

DEVELOPERS' WORKSHOP REPORT

DECEMBER 2015



DELIVERABLE

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D7.2 DEVELOPERS' WORKSHOP REPORT

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EXECUTIVE SUMMARY

Document provides the summary of the activities resulting in DanubeHack (Danube Open (Geo) Data Hackathon & Developers' Workshops) informal, but trustable event (Here and after DanubeHack). The event took place from 15th to 17th of October in the Impact Hub Co-working centre in Bratislava (Slovakia).

Following activities took place under the Work Package 7 (WP7) "Support for External Developers" with aim to attract and provide a support for potential external developers of open (where relevant geo) data resources, technologies, ideas and knowledge provided by the SDI4Apps as well as other from other relevant projects, initiatives, and additional sources.

The main ambition of the event was to create space where people can present what can be done with the open (where relevant geo) data resources, technologies, ideas and knowledge. Another even more important dimension of this event was the willingness to provide also space where people representing various types of stakeholders (from producers to the users) can meet and exchange their experience and knowledge. Based on that, the event was running in two parallel sessions, where the Hackathon part was dedicated to the coding and development of new apps, services or data resources based on the list of identified possible resources (Data, Catalogues and Tools). Second part was dedicated to the Workshops, which were defined by the organizers together with the proposals received from participants, including the "Open (Geo) Data in my country" panel session. Workshops presented latest data and technology resources, examples of successful Open Data projects, practical guidelines how to present open data projects, or data sharing related presentation with interesting discussions.

During the 3 days, 71 participants created unique environment delivering significant amount of data and technology resources which were used to support set of interesting and promising ideas. Out of 14 ideas introduced on the beginning of the Hackathon, 9 projects managed to present their results after two days of intensive work. The best 3 projects were selected by the jury members and awarded with the prizes provided by the set of contributors for the prizes. Many innovative ideas were presented and the winner received €1500 and a virtual server for a year to help to continue the work that seeks to turn unused land in the Bratislava region into productive farmland. In addition European commission offered the winners to support their project in connection to the activities related to the Danube strategy implementation. Although participation on the event was free of charge, selection of the participants was announced based on the registration form, where organisers wanted to identify the motivation of the applicants to take part as well as ensure the event will meet their expectations. Based on real attendance lists as well as direct interaction with the participants their structure they mainly represented private sector, academia, non-governmental organisations and individual enthusiasts. Surprisingly with some exemptions, representation from the public sector was not as originally expected, anyway some interesting datasets as well as workshop slots were provided by the representatives from Slovakia and other countries.

All the results are available via event website and the feedback provided by the 75 participants was the strongest satisfaction organizers could receive.



1 INTRODUCTION

1.1 Motivation

The main motivation to organise the DanubeHack in the way described by this document was creating a free access space where independent developers such as students, small micro companies or any other stakeholders could first time learn about the outcomes of the SDI4Apps project.

This public event was foreseen as initial opportunity to present the SDI4Apps platform to the wider communities of external developers and other stakeholders, together with the possibility for SDI4Apps project team to network and establish the new contacts as well as learn about the other relevant open data and technology resources. This allowed to enrich the common knowledge as a base for the set of following event foreseen to take place during the lifetime of the project and beyond.

Reflecting above motivation DanubeHack was designed as a joint event of the Hackathon and the Workshops. Both sessions took place in parallel, where Hackathon part was dedicated to the coding and development of new apps, services data resources, whilst Workshops were more focused on sharing the latest news about the data resources, technologies, projects, initiatives, including the panel and workshops specific discussions.

The title of the event was inspired by the name of the Danube river on which the capital city of the Slovakia - Bratislava is located, providing the venue and symbolically linking the significant amount of EU and non EU countries via Danube Region. Significant contribution to the idea was also made from the European commission via linking the event and the support made via DRDSI initiative¹.

Despite the increasing amount of the data that is created and made open in the Danube region, its practical use is still facing various challenges. In the case of geo data the situation is even more tricky. Similar conditions relate also to the software tools helping to collect, manipulate and publish such data.

To proof that there is potential in this data and ensure presence of participants pro-actively willing to contribute and benefit from the event anyone was invited to register and indicate their motivation and expectations from the event. This was possible to be done via presenting their work and achievements in the field, identification of the possibilities, pitching the ideas, promoting their data, re-using available open data & software technologies and creating new data, software, apps, or visualisations.

How this motivation was turned into the reality is depicted in Figure 1 and in detail described in following sections of this document.



Figure 1 DanubeHack photo flashback

¹ <http://drdsi.jrc.ec.europa.eu/>

1.2 Objectives

In order to meet the original expectations from the SDI4Apps project's Description of Work (DoW), reflect the developments with the SDI4Apps platform as well as to keep the connection with the latest data, technology and communities momentum, following objectives were defined:

- Organising of 10 related workshops focused on Open data resources and technologies
- Provision of the Hackathon including the competition with the 5 projects in final
- Presentation of the SDI4Apps project
- Collection of the relevant resources (data and technology)
- Identification of the relevant Mentors (At least 10 mentors)
- Organise 3 days event
- Achieve from 50 - 70 participants

Above mentioned objectives were defined with good will to ensure the fulfilment of the expectations and ambition to achieve the credible results.

1.3 Assumptions

Having defined the objectives, set of assumptions had to be identified in order to secure their achievement in line with the project activities as well as with the relevant Open Data movement in the target region. These assumptions were identified as:

- Provision of the free access to the DanubeHack
- Establish and publish the registration for the event
- Collect the offer and expectations from the registered participants
- Ensure the consistent interaction with the participants
- Publish all relevant information via event website and Facebook event social network
- Collect all the results of the event and share them publically
- Actively present the results on relevant events

1.4 Thematic scope

For setting the thematic scene initial list of the preliminary areas was proposed with the possibility to extent them as by the organisers as well as by the participants them self (Figure 2).



Figure 2 Initial list of thematic areas

1.5 Additional support and acknowledgements

Many individuals and organisations have contributed to the DanubeHack. Considering the ambitions defined above and available budget allocated via project, it was obvious, additional support will have to be identified in order to prepare and organise the event of such a scale. With that strong cooperation between the SDI4Apps project and namely main responsible partner SAZP and National Agency for Network and Electronic Services, responsible for e-Government and Open Data activities in Slovakia have been established with the support of the other projects and partners. Event could not reach the achieved level without the contributors for the prizes as well as other partners (Figure 3).



Figure 3 DanubeHack Supporters

Particular acknowledgment deserves members of the project teams in Hackathon, authors of the Workshops as well as Mentors often taking the roles of the extra team members. Important role was undertaken also by the jury members evaluating the results of the final presentations from the Hackathon. Special thanks goes also to the support teams of organizers as well as hosts of the event from ImpactHub in Bratislava. Last but not least Big thanks goes to the all direct participants as well as remote sympathizers.

2 PREPARATORY PHASE

Before the event itself took place, majority of the activities was necessary to identify and execute.

2.1 Basic structure and timing

In connection to the previous project related events, internal discussions and in line with the relevant ongoing activities the expectations for the combined event providing the possibility for knowledge exchange via set of workshops in combination with the Hackathon was obvious. Based on that concept for following two parallel session was proposed:

1. Hackathon - focused on coding and development of new apps, services data resources
2. Workshops - dedicated to the latest data and technology resources with space for discussion

Defining this scope and taking into the consideration time constraints of the DoW, availability of the project partners as well as calendar of the other related events the length and the dates of the event were fixed for the period of 49 hours during the following three days:

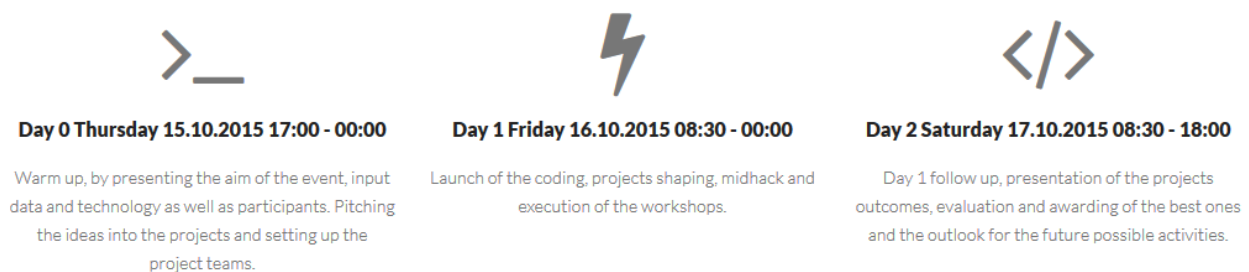


Figure 4 DanubeHack RoadMap

2.2 Event website

Initial step in preparatory phase was taken during the PragueHacks² (Figure 3) and Plzen Code Camp³ events, where basic structure have been defined including the event website prototype. Such events served as initial inspiration for the further shaping of the expectations and consequent requirements.

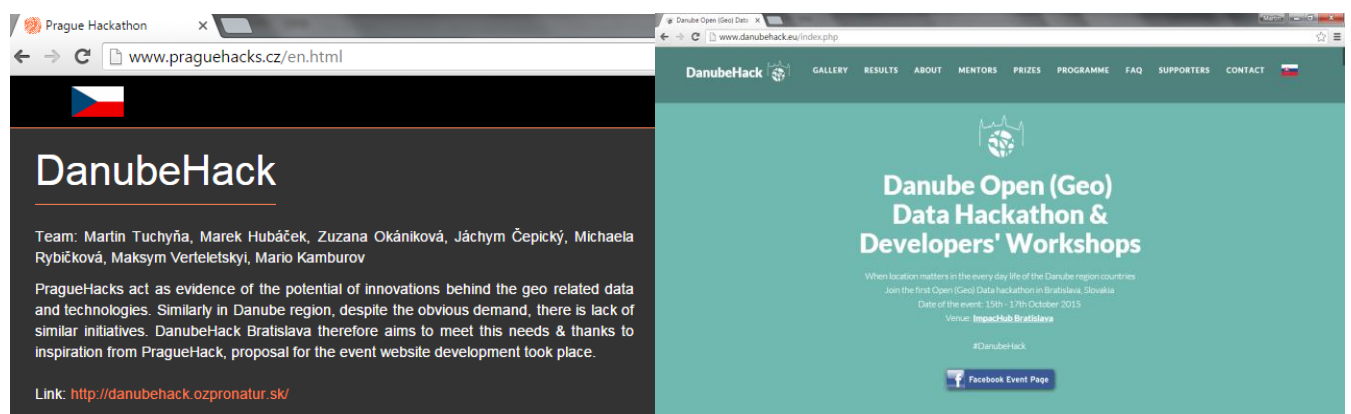


Figure 5 DanubeHack Website Prototype and final website

² <http://www.praguehacks.cz>

³ <http://sdi4apps.eu/2015/07/465/>

Later on registration of the dedicated web domain (<http://www.danubehack.eu>) and further development of the event responsive website have been ensured with the support from the Pronatur project partner. Website have been constantly updated with the new contributions as main communication channel providing the relevant information and resources for the participants. Content of the website have been made available in bilingual version providing the information in Slovak and English language.

2.3 Venue

Selection of the venue is very important aspect to be taken into the consideration and in case of DanubeHack it was influenced by set of factors and conditions, which had to be taken into the consideration and respect the legal condition for the public procurement. One of the main criterion was sufficient space composition, ideally represented by the concept of co-working centres, often providing this type of services. The size of the venue was defined by the expectations of 50-70 participants, ensuring sufficient space as for Hackathon section as well as for the workshops, including some support space for catering, meetings and relax for the participants. At the same time organisers wanted to link the event with the SDI4Apps project meeting, which took place two days before also in Bratislava and benefit to have most of the project partners on the same place and eliminate the additional travelling costs. After the selection of the offers ImpactHub Bratislava co-working centre⁴ have been selected (Figure 6). Based on that set of meetings took place to arrange all logistic and related activities.

Where?

- Hackathon



- Game/relax room



- Workshops



Figure 6 ImpactHub Bratislava venue set-up for DanubeHack

2.4 Facebook Event Page

Although not originally foreseen, after establishing this communication channel helped organisers share an updates about the preparation of the event and provide additional communication and interaction channel

⁴ <http://impacthub.sk/en/>

with the participant. At the same time Facebook Event Page⁵ (Figure 7), helped organiser better reflect certain recommendations proposed via this channel.

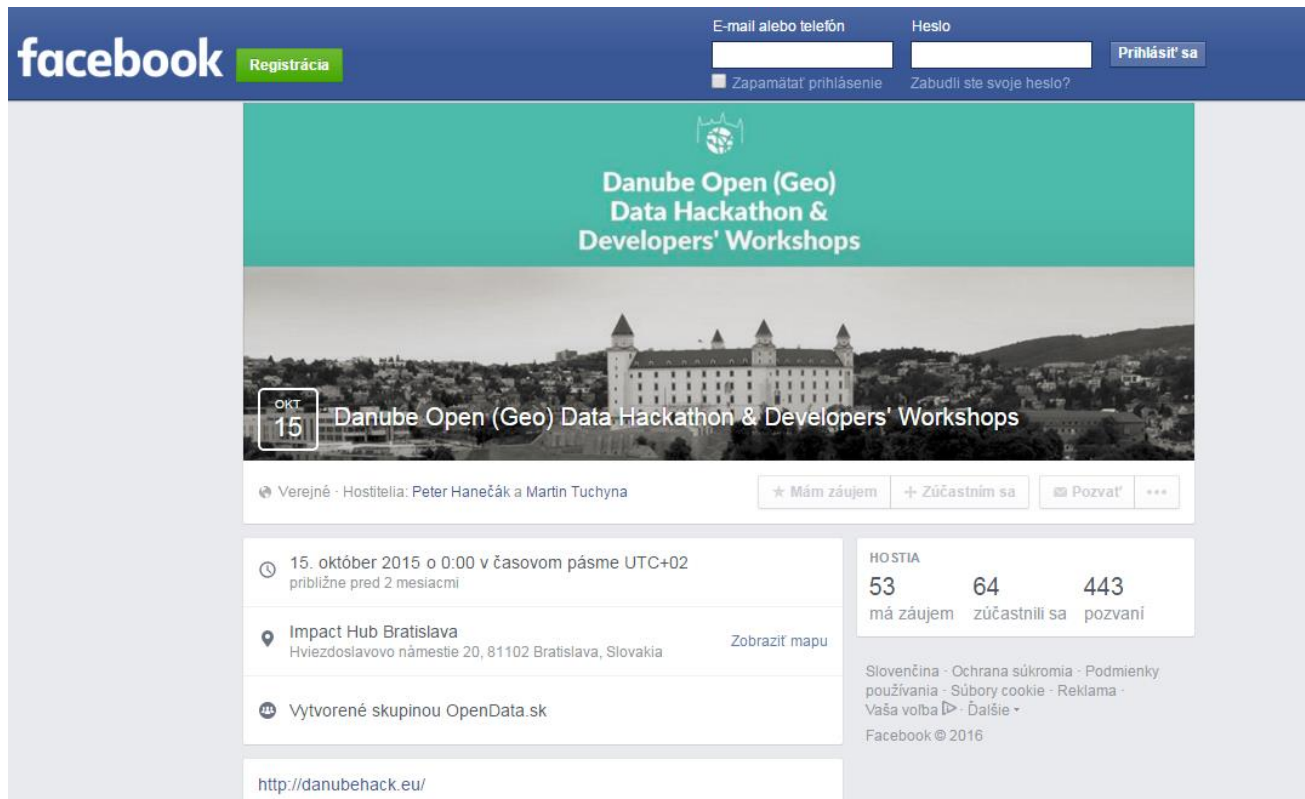


Figure 7 Stakeholder's profile

2.5 Event registration

In order to manage the event participation and establish closer connection with the stakeholders, organizers prepared and launched the registration linked with the short questionnaire aiming to:

- Help organisers get better information about the registered participants
- Motivate the interested participants for active contribution
- Adjust the content of the event better fitting the expectations of the participants

At the same time event registration served for organizers as a potential selection criterion in case the capacity of the venue could not satisfy the demand from the registration.

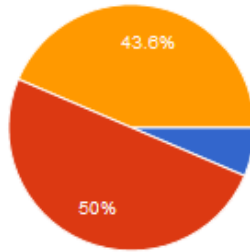
Registration was opened from 01st September 2015 for one month when on the 6th of October 2015 more than 80 participants registered for the event. Even after the registration was closed, additional requests and invitations have been registered (more than 25) so in total, registration was closed with 103 participants. Complete list of registered participants can be found in Annex 1.

Out of the registered participants list, dedicated e-mail list have been established in order to communicate with the registered participants also via dedicated emails with the latest news and further instructions.

Registration form also helped to provide an initial overview about the foreseen participants profile indicating stronger involvement of data consumers in comparison to the data producers (Figure 8).

⁵ <https://www.facebook.com/events/896410953779545/>

Data relationship

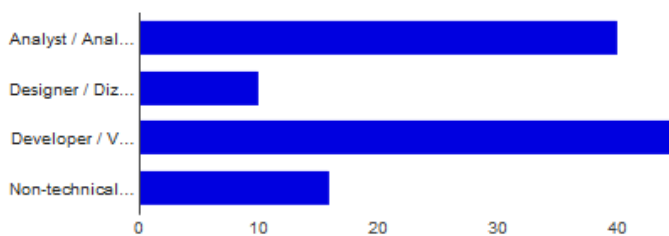


Data producer / Tvorca údajov	5	6.4%
Data consumer / Užívateľ údajov	39	50%
Both / Obe možnosti	34	43.6%

Figure 8 Stakeholder's profile

From the expertise background point of view, majority of the registered participants came from the domains of developers and analysts, with some representation of designers as well as non-technical expertise (Figure 9).

Area of expertise

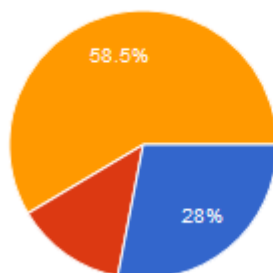


Analyst / Analyti(č)k(a)	40	49.4%
Designer / Dizajnér(ka)	10	12.3%
Developer / Vývojár(ka)	45	55.6%
Non-technical/Nie-technická oblasť	16	19.8%

Figure 9 Foreseen expertise

With regards to the preferences between the Hackathon and Workshops, strongest preference was indicated for both sessions, followed by the registrations only for Hackathon and finally those planning to attend only workshops. This was quite strong signal, that the mixture of both types of session was the right choice (Figure 10).

Preferred participation



Hackathon	23	28.4%
Workshop	11	13.6%
Both / Obe možnosti	48	59.3%

Figure 10 Sessions preferences

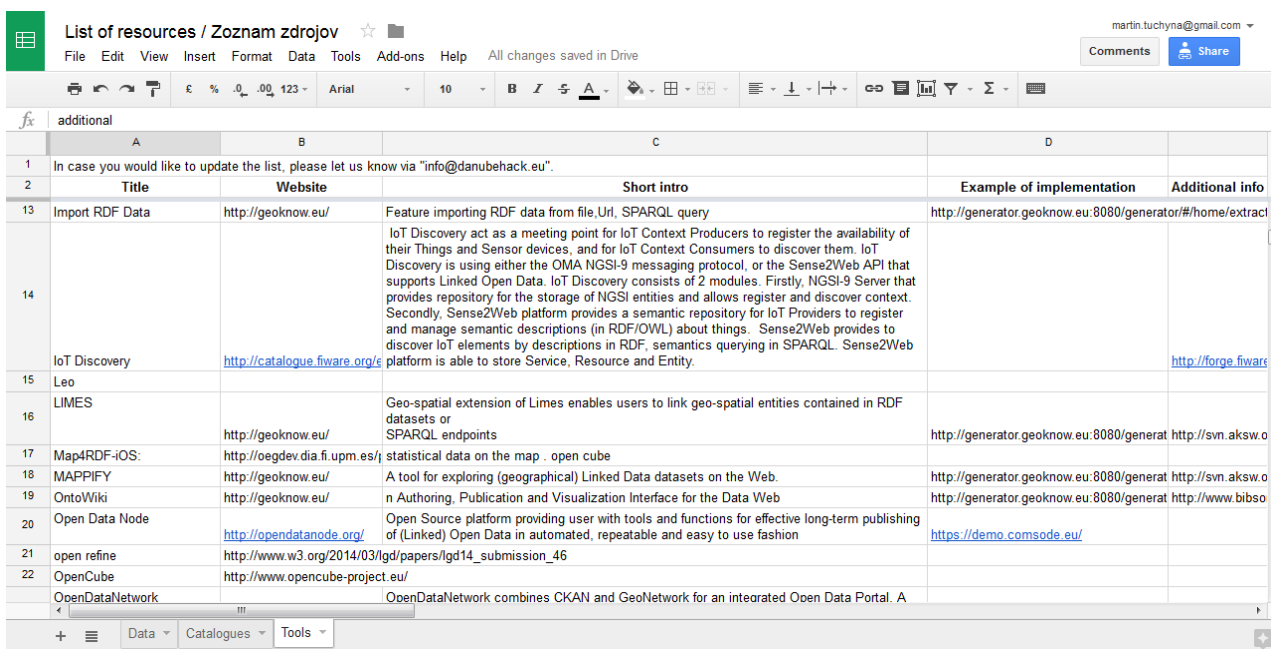
Registration form is available in Annex 2.

2.6 List of possible resources

Having available appropriate data and technology is one of the key precondition of any hack related events. In addition to the SDI4Apps datasets and technology framework, extensive list of possible resources⁶ have been populated containing information about the three type of possible resources:

- Data - providing the list of 46 datasets with the potential to be used during the Hackathon. Plenty of the collected datasets have been prepared particularly for this event and each record provides basic metadata about the datasets.
- Catalogues - sheet collects the list of various catalogues providing the interface for the further data, services and other related resources. More than 31 records provided rich potential of the national, European and Global catalogues, portals and websites with significant amount of information behind.
- Tools - offered additional list of 42 technology resources available for immediate deployment spanning from the desktop to the server tools and solutions available for the event participants with links to their home websites, short description, links for examples of implementation and information.

This list of possible resources (Table 1) was also requested by the participants and will be maintained also after the event and anybody is invited to contribute with the further update and maintenance.



	A	B	C	D	
1	In case you would like to update the list, please let us know via "info@danubehack.eu".				
2	Title	Website	Short intro	Example of implementation	Additional info
13	Import RDF Data	http://geoknow.eu/	Feature importing RDF data from file, Url, SPARQL query	http://generator.geoknow.eu:8080/generator/#/home/extract	
14	IoT Discovery	http://catalogue.fiware.org/	IoT Discovery act as a meeting point for IoT Context Producers to register the availability of their Things and Sensor devices, and for IoT Context Consumers to discover them. IoT Discovery is using either the OMA NGSI-9 messaging protocol, or the Sense2Web API that supports Linked Open Data. IoT Discovery consists of 2 modules. Firstly, NGSI-9 Server that provides repository for the storage of NGSI entities and allows register and discover context. Secondly, Sense2Web platform provides a semantic repository for IoT Providers to register and manage semantic descriptions (in RDF/OWL) about things. Sense2Web provides to discover IoT elements by descriptions in RDF, semantics querying in SPARQL. Sense2Web platform is able to store Service, Resource and Entity.		http://forge.fiware
15	Leo				
16	LIMES	http://geoknow.eu/	Geo-spatial extension of Limes enables users to link geo-spatial entities contained in RDF datasets or SPARQL endpoints	http://generator.geoknow.eu:8080/generat	http://svn.aksw.o
17	Map4RDF-iOS:	http://oegdev.dia.fi.upm.es/	statistical data on the map . open cube		
18	MAPPIFY	http://geoknow.eu/	A tool for exploring (geographical) Linked Data datasets on the Web.	http://generator.geoknow.eu:8080/generat	http://svn.aksw.o
19	OntoWiki	http://geoknow.eu/	n Authoring, Publication and Visualization Interface for the Data Web	http://generator.geoknow.eu:8080/generat	http://www.bibso
20	Open Data Node	http://opendatanode.org/	Open Source platform providing user with tools and functions for effective long-term publishing of (Linked) Open Data in automated, repeatable and easy to use fashion	https://demo.comsode.eu/	
21	open refine	http://www.w3.org/2014/03/igd/papers/igd14_submission_46			
22	OpenCube	http://www.opencube-project.eu/			
	OpenDataNetwork		OpenDataNetwork combines CKAN and GeoNetwork for an integrated Open Data Portal. A		

Table 1 List of possible resources

2.7 FAQ

Very important part of the event website was dedicated to the collection of the all relevant information for the potential event participants in the form of Frequently Asked Questions (FAQ). With that in mind, FAQ section with the appropriate list of questions and answers have been prepared and regularly updated. Having properly defined FAQ (Figure 11) helped participants to decide, whether this event is of their interest and help organisers to eliminate individual queries delivered via webform, or emails.

⁶ <https://goo.gl/vgC4Xn>



Figure 11 DanubeHack FAQ

2.8 Mentors

To increase the support for the Hackathon participants as well as benefit from the presence of some important participants who acted as well as active contributors for the workshops session, concept of mentors have been proposed with the aim to provide the direct face to face support for specific topics with the experts in the field. Selection of the 13 mentors took place based on interaction with the set of experts in the fields addressed by the DanubeHack and who confirm their possibility and willingness to act as mentors. With that final list of the mentors have been completed and published with their short profiles on the event website⁷.

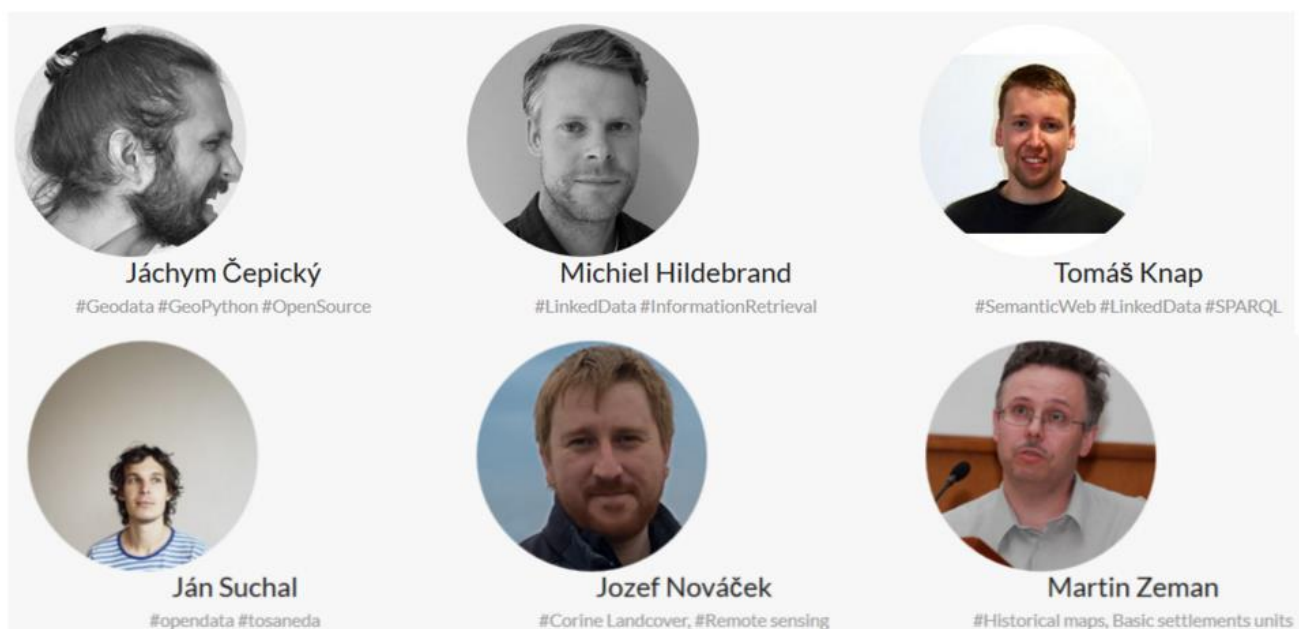


Figure 12 List of mentors - part 1

⁷ <http://www.danubehack.eu/?#section-mentors>

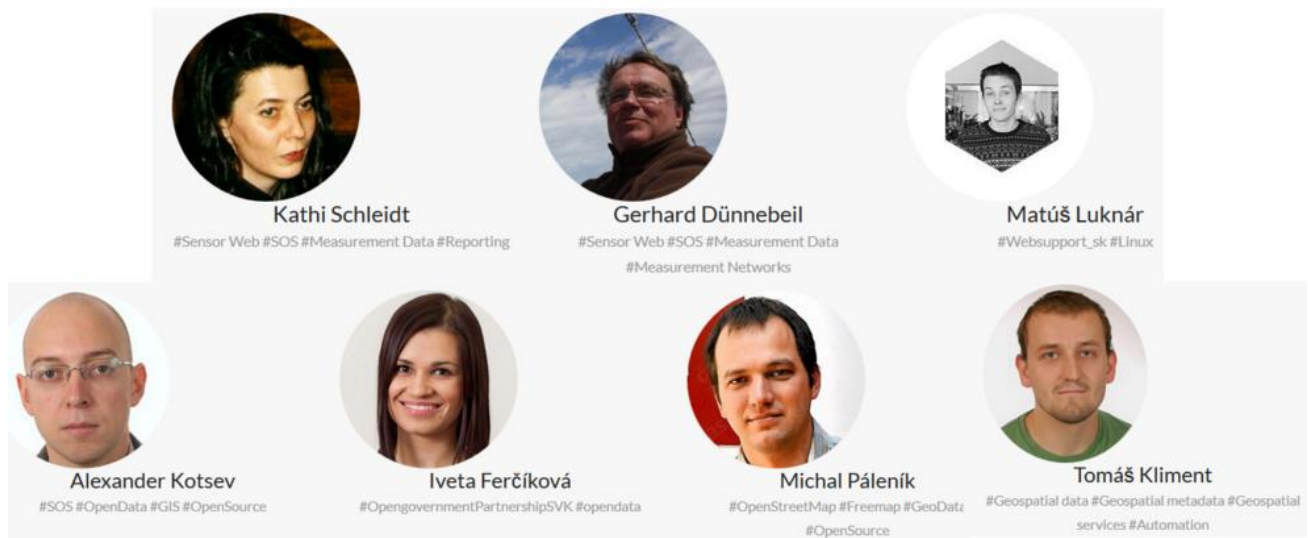


Figure 13 List of mentors - part 2

2.9 Jury members and prizes

For final evaluation of the projects resulting from the Hackathon session group of jury members have been established, composing with the representatives of the organisers, international experts as well as representation of the contributors for the prizes.

Jury members

- Stanislav Parnický - EEA
- Dezső Mikus - Geo-Ict Expert
- Martin Tuchyňa - SAŽP
- Jáchym Čepický - OSGEO, Geosense
- Ľubor Illek - NASES



Figure 14 Jury members

For the winners of the Hackathon, set of prizes have been prepared with the contribution of the supporters:

1. Place: 1500€ and WebSupport Virtual server V2 for 1 year,
2. Place: 1000€ and WebSupport - The Hosting for 1 year max. size 3GB
3. Place: 500€ and WebSupport - The Hosting for 1 year max. size 3GB

Prizes have been supported by:

SAŽP, NASES, ProNatur, EEA foundation, E-Pro, Ness KDC, WebSupport, HERE

3 DANUBEHACK EVENT

3.1 Hackathon

As already mentioned main aim of the Hackathon was to create the space for coding and development of new apps, services data resources. Hackathon session took started on Thursday 15th of October 2015 and finished on the Saturday 17th of October 2015. To make this happen, simple roadmap was defined for the Hackathon part with following milestones:

- Day0: Pitch/Propose an idea or join the team
- Day1: Midhack - presentation of work done, remaining tasks and requests for help
- Day2: Final presentations, Jury evaluations, announcement of the winners

When question of possible outcomes of the projects took place following options were offered as an inspiration:

- Processed data (quality analysis, LOD)
- Visualisations
- Applications

Outcomes of the projects were the subject of evaluation made by the jury members based on following criteria:

- Benefits - new added value
- Attractiveness
- Quality of product and presentation



Figure 15 Atmosphere on Hackathon session

3.2 Workshops

In case of workshops, for the event there has been prepared set of 23 various topics presented by the experts in that field with the request to stimulate the discussions with the participants. All workshops took place in parallel to the Hackathon session during the all three days. Important part of the workshops was the "Open (Geo) Data in my country" Panel section providing the unique opportunity to share the recent Open Data movement in the countries of Central Europe.



Figure 16 Workshops room

3.3 Programme overview

Following table provides an overview of the programme for the whole event with the direct links for the related documentation and presentations from the Workshops. Online version is available via event website⁸.

Day	Time	Hack Session	Workshops, Pannel Session	Author/s	Language
Day 0 Thursday 15.10.2015	17:00	Registration			EN
	18:00	Invitation and introduction of the event			EN
	18:15	Organizational information, presenting			EN

⁸ <http://www.danubehack.eu/?#section-programme>

Day	Time	Hack Session	Workshops, Pannel Session	Author/s	Language
		of mentors			
	18:30	Pitching/Collection of the project ideas - 2 mins/per person. Elevator pitches, no slides.			EN/SK
	19:00	Creating the teams			EN/SK
	19:30	<i>Dinner</i>	<i>Dinner</i>		
	20:00 - 24:00	Evening Hacking	Invitation and introduction of the workshops		EN
			Data and technology intro (Presented by the relevant data producers/publishers max 5-10 mins./each):		
			Data:		
			* SAZP Corine Landcover	Jozef Nováček	SK+EN slides
			* SAZP Basic settlements units	Martin Zeman	EN
			* SAZP Historical maps	Martin Zeman	EN
			* OpenStreetMap essentials	Michal Páleník	EN
			* SmartOpenData Linked Data	Martin Tuchyňa	EN
			* Addresses register	Lubor Illek	SK
			Technology:		
			* Open Data Node	Peter Hanečák	EN
			* ODN/UnifiedViews in particular	Tomáš Knap	EN
			* SDI4Apps Points Of Interest (POI)	Karel Charvát	EN
	00:00	<i>End of day 0</i>	<i>End of day 0</i>		

Day	Time	Hack Session	Workshops, Pannel Session	Author/s	Language
Day I Friday 16.10.2015	08:30	Breakfast	Breakfast		
	09:00		OpenData in Danube region context	Alexander Kotsev, Tomáš Mildorf, Martin Tuchyňa	EN
	09:15	Hacking	"Open (Geo) Data in my country" Panel section with the representatives of the Danube countries addressing topics as: * Open data state of play (main achievements and challenges) * Priorities for near future * Role of open geo data (Open Data related representatives of participating countries - 15mins.each)		
			Austria	Johann Höchtl	EN
			Czech republic	Michal Kubáň	
			Hungary	Dezső Mikus	EN
			Slovakia	Iveta Ferčíková, Ján Gondol	EN
	11:00		SDI4Apps	Karel Charvát	EN
	11:30		Open (data/source) communities, how they work and how you could help them to grow	Jáchym Čepický	EN
	12:00	Lunch	Lunch		
	13:00		Praktické skúsenosti s používaním Open Data v projekte FinStat	Filip Glasa	SK

Day	Time	Hack Session	Workshops, Pannel Session	Author/s	Language
	13:30	Hacking	How to present open data projects	Jan Suchal	SK+EN slides
	14:00		How to simply extract the key information from data by designing your app API with Search by Strategy. Spinque	Michiel Hildebrand	EN
	14:30		SPARQL Query Language	Tomáš Knap	EN
	14:45		Short intro into the use of OGC service	Kathi Schleidt, Dünnebeil Gerhard, Jáchym Čepický, Tomáš Kliment,	EN
	15:00	<i>Coffee break</i>	<i>Coffee break</i>		
	15:30	Hacking	OGP & OpenData action plans	Iveta Ferčíková, Jan Gondol	EN
	16:00		Standards for Open Data	Štefan Szilva	SK+{EN slides}
	16:30		Why are licenses important?	Richard Bednárík, Martin Tuchyňa	EN
	17:00		Here	Soňa Verešová	SK+EN slides
	18:00	<i>Dinner</i>			
	20:30	MidHack - presenting the achievements and problems teams are facing (3-5 mins each!)			
	00:00	<i>End of day I</i>	<i>End of day I</i>		
Day II	08:30	<i>Breakfast</i>	<i>Breakfast</i>		

Day	Time	Hack Session	Workshops, Pannel Session	Author/s	Language
Saturday 17.10.2015	09:00	Hacking			
	09:30		eDemokracia	Lubor Illek	SK+EN slides
	10:00		SmartOpenData	Martin Tuchyňa	EN
	10:30		Open Transport Net	Dimitri Kožuch	EN
	11:00				
	12:00	<i>Lunch</i>	<i>Lunch</i>		
	13:00	Hacking			
	13:30				
	14:00				
	14:30				
	15:00	<i>Coffe break</i>	<i>Coffe break</i>		
	16:00	Final presentations, 3-5 mins each team			EN/SK
	17:00	Jury evaluation of the results Teams have to deliver a short summary of their project to be published on DanubeHack.eu			
	17:30	Anouncing and awarding the winners			EN
	18:00	Conclusions and acknowledgements			EN
		<i>End of day II</i>	<i>End of day II</i>		

Table 2 Programme overview

3.4 Day 0

Before the start and during the whole event registration desk was opened and all participants were asked to register. In total during the whole event 71 participants have been recorded on the registration desk

(Annex 3). Some participants registered before the event sent apologies not to be able to take part so only 53 registered participants took part, while some additional participants took part without the previous registration, as organisers allowed them to take part considering the current capacity of the venue. Participation covered all main societal groups, whilst majority participant came from private, non-governmental sector as well as individuals. In addition there was also obvious involvement of academia, research and development, but organisers expected stronger participation from the public and local government sector.

Initial day (Thursday 15th of October 2015) was dedicated to the opening of the event, invitation to the participants and explanation of all the concepts, programme, actors and all related information. After the introductory part Hackathon facilitated session started with the possibility for participants to present the ideas they would like to work on.

Despite the shy start 14 project ideas were presented by the participants defining the main objective, expected expertise for the team, including the foreseen requirements of the data and technology. Following this Idea pitch session, remaining participants were asked to team up with the ideas they would like to work/support.

After the dinner in parallel to the Hackathon session, Workshop session has also started, presenting the data and technology with the relevant experts.

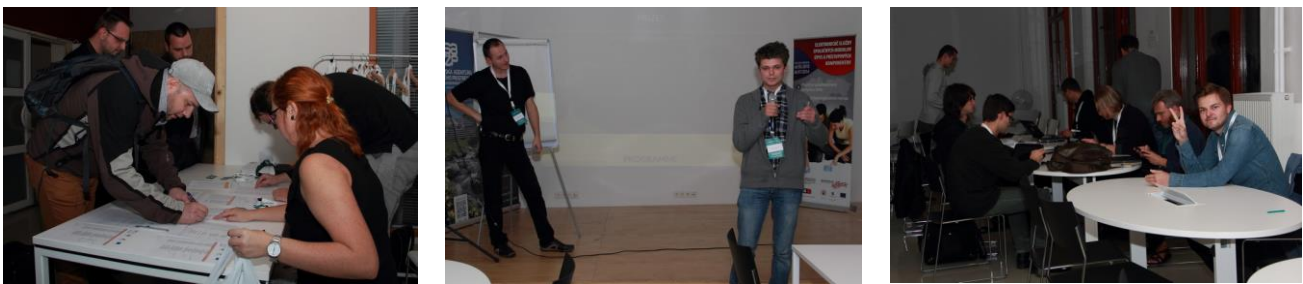


Figure 17 Day 0

3.5 Day 1

Friday offered promising programme, where Workshop part was opened with the Panel section dedicated to the sharing the latest status of the Open (Geo) Data movement in the neighborhood countries (AT, CZ, HU and SK). After this panel section SDI4Apps workshop presented latest outcomes including the data and technology resources made available for the event participants. Last workshop before the lunch provided view on the Open data/source communities life. Afternoon delivered mixed set of workshop session dedicated to the topics of sharing experiences with the use of open data in financial sector, recommendations, how to present the open data projects, using the progressive advanced searching and SPARQL for linked data as well as introduction to the OGC standards and relevant services. Last session was dedicated to the OGP and Open Data action plans, standards for Open Data, licenses and closed with the presentation of the products and services from HERE.

The Hackathon took place all day in separate room and established projects were invited to present their work done so far, indicate the remaining plans and express where they would appreciate some specific support/help via MidHack, which took place from 20:00. Out of initial 14 projects from the Day 0 during the MidHack 9 projects presented their work. Remaining project either merged with some of those 9 or simply did not continue.



Figure 18 Day 1

3.6 Day 2

Last day of the event session of the Workshops provided an overview about the projects related to the use of open data in transparent governance (eDemokracia), utilisation of INSPIRE and environmental linked data (SmartOpenData) as well as potential of transport related open data re-use (OpenTransportNet).

Hackathon session was dedicated to the finishing the projects and preparation for the final presentation. In total 9 projects (Table 3) presented their outcomes and overall results were positively received as by jury members as well as participants audience.

DanubeHack final list of projects		
No.	Title	Abstract
1	Air quality	Trying to visualize Data from an INSPIRE/Air Quality server set. This includes locations (Samples, Stations) from a WFS as well as Measurement Data from an SOS.
2	City Transport Map	Live map of public transportation vehicles for the city of Bratislava.
3	JP Journey planner	The aim is to make simple touristic planner that will make use of the huge amount (4000000) of POI that was collected and stored in SPARQL database within SDI4Apps project.
4	Geo 4 Jira	Jira usage in context of geodata aimed towards municipalities.
5	Smart Land (We learn to farm)	Identifying unused urban and rural properties and creative bottom up initiatives in their surroundings. Linking owners of these properties with potential new users. Motivating through the best practices of the creative bottom-up initiatives. Connecting all these layers to trigger better livelihoods in both cities and rural regions :)
6	Clear streets	ClearStreets brings you the information when a street was cleaned of snow and is safe to drive.
	Cataloguing of Sensors	Testing of IoT Discovery Generic Enabler as candidate for catalogue of sensors and sensor data producers. Try to connecting and harvest data from solution SensLog.
7	French voters abroad	Put French voters living abroad on a map with voting method, keeping privacy safe
8	Open addresses	Created dump of addresses from datagov.sk, which will be suitable for further use. We also did basic online presentation.
9	HydroWCS	Coverage service for annual precipitation in Slovakia for yrs 2009 and 2010 in resolution 0,5 km

Table 3 Final list of the presented projects

Evaluation of the presented projects took place by the jury members based on the assignment of the simple value schema, where the each jury member could assign points from 1-3 for three best projects, where the best one received the highest value. Outcomes of the evaluation are summarised in Table 4.

Results	Project Title	Justification of the Jury members
1prize	We learn to farm	Community impact, quality of presentation, use of the highest number of provided and newly generated data sources, good vision.
2prize	Geo for Jira	Real use case, regional and community aspect, good presentation, use of existing software
3prize	City Transport Map	Focused on real problems, connection to live APIs, nice design and implementation

Table 4 Results of the evaluation of the presented projects

1st place: Smart Land (We learn to farm)

Team: Boglárka Ivanegová, Boris Kružliak, Michal Dolník, Ladislav Morávek, Michala Hrnčiarová, and friends

Description: Identifying unused urban and rural properties and creative bottom up initiatives in their surroundings. Linking owners of these properties with potential new users. Motivating through the best practices of the creative bottom-up initiatives. Connecting all these layers to trigger better livelihoods in both cities and rural regions :)

Used data resources:

1. [Danube reference data and service infrastructure](#) → Urban Atlas Bratislava → land use, focusing primarily land without current use;
2. Soil Science and Conservation Research Institute → Soil map;
3. [SK Open Data portal](#) provided by National Agency for Network and Electronic Services → focusing on address points;
4. Geodetic and Cartographic Institute Mapka application and from the Cadastral portal;
5. We were creating datasets on the spot extending Mgr. Milota Sidorová's dataset of "Active City networks," which is a list of committed, activist formal and informal non-governmental organizations, initiatives, platforms which have been active as of March 2015. This extension was made by using Boglarka's knowledge + the consulting placemaking and participatory planning expertise of Mgr. Art. Dominika Belanská.

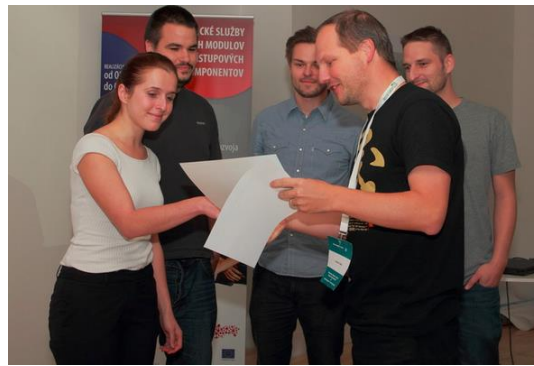
Used technologies: Apache HTTP Server Project, JavaScript (jQuery, Bootstrap, Handlebars, Mapbox, Leaflet), HTML, SQL, CSS (Bootstrap),



Azure; Software: PostgreSQL, PostGIS, qGIS, GRASS-GIS, Chrome

Sources:

- [Presentation](#)
- [Narrative description](#)
- [Prototype 1](#)
- [Prototype 2](#)
- [Video 1 Intro](#)
- [Video 1 Final presentation](#)

**2nd place: Geo for Jira**

Team: Marček Ján, Tomáš Matula, Karol Bujaček, Martin Měkota, Ondrej Kozlovský, Ján Ferko

Description: Jira usage in context of geodata aimed towards municipalities.

Sources:

- [Presentation](#)
- [Prototype](#)
- [Video 1](#)

**3rd place: City transport map**

Team: Richard Laffers, Pavol Bučko

Description: Live map of public transportation vehicles for the city of Bratislava. App will be deployed in the near future under the <http://imhd.sk>.

Used data resources: dpb.sk via imhd.sk API

Used technologies: Javascript, Leaflet, OpenStreetMap, SASS, Grunt

Sources:

- [Presentation](#)
- [Source code](#)
- [Video 1](#)



Descriptions of the remaining projects including the links to the relevant sources has been made available via dedicated project website Results section⁹ including additional photo gallery¹⁰.

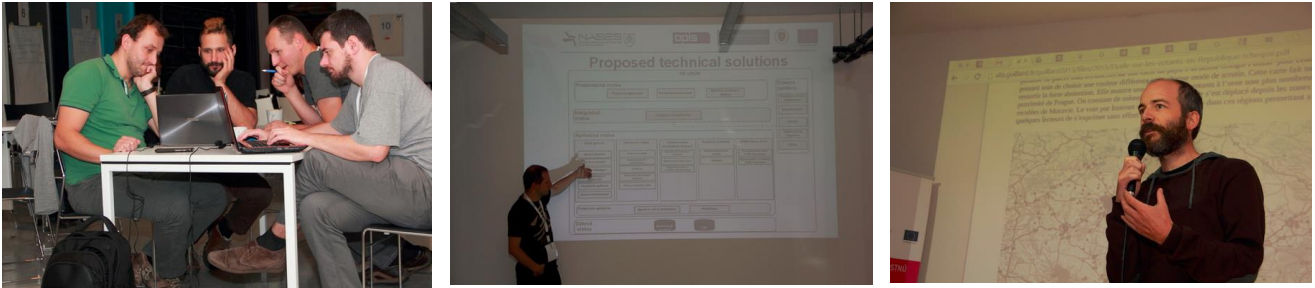


Figure 19 Day 2

⁹ <http://www.danubehack.eu/index.php#section-results>

¹⁰ <http://www.danubehack.eu/index.php#section-gallery>

4 EVALUATIONS AND CONCLUSIONS

This section provides a simple evaluation of the whole task from two perspectives with aim to summarize, how initial objectives were met, respecting the real condition activities were facing during the preparatory, execution and follow up period.

4.1 Organisers perspective

From the overall organisers' perspective the whole task resulting in the DanubeHack event fulfilled and even exceeded original ambitions. At the same time it has to be stated, some objectives were met only partially and these lessons learnt shall be taken into the consideration for the further activities within the WP7 as well as all the project related activities.

4.1.1 Positive lessons learnt

The most positive outcome of the event for the organisers was the direct and indirect feedback from the participants, which exceeded all issues or challenges making DanubeHack event the reality. In addition, following list provides examples of some other positive observations, organisers encountered:

- **Two parallel session experience** - Despite the limited practical experience in this field having two parallel sessions event, was quite unique experience comparing this kind of the events on the local, regional and even European level.
- **Importance of preparation** - Although preparatory phase revealed difficulty to arrange sufficient data and technology base for the Hackathon as well as challenges to prepare the Workshops on the essential level of quality, at the end of the day DanubeHack provided interesting Initial list of possible resources and attractive package of the Workshops topics.
- **Open interaction with the stakeholders** - Availability of the essential information via DanubeHack web, with the regular updates via Facebook Event Page proved importance of transparent communication with the potential participants, increasing their interest and helping organisers to better fine-tune the event.
- **Importance of Mentors** - Was confirmed by the demand for their expertise as well as via results from DanubeHack Survey (Chapter 4.2).
- **Unique knowledge exchange experience** - Overall interest from the stakeholders as during the preparatory as well as DanubeHack phase was very positive and inspiring, confirming existence of the demand for this kind of events, where people can access interesting data, technology resources, but most importantly meet people with similar interest or different experience and mutually exchange this knowledge and create the new contacts and networks.
- **Attractive and promising ideas** - Type of presented ideas /use-cases and the level of their maturation after the effort spent in the DanubeHack was very interesting and reflecting the current societal expectations and needs. At the same time having the possibility to see, where the initial ideas were on the day0, day1 and day2 shows how fast some project can be developed but also how much additional effort can be needed to move them to the further more operational phase.
- **Smart brains hunting** - Event provided the unique possibility to present the expertise and potential of all actively contributing participants, where direct presence on the event help SMEs, but also public sector and academia representatives to see who could be their potential new employees helping to solve their tasks and contact them directly.
- **Pool for following project proposals** - At the same time DanubeHack planted some ideas for the project proposals, which started their life and continued after the event aiming to meet certain calls for participations or other interesting funding opportunities.
- **Credits for SDI4Apps credibility** - Event helped to present the project, its partial outcomes as well as potential of the consortium members. Consequently requests to present the outcomes of the

DanubeHack on various high level events confirmed the relevance and demand for such activities and helped to raise awareness about the SDI4Apps project itself (More details in chapter 5.1).

4.1.2 Room for improvements

Of course preparing this kind of event brings a lot of unexpected situations and even those expected can result in different outcomes than originally foreseen. Despite of that, organisers were trying to react on these the best current situation allowed and are also ready to take those not reflected into the consideration for the future. To list those observed so far:

- **Two parallel session experience** - The same point as in previous chapter brought some doubts from certain perspective, as having the parallel session caused sometime difficulties for some participants to be present, where they wanted to be and consequently some workshops did not managed to address the original main audience from the Hackathon session.
- **Timing and order of some workshops** - As the Workshops program was the subject of changes almost till the last moment, some workshops end up in not best time or place considering the overall structure. Although significant effort was spent to organise the program in the most suitable way. For example on the Day0 it was obvious, too much workshops were proposed for late evening time and also order could be better managed.
- **Closer interaction with the Project teams** - Despite the overall effort to support the teams working on the projects during Hackathon (Initial list of potential resources, Workshops, Mentors) it was obvious further support shall be provided to the teams presenting the ideas on Day0, but not continuing later on.
- **Stronger facilitation of the SDI4Apps outcomes re-use** - Although project representatives provided necessary information about the project data and technology resources, and some of the themes were directly used in the projects (JP Journey Planner, use of POIs, Source code of Open Smart Tourist Data pilot application of SDI4Apps) in general wider reuse of available resources was expected.
- **X border missing use-cases** - One of the ambition of the event was to stimulate and motivate participants to deliver results promoting the cross border re-use of available resources. Some efforts were foreseen in certain project teams, but were not completed by the time made available.
- **Insufficient presentation of the Initial list of possible resources** - It's every time challenging task to prepare sufficient and appropriate list of data and technology resources and properly communicate their content, functionality and potential to the target stakeholders. Certain effort took place to meet this challenge also during the Hackathon, particularly via Workshops. After the event took place, it was obvious, shorter and better targeting slots shall be made available to meet this expectation.
- **Unfinished collection of the feedback on workshops** - Organisers also prepared for the participants a possibility to evaluate the quality and the relevance of the offered workshops via poster, where for each workshop could be provided appropriate stickers. Unfortunately mainly because of miscommunication, this information resource was unintentionally removed, before the appropriate documentation of the outcomes could take place.

4.2 Participants perspective

There has been set of channels through the DanubeHack participants and sympathizers shared their feedback during the all phases of the DanubeHack experience. From the beginning as the main communication channel was used registration and contact form, later on email and Facebook Event Page served as an important interaction platforms. The most important evaluation was received directly during the event seeing the direct and indirect response from the participants.

Despite the last point mentioned in previous chapter and thanks to the initiative of the UWB partners simple DanubeHack Survey have been prepared and distributed among the participants.

Although 8 received forms represents 10% of the participants, basic outcomes provides some thoughts about to be considered too.

Summary of the responses from the DanubeHack survey:

Have you used any open data from the list provided by the organisers?



Figure 20 Usage of the data resources from the Initial list of possible resources

Have you had any difficulties with using open data?



Figure 21 Difficulties with the use of open data

If YES, please describe these difficulties:

- How to query the Sparql endpoint of POIs, but we solved it together.
- GIS, ArcMap
- In some cases was hard to find the data and also process the data
- where are they?

Figure 22 Type of encountered difficulties

PRE-DEVELOPED SOFTWARE

Have you used any existing software or source code for your application?



Figure 23 use of existing source code in the projects

If YES, please indicate which one(s):

We created new feature on top of Mycartracks.com
Source code of Open Smart Tourist Data pilot application of SDI4Apps
leaflet + plugins
IoT Discovery GE Senslog

Figure 24 Description of used software

MENTORS

Have you discussed any issues with the DanubeHack mentors?



Figure 25 Role of mentors

If YES, was the discussion helpful?



Figure 26 Support received from mentors

ORGANISATION

Were you satisfied with the organisation of DanubeHack?



Figure 27 Satisfaction with the DanubeHack organisation

Do you have any suggestions for changes regarding the organisation, programme, duration, etc.? This might help with organising other similar events.

Developing from 09:00 to 24:00 is very long, it is not possible to concentrate for such a long time
Present all available data first and then start pitching the project ideas and coding
Well organised!
Badges with colour code - to distinguish organisers, visitors and mentors
No
WIFI was really bad. Otherwise great event, you made a great job!
10+ thumb up

Figure 28 Suggestions for an improvement

4.3 DanubeHack awareness raising

There has been undertaken of activities focused on awareness raising about the event before and after the DanubeHack took place. Some examples:

Websites:

- CodeWeek.eu¹¹
- SDI4Apps¹²
- DRDIS Yammer¹³
- INSPIRE Forum¹⁴
- INSPIRE@SK¹⁵
- IMPACT HUB Bratislava¹⁶
- SAZP Website¹⁷
- EnviroMagazin¹⁸
- Geoinformatika.SK^{19, 20}
- Robime.IT²¹

Social Networks:

- OpenData.sk Facebook²²
- Twitter^{23, 24}

Conferences:

- ¹¹ <http://events.codeweek.eu/view/5382/danubehack/>
- ¹² <http://sdi4apps.eu/2015/10/danubehack-results-online/>
- ¹³ <https://www.yammer.com/danuberdsi/>
- ¹⁴ https://inspire-forum.jrc.ec.europa.eu/pg/event_calendar/view/253352
- ¹⁵ <http://inspire.enviroportal.sk/clanky/danubehack>
- ¹⁶ <http://impacthub.sk/events/>
- ¹⁷ <http://www.sazp.sk/public/index/go.php?id=81&prm3=921>
- ¹⁸ http://www.enviromagazin.sk/enviro2015/06_Enviromagazin_2015.pdf
- ¹⁹ <http://www.geoinformatika.sk/registracia-na-prvy-open-geo-data-hackathon-v-bratislave>
- ²⁰ <http://www.geoinformatika.sk/kalendar-hackathon-danubehack-2015>
- ²¹ <https://www.facebook.com/Robimeit/posts/1050988441578663>
- ²² <https://www.facebook.com/groups/180824635305518/permalink/876793072375334/>
- ²³ <https://twitter.com/MartinTuchyna/status/639909211279917056>
- ²⁴ <https://twitter.com/PHanecak/status/640267620277747714>

- JRC Annual Event on the Scientific Support to the Danube Strategy²⁵
- ITAPA 2015²⁶
- INSPIRUJME SE 2015²⁷

4.4 Recommendations

Based on the practical experience and reflecting the suggestions from the participants this chapter provides a set of recommendations to be taken into the consideration in future related events.

- **Proper definition of the event ambition and target audience.** Selection of the relevant domains/topics to be addressed and identification of potential for appropriate stakeholders is the half of the success.
- **No budget - No fun** - Without essential budget or funding from the sponsors is very difficult to initiate any activities. In some cases event can be built only on top of the voluntary activities, but sufficient willingness and possibilities have to be identified and ensured in advance.
- **Selection of suitable level of detail** - Event can be organised on various level of detail (from company, community, regional, national or as in this case as international) - anytime shall be appropriate to the defined motivation and ambitions
- **Proper structure and focus** - Hackathon doesn't have to be always organised with the side activities as workshop and often it makes sense to link it with the possible release of some new (ideally attractive) data resources.
- **Don't underestimate the preparation** - It's important to allocate sufficient time and resources, as reality will be at least 1,5 - 2 times higher demanding than the worst scenarios.
- **Ensure the suitable venue** - Having venue allowing this type of activities can increase the attractiveness of the event and provide the conformable space for work and relax.
- **Establish the event website** - Is the initial place telling the world something is going to happen. Keeping the website regularly updated with proper way of sharing of these updates increase the credibility.
- **Proper order of the programme** - Mainly in case of events with combined or parallel sessions should be eliminated overlaps of the activities, where the same participants are expected to take part. Also present all available data first and then start pitching the project ideas and coding.
- **Open communication and responsiveness** - Appropriate feedback on questions and willingness to take recommendations into the consideration increases the confidence. Provide the participants the chance to shape the program or direction of the event.
- **Preparation and the cleaning the data and technology resources** - Having the properly prepared and well documented resources in advance can help a lot - except the cases, where the event is dedicated to activities, where for example data scraping or cleaning is foreseen. Appropriate attention shall be paid to the clarification of the conditions of the use for provided resources.
- **Reliable infrastructure in place** - Appropriate infrastructure on the venue is critical factor, which is often difficult to guarantee before the all participants are on place (and WIFI starts to fail).
- **Ensure the presence of the Mentors** - Although their role can be seen as not important, the reality can be completely opposite.
- **Collection of the feedback** - Prepare for the participants the simple tools to provide their feedback for evaluation and motivate them in attractive and not forced manner to share their

²⁵ <https://ec.europa.eu/jrc/en/event/conference/jrc-annual-event-scientific-support-danube-strategy>

²⁶ <https://utopia.sk/wiki/display/OPENDATA/ITAPA+2015>

²⁷

http://dru_inspirujmese.sazp.sk/sites/dru_inspirujmese.sazp.sk/files/2015_30_inspirujme_se_2015_sdi4apps.pdf

views with you. In case of small dedicated hackathons project teams' contribution for the survey shall be highly recommended or even as an condition.

- **Distinguish who is who** - Badges with colour code - to distinguish organisers, visitors and mentors.
- **Promote & disseminate** - It's important to spread the word about the event, where relevant.
- **Importance of evaluation** - Without the evaluation of the event there is lost significant potential collected during the event, which can be used for further motivation and inspirations as for the organisers themselves as well as for anyone else planning to organise similar event.
- **Acknowledgement** - Independently from the conditions, event took place, it's important to acknowledge all contribution and support provided in the connection of the event.

5 CONCLUSION

DanubeHack wanted to create the space, where anybody aware about the potential of Open (Geo) Data could come and present what can be created with related data and technology resources or simply learn more about how location information can influence our life. Although organisers didn't expect the dimension of the consequences for making such event, achieved Hackathon results and presented Workshops, including the received feedback confirmed it was worth to do it. Some Hackathon outcomes comes with the chance for the further development and offer provided by the European commission Joint Research Centre for the winning project gives promising opportunity to improve the quality of the underlying apps for another dimension. Although final prizes were awarded to the first three places, all project belongs to the winners as they managed to complete their mission, which can be further developed and improved as well as used as important reference. Also results from the Workshops delivered valuable information available via presentations including the interesting discussions resulting in knowledge and opinions exchange and triggering some ideas about potential joint project proposal. Whether the DanubeHack will start its own tradition is too soon to say, anyway there is strong commitment to take all lessons learnt into the consideration for any similar events organised in the future.

ANNEX 1 REGISTERED PARTICIPANTS

No.	Timestamp	First Name	Surname
1.	1.9.2015 15:06	Tomáš	Bél
2.	2.9.2015 15:07	Marek	Varga
3.	4.9.2015 20:35	Jan	Gondol
4.	5.9.2015 17:34	Alexander	Sadovsky
5.	5.9.2015 17:47	Martin	Jirku
6.	6.9.2015 8:18	Samuel	Ondrek
7.	6.9.2015 9:30	Radovan	Hilbert
8.	6.9.2015 14:20	Radovan	Kavický
9.	6.9.2015 17:40	Adam	Lieskovsky
10.	6.9.2015 17:41	Barbora	Brocková
11.	7.9.2015 7:48	Tomáš	Štefanička
12.	7.9.2015 22:15	Marek	Čudejko
13.	8.9.2015 12:54	Matúš	Luknár
14.	9.9.2015 11:17	Jan	Keselak
15.	9.9.2015 13:57	ibraheem	balogun
16.	9.9.2015 14:35	Miroslav	Zoricak
17.	9.9.2015 23:19	Miro	Jánošik
18.	10.9.2015 11:36	Alexander	Kotsev
19.	10.9.2015 14:11	-	Belešová
20.	14.9.2015 15:33	EUGEN	IODACHE
21.	15.9.2015 15:31	Michala	Hrnčiarová
22.	15.9.2015 17:54	Alix	Guillard

No.	Timestamp	First Name	Surname
23.	16.9.2015 10:12	Marek	Hubáček
24.	16.9.2015 17:48	Peter	Vojtek
25.	17.9.2015 14:35	Henrich	Bernát
26.	17.9.2015 16:19	Jachym	Cepicky
27.	18.9.2015 13:51	Jozef	Nováček
28.	21.9.2015 8:34	Samuel	Kimlička
29.	23.9.2015 9:37	Tomas	Knap
30.	23.9.2015 11:24	Tomáš	Bél
31.	24.9.2015 9:03	Boris	Kružliak
32.	24.9.2015 10:26	Peter	Klobusnik
33.	24.9.2015 10:26	Peter	Kopčanský
34.	24.9.2015 15:21	Gerhard	Dünnebeil
35.	24.9.2015 15:25	Katharina	Schleidt
36.	24.9.2015 15:49	Jaroslav	Ambróz
37.	24.9.2015 15:50	Martin	Šutka
38.	25.9.2015 11:34	Sona	Veresova
39.	25.9.2015 12:25	Tomas	Kliment
40.	25.9.2015 22:17	Juraj	Macháč
41.	25.9.2015 22:34	Peter	Laurinec
42.	25.9.2015 22:34	Michal	Páleník
43.	25.9.2015 22:34	Martin	Gábriš
44.	25.9.2015 22:40	Andrej	Skok
45.	25.9.2015 22:44	Ladislav	Pápay
46.	25.9.2015 22:49	Miro	Jánošík

No.	Timestamp	First Name	Surname
47.	25.9.2015 23:15	Richard	Laffers
48.	26.9.2015 8:54	Pavol	Bucko
49.	26.9.2015 13:40	Ondrej	Kozlovsky
50.	26.9.2015 15:17	Jan	Ferko
51.	27.9.2015 18:02	Rastislav	Holecek
52.	27.9.2015 21:30	Adam	Kulíšek
53.	28.9.2015 13:38	Martin	Pinter
54.	28.9.2015 21:07	Matej	Kozlovský
55.	28.9.2015 22:49	Jakub	Kočica
56.	30.9.2015 7:19	Filip	Gurtler
57.	30.9.2015 16:45	Iveta	Ferčíková
58.	30.9.2015 20:45	Martin	IVIČIČ
59.	1.10.2015 9:33	Premysl	Vohnout
60.	1.10.2015 11:39	Gabriel	Lachmann
61.	1.10.2015 23:56	Rosen	Dimov
62.	2.10.2015 10:57	Tomas	Mildorf
63.	2.10.2015 13:29	Tomáš	Sapák
64.	2.10.2015 13:29	Martin	Kuba
65.	2.10.2015 16:54	Dimitri	Kožuch
66.	2.10.2015 18:06	Michal	Kepka
67.	3.10.2015 23:35	Martin	Tuchyňa
68.	4.10.2015 0:15	Šimon	Leitgeb
69.	4.10.2015 13:54	Michal	Dolnik
70.	5.10.2015 1:14	Lubor	Illek

No.	Timestamp	First Name	Surname
71.	5.10.2015 9:35	Stanislav	Parnicky
72.	5.10.2015 10:13	Veronika	Fercikova
73.	5.10.2015 10:47	Tomas	Matula
74.	5.10.2015 10:48	Martin	Měkota
75.	5.10.2015 12:43	Daniele	Tarini
76.	5.10.2015 13:00	Ján	Marček
77.	5.10.2015 15:14	George	Soulos
78.	5.10.2015 15:49	Ervin	Wirth
79.	5.10.2015 18:19	Karol	Bujaček
80.	5.10.2015 21:28	Juraj	Pikulik
81.	5.10.2015 22:13	Alessandro	Oggioni
82.	Additional participants		
83.		Peter	Hanečák
84.		Baška	Klimek
85.		Eva	Šimková
86.		Štefan	Szilva
87.		Richard	Bednárík
88.		Michal	Kubáň
89.		Dezső	Mikus
90.		Filip	Glasa
91.		Jan	Suchal
92.		Michiel	Hildebrand
93.		Peter	Pastorek
94.		Ján	Tóbik

No.	Timestamp	First Name	Surname
95.		Martin	Zeman
96.		Veronika	Košková
97.		Vouter	Alink
98.		Tarini	Daniele
99.		John	O'Flaherty
100.		Ivan	Radvak
101.		Mario	Burian
102.		Nicolas	Petropoulos
103.	Waiting list	Requested access after the registration deadline	
104.		Martin	Lipták
105.		Ondrej	Zvara

Table 5 List of DanubeHack registered participants

ANNEX 2 REGISTRATION FORM

DanubeHack registration

<http://www.danubehack.eu>

*Required

1. First Name *
2. Surname *
3. Contact e-mail *
4. Affiliation (Please state a company / authority you work for, school you attend or if you register as private person, etc.) *
5. Data relationship *Mark only one oval.
 - Data producer
 - Data consumer
 - Both
6. Area of expertise * Tick all that apply.
 - Analyst
 - Designer
 - Developer
 - Non-technical
7. Preferred participation * Mark only one oval.
 - Hackathon
 - Workshop
 - Both

Hackathon

8. Why do you think your Hackathon registration should be selected? *
9. What are the ideas you'd like to work on? (If you already have an idea for a project you'd like to work on, please describe it briefly.)
10. Are there some data, you'd like to share and present during the event?
11. Are you willing to work on your project after the Hackathon? Mark only one oval.
 - Yes
 - No



Workshop

12. Topics, you would like to offer to present (Title, abstract in max of 500 characters).
13. Topics, you would like to see in workshops and learn more about

Conclusion

14. Your note to the organisers.

ANNEX 3 ATTENDANCE LIST

Attendance list

DanubeHack (Danube Open (Geo) Data Hackathon & Developers' Workshops)

p.č. no.	Priezvisko Surname	Meno Name	Podpis Signature		
			15.10.2015	16.10.2015	17.10.2015
1.	JANOŠEK	MIROSLAV			
2.	ŠTEPAŇČEK	TOMAS			
3.	DOLNÍK	MIKHAL			
4.	Alink	Wolker			
5.	Hildebrand	Michiel			
6.	Madala	Tomáš			
7.	Bujáčik	Karol			
8.	Horáček	John			
9.	Torres	Daniela			
10.	PEREK	IASFOERK			
11.	Kellav	Jschum			
12.	O'KANEVY	JOHN			
13.	KUBA	Michiel			
14.	SAPAT	TOMAS			
15.	CHADNAT	FRANEC			
16.	KOZMA	DIMITRIOS			
17.	KEPPEK	Michael			
18.	PETROPOULOS	NIKOLAOS			
19.	KINCIK	DAMIAN			
20.	BURIAN	MARIO			
21.	Dovácik	Jozef			
22.	Hilgert	Reiner			
23.	KMAY	MARTIN			
24.	HEULEK	JOHN			
25.	WIRTH	ERWIN			
26.	KOZUSKAT	PETER			
27.	KAPUSNÍK	PETER			
28.	Kocák	Karol			
29.	Alta	Guillaume			
30.	Juraj	Mojica			

1

SLOVENSKÁ AGENTÚRA ŽIVOTNÉHO PROSTREDIA SLUŽBA ENVIRONMENT AGENCY		SDI4Apps		
31.	LAPPERS RICHARD	<i>[Signature]</i>	<i>[Signature]</i>	
32.	A. ... Krištelová	<i>[Signature]</i>		
33.	KUŠVA MARTIN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
34.	OBIL John	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
35.	ZEMHA MARTIN	<i>[Signature]</i>		
36.	Schleier Cathi	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
37.	Künzelsch Gerhard	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
38.	KOLČO DANILO	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
39.	KLIVKA JORIS	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
40.	ČEPIČKY JACHM	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
41.	VOJTEK PETER	<i>[Signature]</i>		
42.	ČERNÝ MATÚŠ	<i>[Signature]</i>	<i>[Signature]</i>	
43.	Leitges Simon	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
44.	... ..	<i>[Signature]</i>		
45.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
46.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
47.	IVETA FERČÍKOVÁ	<i>[Signature]</i>	<i>[Signature]</i>	
48.	MARTIN DEKUTA	<i>[Signature]</i>	<i>[Signature]</i>	
49.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
50.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
51.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
52.	MARTIN PRAVDA	<i>[Signature]</i>	<i>[Signature]</i>	
53.	SONJA VEČESOVÁ	<i>[Signature]</i>	<i>[Signature]</i>	
54.	BRENOVA ZATKOVÁ	<i>[Signature]</i>	<i>[Signature]</i>	
55.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	
56.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	
57.	John ...	<i>[Signature]</i>	<i>[Signature]</i>	
58.	VRHAC SABO	<i>[Signature]</i>	<i>[Signature]</i>	
59.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	
60.	ANNA URBELDOVA	<i>[Signature]</i>	<i>[Signature]</i>	
61.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	
62.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	
63.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	
64.	FENCIK ...	<i>[Signature]</i>	<i>[Signature]</i>	
65.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	
66.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
67.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
68.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
69.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
70.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
71.	... ..	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

Table 6 DanubeHack attendance list

ANNEX 4 OUTCOMES OF DANUBEHACK SURVEY

The DanubeHack SURVEY

DATA

1. Have you used any open data from the list provided by the organisers?

- A. YES
B. NO

2. Have you had any difficulties with using open data?

- A. YES
B. NO

if YES, please describe these difficulties:

PRE-DEVELOPED SOFTWARE

3. Have you used any existing software or source code for your application?

- A. YES
B. NO

if YES, please indicate which one(s):

Geoserver

MENTORS

4. Have you discussed any issues with the DanubeHack mentors?

- A. YES
B. NO

if YES, was the discussion helpful?

- A. VERY HELPFUL
B. HELPFUL
C. NOT HELPFUL

ORGANISATION

5. Were you satisfied with the organisation of DanubeHack?

- A. YES
B. NO

6. Do you have any suggestions for changes regarding the organisation, programme, duration, etc.? This might help with organising other similar events.

well organised!

The DanubeHack SURVEY

DATA

1. Have you used any open data from the list provided by the organisers?

- A. YES
 B. NO

2. Have you had any difficulties with using open data?

- A. YES
 B. NO

if YES, please describe these difficulties:

In some cases was had ~~to~~ to find the data and also process the data.

PRE-DEVELOPED SOFTWARE

3. Have you used any existing software or source code for your application?

- A. YES
 B. NO

if YES, please indicate which one(s):

MENTORS

4. Have you discussed any issues with the DanubeHack mentors?

- A. YES
 B. NO

if YES, was the discussion helpful?

- A. VERY HELPFUL
 B. HELPFUL
 C. NOT HELPFUL

ORGANISATION

5. Were you satisfied with the organisation of DanubeHack?

- A. YES
 B. NO

6. Do you have any suggestions for changes regarding the organisation, programme, duration, etc.? This might help with organising other similar events.

The DanubeHack SURVEY

DATA

1. Have you used any open data from the list provided by the organisers?

- A. YES
 B. NO

2. Have you had any difficulties with using open data?

- A. YES
 B. NO

if YES, please describe these difficulties:

PRE-DEVELOPED SOFTWARE

3. Have you used any existing software or source code for your application?

- A. YES
 B. NO

if YES, please indicate which one(s):

IoT Discovery & EE
Senology

MENTORS

4. Have you discussed any issues with the DanubeHack mentors?

- A. YES
 B. NO

if YES, was the discussion helpful?

- A. VERY HELPFUL
 B. HELPFUL
 C. NOT HELPFUL

ORGANISATION

5. Were you satisfied with the organisation of DanubeHack?

- A. YES
 B. NO

6. Do you have any suggestions for changes regarding the organisation, programme, duration, etc.? This might help with organising other similar events.

Developing from 9:00 to 24:00 is very long, it's not possible to concentrate for such a long time

The DanubeHack SURVEY

DATA

1. Have you used any open data from the list provided by the organisers?

- A. YES
B. NO

2. Have you had any difficulties with using open data?

- A. YES
B. NO

if YES, please describe these difficulties:

where are they?

PRE-DEVELOPED SOFTWARE

3. Have you used any existing software or source code for your application?

- A. YES
B. NO

if YES, please indicate which one(s):

leaflet + plugins

MENTORS

4. Have you discussed any issues with the DanubeHack mentors?

- A. YES
B. NO

if YES, was the discussion helpful?

- A. VERY HELPFUL
B. HELPFUL
C. NOT HELPFUL

ORGANISATION

5. Were you satisfied with the organisation of DanubeHack?

- A. YES
B. NO

6. Do you have any suggestions for changes regarding the organisation, programme, duration, etc.? This might help with organising other similar events.

badges with colour codes - orga - visitor - mentor

The DanubeHack SURVEY

DATA

1. Have you used any open data from the list provided by the organisers?

- A. YES
B. NO

2. Have you had any difficulties with using open data?

- A. YES
B. NO

if YES, please describe these difficulties:

How to query Sparql endpoint of POIs, but we solved it together

PRE-DEVELOPED SOFTWARE

3. Have you used any existing software or source code for your application?

- A. YES
B. NO

if YES, please indicate which one(s):

source code of Open Smart Tourist Data pilot application of SDI4apps

MENTORS

4. Have you discussed any issues with the DanubeHack mentors?

- A. YES
B. NO

if YES, was the discussion helpful?

- A. VERY HELPFUL
B. HELPFUL
C. NOT HELPFUL

ORGANISATION

5. Were you satisfied with the organisation of DanubeHack?

- A. YES
B. NO

6. Do you have any suggestions for changes regarding the organisation, programme, duration, etc.? This might help with organising other similar events.

Present ~~the~~ all available data first and then start pitching the project ideas and coding.

The DanubeHack SURVEY

DATA

1. Have you used any open data from the list provided by the organisers?

- A. YES
- B. NO

2. Have you had any difficulties with using open data?

- A. YES
- B. NO

if YES, please describe these difficulties:

PRE-DEVELOPED SOFTWARE

3. Have you used any existing software or source code for your application?

- A. YES
- B. NO

if YES, please indicate which one(s):

MENTORS

4. Have you discussed any issues with the DanubeHack mentors?

- A. YES
- B. NO

if YES, was the discussion helpful?

- A. VERY HELPFUL
- B. HELPFUL
- C. NOT HELPFUL

ORGANISATION

5. Were you satisfied with the organisation of DanubeHack?

- A. YES
- B. NO

6. Do you have any suggestions for changes regarding the organisation, programme, duration, etc.? This might help with organising other similar events.

No

The DanubeHack SURVEY

DATA

1. Have you used any open data from the list provided by the organisers?

- A. YES
 B. NO

2. Have you had any difficulties with using open data?

- A. YES
 B. NO

if YES, please describe these difficulties:

PRE-DEVELOPED SOFTWARE

3. Have you used any existing software or source code for your application?

- A. YES
 B. NO

if YES, please indicate which one(s):

GIS, Arc Map

MENTORS

4. Have you discussed any issues with the DanubeHack mentors?

- A. YES
 B. NO

if YES, was the discussion helpful?

- A. VERY HELPFUL
 B. HELPFUL
 C. NOT HELPFUL

ORGANISATION

5. Were you satisfied with the organisation of DanubeHack?

- A. YES
 B. NO

6. Do you have any suggestions for changes regarding the organisation, programme, duration, etc.? This might help with organising other similar events.

10 f 

The DanubeHack SURVEY

DATA

1. Have you used any open data from the list provided by the organisers?

- A. YES
- B. NO

2. Have you had any difficulties with using open data?

- A. YES
- B. NO

if YES, please describe these difficulties:

11

PRE-DEVELOPED SOFTWARE

3. Have you used any existing software or source code for your application?

- A. YES
- B. NO

if YES, please indicate which one(s):

WE CREATED NEW FEATURE ON TOP OF MYCARTRACKS.COM

MENTORS

4. Have you discussed any issues with the DanubeHack mentors?

- A. YES
- B. NO

if YES, was the discussion helpful?

- A. VERY HELPFUL
- B. HELPFUL
- C. NOT HELPFUL

ORGANISATION

5. Were you satisfied with the organisation of DanubeHack?

- A. YES
- B. NO

6. Do you have any suggestions for changes regarding the organisation, programme, duration, etc.? This might help with organising other similar events.

2ND. DAY WIFI WAS REALLY BAD
OTHERWISE GREAT EVENT, YOU MADE A GREAT JOB!