

Hack4Norden

Presentation of
the hacker teams
competing in
Hack4Norden at
Slush 2016.

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Photo right: Hack4Fi.
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Photo above: Hack4Heritage in Sweden.
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Hack4Norden 2016

Innovation driven by data.

Data is emerging as one of the most important drivers of innovation. Some call it "the new oil", an "economic super driver" and a "future x-factor". Nordic Innovation acknowledges the innovation potential of data, and is therefore taking the initiative for Hack4Norden – a Nordic open data innovation competition.

Building on the 2015 [Nordic Open Data Week](#) initiative, we have strengthened the collaboration with public organisations arranging hackathons in the Nordic countries to create the Hack4Norden challenge.

The goal is to support the development of new innovative companies and to show the value and possibilities of data, as well as to push the acknowledgement of data utilisation in public and private organisations. All the solutions and ideas competing at Hack4Norden have a Nordic dimension – either solving a societal challenge or elevating the region's cultural heritage.

Becoming digital pioneers.

Competition criteria

1. Business potential

The winning team must present an idea with a clear business potential. The idea should ideally be scalable and there should be a well-defined business plan. The winning team must be able to present what problem they are solving, how they are solving it and who the customers are.

2. Nordic perspective

The Nordic countries are very similar in social and economic structures. The winning team must present an idea or solution applicable as well as demanded in all the Nordic countries.

3. Innovation and creativity

The winning team must present an idea or solution that creatively solves a problem and benefits the end user by combining data in new ways and/or by rethinking its service design. The best solution or idea must be an eye-opener.

Hack4Norden is part of the lighthouse project [Innovative Nordic Digital Solutions](#) initiated by the Nordic Ministers of Business, with the overall goal of developing the Nordic region into a pioneer region for new and innovative digital solutions.

Competition background

Eight Nordic hack teams will compete to become the Hack4Norden champion 2016. The eight teams, two each from Denmark, Finland, Norway and Sweden, qualified for the competition by winning their national hackathons.

The finalists won tickets and travel expenses to go to Slush, as well as professional pitching preparation and business development mentoring. A Nordic jury will decide on the top three teams, who will win 125.000 NOK, 75.000 NOK and 50.000 NOK in business development support.

The Hack4Norden pitching will take place at Hall 2 at the Slush venue 1 December from 12.00 to 14.00 CET+1.

On the next pages you will find short presentations of the eight teams competition at Hack4Norden 2016.

Green Kids Competition

An educational cross-disciplinary competition about behavioural change and energy awareness.

The overall goal of Green Kids Competition is to move energy consumption from peak hours and educate the future consumers about energy related issues. The program is tailored to fit the school learning goals for 3rd-4th graders.

By engaging in different challenges, the students learn about energy consumption and build a physical object that uses open data to visualise energy usage. The challenges and objects enables the kid to help his or her family change consumption behaviour, which is measured through the Smart Grid. The student competes with classmates.

Green Kids Competition won the Open Energy Days hackathon in Denmark.



Country
Denmark

Team
Katja Meyer (Entrepreneurial Consultant)
Tejs Dupont (Student)
Mariya Yanakieva (Student)
Michael Veng (Consulting Engineer)
Liga Daine (Student)
Thomas Wessel (Student)
Joachim Skovbogaard (Student)



Enterdest

A shortcut to your destination.

Enterdest is an app that learns to predict your next destination by building your location history step by step and by having access to your calendar events.

When you open the app, these predictions appear as suggestions, which you can then click to feed them as destinations to integrated mobility applications, such as Uber. Enterdest also allows you to send location requests to contacts.

Enterdest features an API that other mobility applications can implement. This way other applications can access the mobility intelligence gathered by Enterdest while having a control of the user experience.

The team behind Enterdest won the MyData hackathon in Helsinki 2016.

Country
Finland

Team
Jussi Viinikka (Student)
Iina Lumme (Student)
Johannes Kauhanen (Student)

SaveMyReindeer

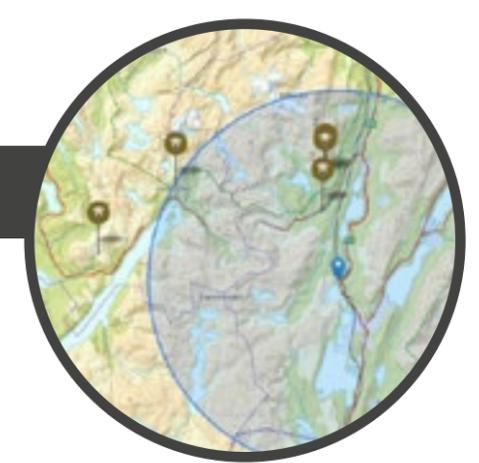
An automatic animal detection system for railroad and roads.

This solution makes it possible for the railroad service and animal owners to get a notification if an animal is in the danger of being hit by a train.

By combining the data from an animal tracking system with real time railroad data, it is possible to notify the train to either reduce the speed or stop the train so that the animal can be removed from railroad track to prevent a fatal accident. The system can also be implemented on roads via smart-signs and other road traffic warnings systems.

The solution utilises data from Jernbaneverket the Norwegian Mapping Authority, Lantmäteriet, MML Verkkopalvelu and live animal tracking data from Findmysheep.

SaveMyReindeer won the Norwegian #Hack4No 2016.



Country
Norway

Team
Marit Mjøen Solem (Founder, CEO of Findmysheep)
Halvor Mjøen (Founder, CTO of Findmysheep)
Tina Hætta (Reindeer owner)
Kristin Skjerven (Officer, The Norwegian Mapping Authority)



Country
Sweden

Team
Heiti Ernits (Researcher, RISE)
Marcus Kempe (Technician, RISE)
Mats Törnberg (Programmer, Cavagent AB)
Per-Olov Jernberg (Programmer, Spotify AB)



DiverCity

A tool for analysing urban life and diversity.

DiverCity, created by GeOhack3s, is a utility for visualising cultural and economic conditions and activities in a city. The web-application combines geographical data from municipalities and social media to generate an interactive map.

The tool can be used by urban planners to get a better understanding of socio-economic relations in different urban areas. Furthermore, the solution can be used by actors in business sector as a strategic tool for geographical positioning of an establishment.

The tool can also be used by tourists and citizens in order to find activities and events in the city. GeoHackers won Hack for Sweden 2016.

GhostWriter

Data is a ghost.

GhostWriter is an exciting experience for museum visitors to learn about Nordic historical authors and explore the vivid history of the places where these authors lived.

Working with the digitised databases of museums, GhostWriter makes history come to life in a deeply emotional interactive human experience using open source microcontroller technology together with game and interaction design on different devices such as typewriters, TVs, pocket writers or even old computers.

By physically relocating the devices themselves, the solution could help share ghosts between museums, allowing for interesting Nordic intercultural exchange. The prototype was made using the data collection of the author J.Buchholtz from Struer Museum.



Country
Denmark

Team

Alf Andersen (Software developer)
Annette Finnsdottir (Curator & Concept Developer)
Davide Ronco (Product & Graphic Designer)
Julie Reindl (Speculative Design & Writer)
Mateo Pérez (Game Designer & Business Developer)
Christopher Nielsen (Technology Engineering & Business Developer)



Quicktags.io

Image tagging and meta data creation powered by AI.

Quicktags.io is an image tagging and face recognition solution powered by AI and deep learning algorithms. The tool can help media companies, image agencies, photo stocks and archives to save time and money by automating their manual image tagging and annotation tasks and get more accurate and relevant tagging for their content.

It also consists of a powerful image analysis API for developers and integration partners. After uploading an image set, the tool will automatically recognise and tag images with auto tagging using similar image analysis and face recognition.

At Hack4FI, 1500 images from different cultural organisations including YLE archives, Svenska Litteratursällskapet (SLS) and Suomi syö ja juo were used.

Country
Finland



Team

Timo Heikkinen, CEO, Top Data Science)
Hung Ta (CTO, Top Data Science)
Oguzhan Gencoglu (Chief Scientist, Top Data Science)

Hidden – tales of the North

Bringing ancient stories from Nordic folklore to life.

Hidden is a map-based gaming app taking the player out to experience cultural heritage sites and the background of famous stories from Nordic folklore and mythology. The game will consist of two interfaces, a website and an application.

The application is a map guiding you on paths into the deep forests of Nordic folklore and history. You can plan your trip ahead by browsing the area you want to visit and see how many folklores you can chase down during a day-trip or on a longer vacation. When reaching your folklore destination, the whole story will be revealed in the app.

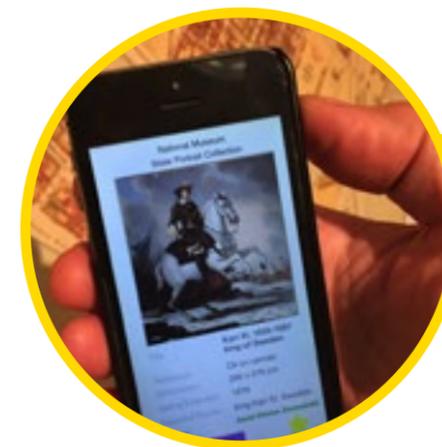
The game prototype was built by using open data sets from the Norwegian Mapping Authority and the Directorate for Cultural Heritage.



Country
Norway

Team

Pål Rørby (Troll Expert, Nice View Studio)
Veronika Bazika (Project Developer, PAN Innovasjon)
Torkel Velure (Student)
May-Lene Gjerde (Student)
Victor Finnerud (Student)
Frans Titulaer (Student)



Country
Sweden



Team

Hardik Bajaj
Tore Danielsson
Magnus Sälgö

myMuseum

The proactive museum experience.

myMuseum is an app that changes the museum visit to be personalised, hyperlinked and proactive. The app gives the end user personalised artwork in his or her mobile phone, smartwatch or tablet based on preferences and social network.

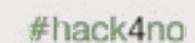
The museums will get a new interaction with the visitors both before, during and after the visit. They can also connect objects in the exhibition with other museums.

The app uses the web 3.0 technology of the semantic web combined with the museum visitor preferences which can be continuously updated. The app will be based on open data from the national museum in Sweden, Wikimedia Commons, Wikidata and other museums offering open data about their collections.



Nordic Innovation
Stensberggata 25
NO-0170 Oslo
www.nordicinnovation.org

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