



QUEEN'S
UNIVERSITY
BELFAST

SCHOOL OF
ELECTRONICS,
ELECTRICAL
ENGINEERING AND
COMPUTER SCIENCE



OpenDataNI
Sonrai Oscailte TÉ



PARTICIPANT HANDBOOK

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AGENDA

Monday 20th January

CSB/0G/028

5:00 - 5:30 PM	Arrival and Registration
5:30 - 6:00 PM	Hackathon Kick-off
6:00 - 7:00 PM	Problem Identification in Teams
7:00 - 7:45 PM	Dinner (served in CSB Ground Floor Foyer)
7:45 - 8:30 PM	Solution Ideation in Teams
8:30 - 9:00 PM	Video Creation Workshop

Friday 24th January

5:00 PM	Final Submission Deadline
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Monday 27th January

CSB/0G/028

5:00 - 6:00 PM	Reminder on Awards and Public Vote
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Friday 31st January

5:00 PM	Public Vote Closes
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Monday 3rd February

CSB Ground Floor Foyer

5:00 - 6:00 PM	Awards Announced
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CHALLENGE

Water! Water is an extremely important natural resource which has ever increasing complex issues. From the impact of climate change on rising sea levels to local water usage and management there are so many ways you can consider the importance of water in all our lives and the need for a sustainable approach to everything concerning water. You must create a technical solution that helps with a problem associated with water in Northern Ireland. You can consider Belfast or Northern Ireland in general or other specific areas, but the problem you work on must be related to water.

DATA

Here are example datasets from OpenData NI for you to utilise when creating your solution. You are not limited to these datasets and may supplement your analysis with other datasets you find relevant on OpenData NI or from other sources as well.

- <https://admin.opendatani.gov.uk/dataset/lakes-of-northern-ireland>
- <https://admin.opendatani.gov.uk/dataset/lake-water-bodies>
- <https://admin.opendatani.gov.uk/dataset/register-of-private-water-supplies-in-northern-ireland-24-04-2020>
- <https://admin.opendatani.gov.uk/dataset/surface-drinking-water-protected-areas>
- <https://admin.opendatani.gov.uk/dataset/bathing-waters-directive-protected-areas>
- <https://admin.opendatani.gov.uk/dataset/ni-water-customer-tap-authorised-supply-point-results>
- <https://admin.opendatani.gov.uk/dataset/bathing-waters-directive-protected-areas>
- <https://admin.opendatani.gov.uk/dataset/river-water-quality-monitoring-1990-to-2018>
- <https://admin.opendatani.gov.uk/dataset/inland-fisheries-public-angling-estate>
- <https://admin.opendatani.gov.uk/dataset/drainage-asset>
- <https://admin.opendatani.gov.uk/dataset/groundwater-dependent-terrestrial-ecosystems>
- <https://admin.opendatani.gov.uk/dataset/lagan-network-contribution>
- <https://admin.opendatani.gov.uk/dataset/digital-surface-model>
- <https://admin.opendatani.gov.uk/dataset/lough-neagh-network-contribution>





POTENTIAL PROBLEMS

The example datasets provided allow you to investigate potential problems, such as:

- Lough Neagh
- Water Quality
- Flooding
- Water Conservation
- Aquatic Biodiversity
- Wastewater

These are just examples: you are encouraged to think creatively about what problems are faced locally regarding water. You need to come up with a problem that is specific.

POTENTIAL SOLUTIONS

Here are some example ideas for generic solutions that you could create a solution using:

- An information-based app to inform users of something or to allow them to find out something
- A game-based app to teach users about a water related issue and how they can help
- A tracker-based app
- Issue reporting app
- Optimization app
- A crowdsourcing organisation app

All the apps mentioned could be web apps or mobile apps, you can do either. Of course, these are just examples, and you should think about others as well as how you are going to solve your problem you have chosen.



OUTPUTS

All of the following outputs must be submitted, otherwise you will not be judged:



You must create a **60-second video** in mp4 file format that details your problem and solution.

- Suggested video plan: 10 seconds on the problem, 10 seconds on the solution, 40 seconds showcasing what you have created.
- It should be professional; it will also be used for the public vote. Therefore, it should not contain any inappropriate material. Any violation of this will result in disqualification.



You must submit a **word file** that contains:

- The name of the solution
- A 150-word product vision: what the solution is, for whom, why they'd want to use it, and its unique selling point.



All **technical files** for your final solution.

SUBMISSION

Each team has a private MS Team subchannel. In that subchannel in the *Files* tab you have a folder called *Submission*. The 60-second video, document with the name and product vision, and all technical files for the created solution must be in the *Submission* folder by **5pm on Friday 24th January**. After this point the folder is locked, and you cannot add the files.

Only outputs in the *Submission* folder will be judged. All outputs must be submitted.





PUBLIC VOTE

Details on how the public vote will work will be provided on Monday 27th January in person.

You are encouraged to get others to vote for your video, however, to vote they **must be a student or staff member at QUB** and can only vote once.

You must let the organisers know if you do not wish for your video to be included in the public vote. You can withdraw your video at any time, but you must let the organisers know. However, this means you will not be eligible for the People's Choice award.

PRIZES

All prizes will take the form of Amazon vouchers divided amongst the team evenly. Teams can win multiple prizes of any combination.



TEAMWORK

Teams might consist of people you have not worked with before or have different experiences from you.

Remember that you are expected to create a technical solution for your identified problem.

Team members can focus on tasks that **align with their expertise**, be it technical or non-technical, as both are needed to achieve the final outputs.

You might find it useful to **assign roles** once you have decided on what you are going to create.

HOUSEKEEPING



Food Policy

No food can be taken into the computer lab and drinks must have a closeable lid.



Respect & Collaboration

Please be attentive and work respectfully with your teammates. Approach teamwork with an open mind and support each other's contributions.



Fire Drill

There are no planned fire drills, therefore if a fire alarm goes off, please follow the directions of the fire warden present and exit the building in a calm orderly fashion.





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SPONSOR

Opendata NI Outreach Fund
<https://admin.opendatani.gov.uk/>

