Expression of Interest	
Project Title	Novel Ways of using NCC Open Data Resources
Organisation or Supervisor	UoN
Contact person (sponsor)	Peer-Olaf Siebers
Contact email	peer-olaf.siebers@nottingham.ac.uk
Team Number:	16
Team Members	
Name	Email Address
Saamiya Aqeel	Psysa11@nottingham.ac.uk
Alice Thornton	psyat9@nottingham.ac.uk
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Roan Hutcheson	psyrh11@nottingham.ac.uk

## Description of Team Skills (You must provide clear evidence of to what extent the team has the Highly Desirable and where possible the Desirable Skills detailed on the Original Project form)

Nottingham as a city is very popular amongst students, seniors and everyone in between. As students studying at UoN, we have explored the city quite well. Therefore, we feel the need for an application that could provide some guidance and advice to other people who want to explore the city. Additionally, we want to work on this project as we know that our final product will be particularly useful for the development of Nottingham's reputation as a busily, charming, and contemporary city.

We are aware that the sponsor of this project, Peer-Olaf Siebers, has relevant experience and a deep knowledge of the travel market. Knowing this, it enforces our enthusiasm for this as we are confident, we can tailor it to the needs of the sponsor.

This opportunity presents itself as a wonderful way for us to express our creative ideas. In order to turn the NCC Open Data platform into useful information that the public would benefit from, using a smart travel app would be the most efficient way. In an effort to promote these cultural elements of this cultural city we want to provide people the necessary information in a quick and accessible format.

After conducting research on the travel market, we established that it is currently extremely competitive with top travel providers such Airbnb and Booking, these are big companies which are heavily invested into providing worldwide services. Making ourselves noticeable would prove to be a great challenge that we are willing to accept. We will distinguish ourselves by providing travel advice solely for tourism in Nottingham and adding interactive features so the app is enjoyable for people of all ages and backgrounds such as an educational game or popups containing blurbs of knowledge and history.

Delivering this product in such a way that it is a person's first approach is our top priority. We plan to focus on the user experience by considering the visibility of system status, the cohesion between the system and the real world and the user's control and freedom. Consistency of standards and error prevention are of a top priority to us. At the core of the travel app, we plan on this application to be easy to maintain and extend to fit the life cycle of the software by ensuring our code is able to support new software updates and is able to reinforce any new features.

This application will meet the initial requirements by including map integration and navigation, recommendations on the most suitable routes, and the ongoing events that might be of interest. The key features will include Nottingham landmarks and traveling advice on using public transportation.

Together, we bring a range of experiences that will help us solve the problem at hand which is all systematically organized below. Outside of development skills, our team members also have experience working as a team in a professional environment from different jobs.

Our team admin, David, has experience working with machine learning and data analysis using Python and scikit-learn for data analysis and to implement different types of models that will be relevant in this project such as decision trees and neural networks to predict people's salaries. His experience will be very valuable to us in developing the product.

Our git lead, Maria, has a lot of experience with web development and related web languages such as HTML, CSS, JavaScript, and PHP. She has been previously exposed to web scraping and data science, interests in which she would be more than happy to pursue in this project when creating the interface for the app. Additionally, Roan's technical skills in Python and Java would also benefit the project by increasing the range of our options and ways in which we can develop the back end of the app.

Although this is quite a technical project, it is only possible to execute this project by carefully planning the process of development. This includes project management methods: agile and scrum, effective collaboration, etc. We also acknowledge that there will be challenges involved in the making of this project due to gaps in our experience analyzing data, applying and evaluating machine learning models as well as it being our first time doing this type of work. To counteract that, we will utilise paired programming and knowledge transfer for anything restricting the progress of the project.

As a multicultural group as ours, our unique ideas bring an edge to everything we do and we hope this project will catapult us further into our career with the diverse skills it offers in its implementation.

(Max 750 words)

Date of Submission of EoI	19 <sup>th</sup> of October 2022
Date of Pitch	26 <sup>th</sup> of October 2022
Notification of award	

Please make sure to submit a CV for each member of the team together with the EoI using the submission format available on Moodle.