

School of Computing

CA326 Year 3 Project Proposal Form

SECTION A

Project Title: TerraTalk

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Staff Member Consulted Dr. Tracey Mehigan

Project Proposal

Description

Our group has decided to create an android app that acts as a social and educational platform for people that are environmentally conscious. We decided on this project because environmentalism is a topic that is getting more and more prevalent in the general public and we believe that giving people a resource that makes green living more accessible to the average person is very important.

We took inspiration from websites such as Treehugger and EthicalConsumer which are educational websites that share many articles about sustainable living and environmentalism. We wanted to create an app version that also acts as a social

media as we saw that these websites lacked a social aspect. With our forum and event creation features.

Our main demographic is people who want to be more environmentally conscious and young people. The app will be easy to use and familiar for younger audiences to use as it'll act similar to a social media platform. It'll encourage young people to get more involved in eco living.

We plan on using Kotlin to create an app that contains these key features:

- Pages containing local and global news implemented using RSS or web scraping
- Suggestions for events such as charity fundraisers, workshops, protests and talks using Eventbrite API and Meetup API
- Local map with filters that show locations for recharging points for electric bikes, recycling stations, vegan/vegetarian restaurants, local organic shops and locations for events
- Forum section where people can share their thoughts and opinions. There would be different sections to keep everything organised (e.g Recipes, Current Affairs, Product Recommendations) and storing all the data in a Firebase database
- Users can set up and advertise events on the forums and if given enough 'upvotes' from other community members. The map will then be updated in the events filter to show the location for the event.

We plan on having a simple and elegant UI design as the app does have many features and we don't want to overcrowd the screen and confuse the user. We will also have accessible design to accommodate people with visual disabilities by using alt-text for all images and having different settings to change font size and colour.

Division of Work

Madalina Triboi:

- Design Logo, icons and UI
- Implement & Test Back-End
- Set up server
- Deploy app

Siri Nandiparty:

- Implement & Test Front-End
- Localisation & Accessibility

- Configure Database
- Optimisation

Programming language: Kotlin

Programming tool(s)

IDE: Android Studio

Web Server & Database: Firebase

APIs to be used: Google API, Eventbrite API, Meetup API

Design: Adobe Illustrator to design logo & icons

Figma to prototype basic application front-end

Learning Challenges

Kotlin

Android Studio Giraffe 2022.1.3

Jetpack Compose UI

Adobe Illustrator v28

Google Firebase

Hardware / software platform

For the development of our app we will be using our own PCs and lab machines, using both Windows and Linux (Ubuntu).

Special hardware / software requirements

Hardware requirements: Android phone

Software requirements: Android Studio