EVOLEON

Evoleon Mobile App
Project Handover
Trimester 2, 2022

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This handover document covers sub-project one (the Evoleon App) of Chameleon's EV Adoption Tools project for Trimester 2, 2022. A separate document is available for sub-project two (EV Charger Forecasting and Location Optimisation).

Overview, Goals and Objectives

The Evoleon app project (sub-project one of two in EV Adoption Tools) aims to design and develop an app that makes locating EV charging stations and their various features easier.

Aims for Trimester

- Add page switching functionality to app navigation menu
- Implement clickable charging location icons onto the EV charging station map, with details such as charge speed and available/total vehicle capacity to assist the end user's in choosing an appropriate station
- Arrange charge station data (from a variety of sources) in a consistent format that is readable by the mobile application
- Design new features, or expand on previous designs, to inform future development

Project Members

Student ID	Name	Junior/Senior	PG/UG	Team/Position
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From *Evoleon Project Members T2 2022.xlsx*

Project Status

What we achieved this trimester:

- Page switching functionality working, with multiple pages available
- Clickable charging station icons implemented
- User sign-up and authentication with email and password implemented; details stored in Firebase DB
- Charge station data format created on our project's new Firebase DB
  - Script created to add new data to the database
- Documentation and explanations of aspects of the project created to assist with onboarding
  - How to download and run the project (link)

Next steps
These are some suggested deliverables to work on in the following trimester:

- Implement information display when a charging location icon is clicked (currently, clicking reveals a placeholder)
- Get the charging location data on Firebase to be accessible by the app (replacing the hardcoded location data with data from the Firebase DB)
- Work to reduce resource usage and resolve performance issues when running on Android

Minor/admin changes
Updates/additions other than project deliverables

- Project restructured to ensure clear distinction between the two sub-projects
  - Project Lead role is responsible for EV Adoption Tools project as a whole, and the Evoleon App (sub-project one), while a separate leader is suggested to lead sub-project two (EVCFLO)
  - This structure may be modified at the Project Lead's discretion
- evoleonapp@gmail.com name changed from "Glenn Richmond" (previous project lead) to "Evoleon"
- Cleaned up files in Teams channels (once T2's handover documents are no longer relevant, please move them to T2 2022 archive folder and create another archive folder for the outgoing trimester, etc.)
- Ideas document created (in Evoleon channel files) for ideas to be listed and explained

Location of Project Resources

- Evoleon App play store listing (use evoleonapp@gmail.com to access as admin)
- Github Repository
- Github Build Pipelines
- Evoleon Expo Project (React Native Build Pipeline & submission to play store)
- Trello Board
- Figma Board
- New starter guide (located in 'Evoleon App Team' Teams channel)

Login details and other files are available in the relevant Teams channels.

User Authentication feature handover details

From *User Authentication technical info.docx* (located in 'Evoleon App Team' Teams channel)

An overview / details of technical work completed for the User Auth task in Trimester 2 2022
- Added the following UI pages as part of the auth process. These pages are in the Screens folder within the application:
  - AuthenticateScreen.tsx
  - Login-screen.tsx
  - Signupscreen.tsx

- The styling for the new pages is in these listed files. These files are in the styles folder in the application.
    o authenticateStyle.ts
    o buttonStyle.ts
    o loginStyle.ts
    o logoStyle.ts
    o SignUpStyle.ts

- The new user authentication pages are added as Drawer.Screen's in the DrawerNavigator.tsx file. These new pages are hidden from view in the top left menu bar. The code to hide the new pages from the menu is in const filteredTopLeftMenuItems.

- The new User Auth pages are accessed in the app from the new sign in/sign out button that we added in the top left menu. This button also changes according to if the user is signed in or not. If required, this button text can be altered in the firebase.js file.

- Integrated the app with the Firebase account attached to the Evoleon Gmail. All the Firebase code is within the firebase.js file. The user auth pages use the new firebase functions from the firebase.js file. E.g. userSignIn(email, password);

Ideas for further work and improvements for the user auth in future trimesters

- After a user sign up / sign in, validate that the process was completed correctly. Only navigate to the next page if the process (sign in/ sign up for new account) was successful, otherwise alert the user to enter their details again.

- Create a new database in Firebase to store the other user details on sign up, such as first name. For example, the users first name could be added to the sign out button text. "Sign out of Jane's account". Could also organise an analysis on what user details actually need to be stored by Evoleon, as we might not need all the details that are in the Figma page designs. Depending on what is found from the research, might need to do a page redesign.

- Currently the app authenticates users with email and password. Might need to implement a password reset option for when a user forgets their password.

- Research and write a terms and conditions document for the user sign up. Can then add this information into the app as a link, for when a user is signing up for a new account.