# **Assignment 3 – Application Development**

Group 11: Annie Berend, Tobias Heckel, Christos Stylianos Vazouras, Žan Zafošnik

15.12.2020

#### Source code

The source code can be found in our public GitHub repository at https://github.com/strobi/home-jungle

# **Mobile Functionalities Requirements**

- Multiple activities or fragments
  - We have more than 10 fragments, e.g., plants, future plants, calender, database (categories, species and information), marketplace, give-aways, etc.
- Utilization of sensors
  - We use the GPS location in the marketplace to only display give-aways in the neighbourhood of the user
  - We use the GPS location when a give-away is created by the user to only display it to nearby users (see point above)
  - We use the camera to take photos of give-aways when a give-away is created
- Use of notifications
  - The user receives a daily reminder when he needs to water a plant or plant a future plant
- Utilization of touch (not just click). Swipe
  - In the home/plant fragment, the user can swipe between to pages (plants and future plants)
  - In the plant species information fragment, the user can swipe between to pages (general information and information on how to plant)
  - Items in lists can be deleted by swiping them (e.g., in the home/plant fragment, in the give-aways, etc.)
- Networking (e.g. http)
  - o We use a Firebase database to store and retrieve give-aways on a server
- Using a variety of interface elements (e.g. buttons, progress bars, etc)
  - o We used buttons, progress bars, alert dialogs, checkboxes, list views, etc.

# **Description of test cases**

#### Test case 1:

- 1. Launch the app
- 2. User selects the plus icon on the home screen
- 3. User browsers the database for the plant he/she wants to add
- 4. The user adds the plant to "Your Plants"
- 5. The user clicks on the added plant and checks the details
- 6. The user clicks the back button
- 7. The user removes the added plant by swiping

#### Test case 2:

- 1. The user swiped to the right to switch to the Future plants
- 2. User selects the plus icon on the home screen
- 3. User browsers the database for the plant he/she wants to add
- 4. The user adds the plant to "Future Plants"
- 5. The user clicks on the added plant and checks the details
- 6. The user clicks the back button
- 7. The user removes the added plant by swiping

#### Test case 3:

- 1. The user does the first test case and the second without the 7<sup>th</sup> step
- 2. The user clicks on the calendar button at the bottom
- 3. He checks the watering and planting dates and times
- 4. The user waits or switches system time on his phone to the date/time of watering/planting
- 5. The user then checks the checkbox in order to tell the app that he has done the task

### Test case 4:

- 1. The user clicks on the plant icon on the bottom
- 2. The user browses the plant database
- 3. The user checks and adds the plants to all three lists (your plants, future plants and giveaways)
- 4. The user exits the database

## Test case 5:

- 1. The user clicks on the marketplace
- 2. He scrolls through the give-aways and selects one
- 3. He checks the details of the give-away

### Test case 6:

- 1. The user clicks on the Giveaways button on the bottom
- 2. He selects the plant (seeds) he/she wants to give away
- 3. He fills in the text fields with his name and his contact details and adds the giveaway