**Assignment 3 – Application Development**

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**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)
  + 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)
  + 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 7th 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