GTA-Group

Water Me
Use-Case Specification: Manage plants

Version 1.3

Revision History

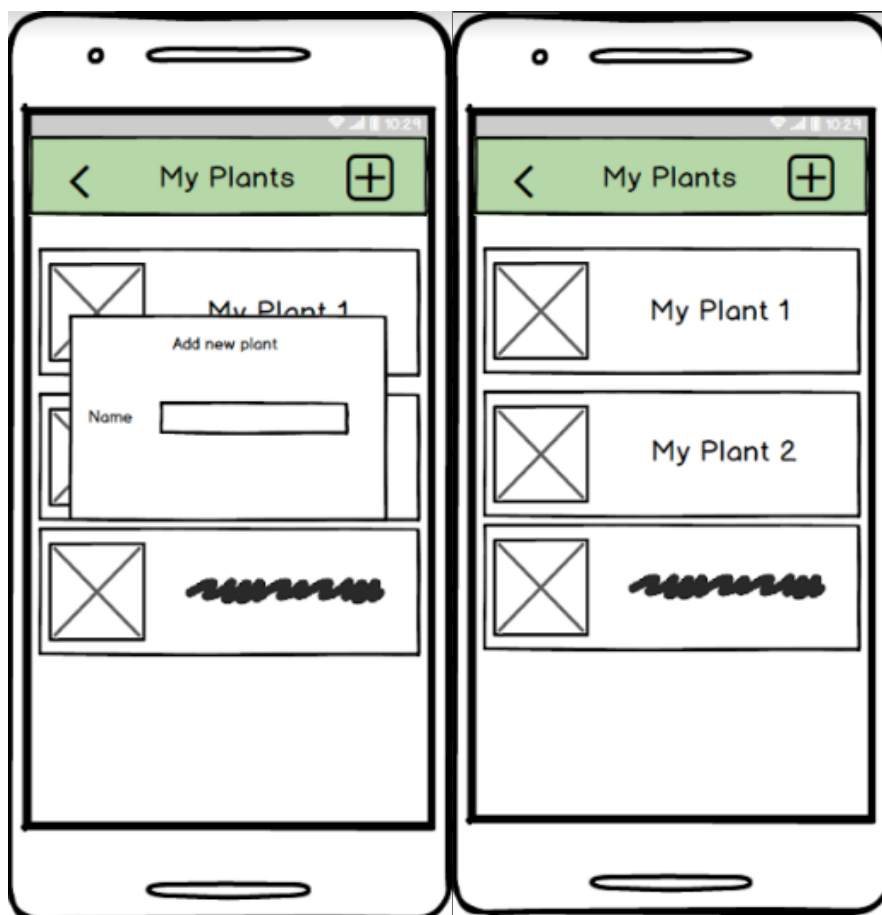| Date	Version	Description	Author
04/Dez/2016	1.0		Olga Akymenko
08/Dez/2016	1.1	Added Espresso test and mockup	Chris Todt
19/Dez/2016	1.2	Changed Diagramm	Olga Akymenko
01/Mai/2017	1.3	Added FP-Calculation	Olga Akymenko
11/Juni/2017	1.4	Changed Diagram and mockups	Olga Akymenko

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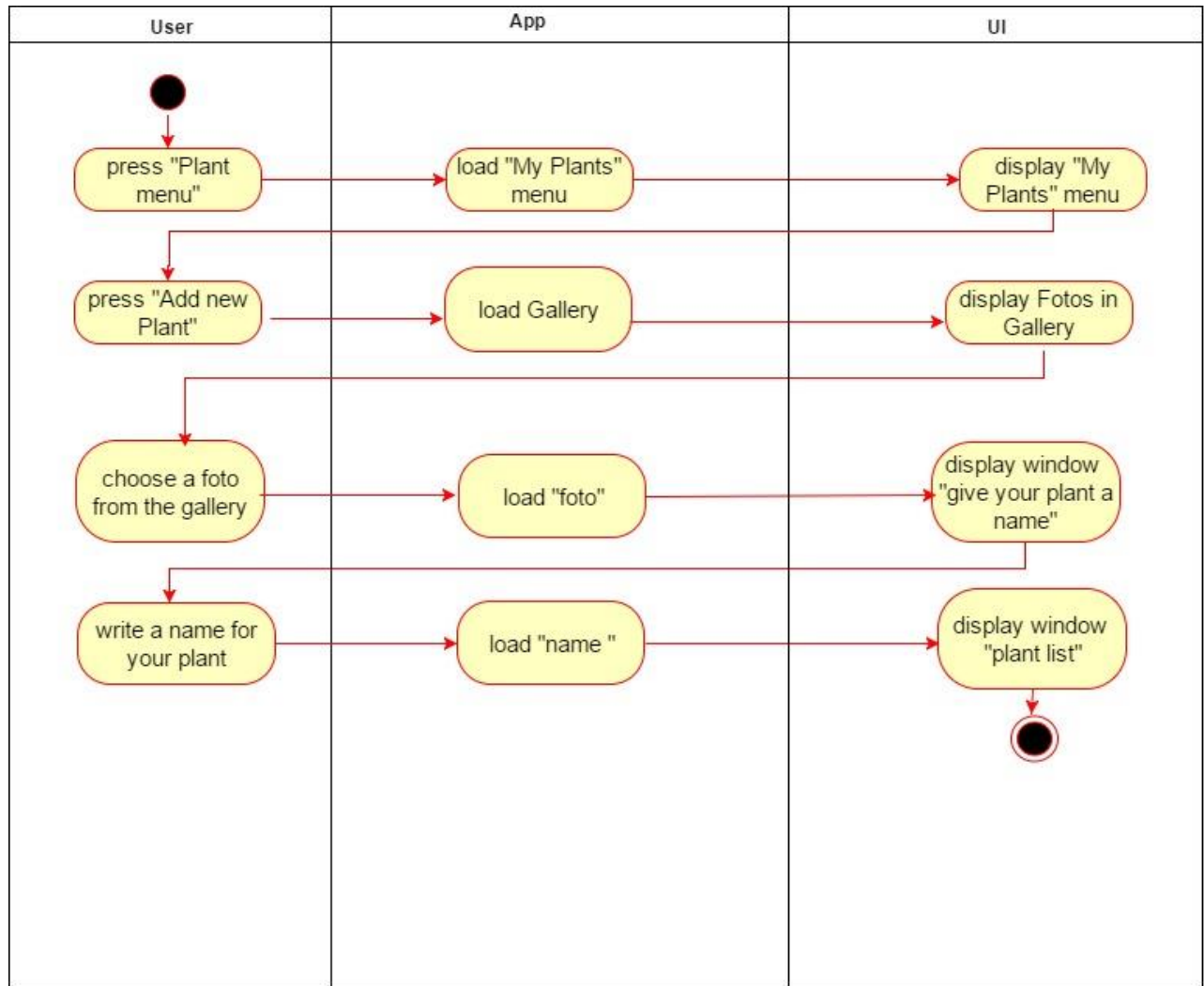
1.   Manage plants

1.1   Brief Description

User has the ability to add a new plant in the list. Also, change the image and add information about the plant (the optimum humidity level).

1.2   Mockup

2. Flow of Events

2.1 Basic Flow

2.2   Alternative Flows

(n/a)

3.   Espresso test

```java
package com.project.gta.demo;


import android.support.test.espresso.ViewInteraction;
import android.support.test.rule.ActivityTestRule;
import android.support.test.runner.AndroidJUnit4;
import android.test.suitebuilder.annotation.LargeTest;

import org.junit.Rule;
import org.junit.Test;
import org.junit.runner.RunWith;

import static android.support.test.espresso.Espresso.onView;
import static android.support.test.espresso.action.ViewActions.click;
import static android.support.test.espresso.action.ViewActions.closeSoftKeyboard;
import static android.support.test.espresso.action.ViewActions.replaceText;
import static android.support.test.espresso.matcher.ViewMatchers.isDisplayed;
import static android.support.test.espresso.matcher.ViewMatchers.withClassName;
import static android.support.test.espresso.matcher.ViewMatchers.withContentDescription;
import static android.support.test.espresso.matcher.ViewMatchers.withId;
import static android.support.test.espresso.matcher.ViewMatchers.withParent;
import static android.support.test.espresso.matcher.ViewMatchers.withText;
import static org.hamcrest.Matchers.allOf;
import static org.hamcrest.Matchers.is;

@LargeTest
@RunWith(AndroidJUnit4.class)
public class UCManagePlants {

    @Rule
    public ActivityTestRule<MainMenu> mActivityTestRule = new
ActivityTestRule<>(MainMenu.class);

    @Test
    public void uCManagePlants() {
        ViewInteraction appCompatButton = onView(
                allOf(withId(R.id.BTNmyplants), withText("My plants"),
                        withParent(allOf(withId(R.id.mainmenu),
                                withParent(withId(R.id.activity_main_menu)))),
                        isDisplayed()));
        appCompatButton.perform(click());
```

```
        ViewInteraction actionMenuItemView = onView(
                allOf(withId(R.id.changescale), withContentDescription("Change scale"),
isDisplayed()));
        actionMenuItemView.perform(click());

        ViewInteraction editText = onView(
                allOf(withClassName(is("android.widget.EditText")),
                        withParent(allOf(withId(R.id.custom),
                                withParent(withId(R.id.customPanel)))),
                        isDisplayed()));
        editText.perform(click());

        ViewInteraction editText2 = onView(
                allOf(withClassName(is("android.widget.EditText")),
                        withParent(allOf(withId(R.id.custom),
                                withParent(withId(R.id.customPanel)))),
                        isDisplayed()));
        editText2.perform(replaceText("test"), closeSoftKeyboard());

        ViewInteraction appCompatButton2 = onView(
                allOf(withId(android.R.id.button1), withText("OK"),
                        withParent(allOf(withId(R.id.buttonPanel),
                                withParent(withId(R.id.parentPanel)))),
                        isDisplayed()));
        appCompatButton2.perform(click());

    }

}
```

4.   Special requirements

(n/a)

5.   Preconditions

5.1   Gallery

User has installed the application and is in the "Plant menu". The phone has at least one photo in the gallery.

6.   Postconditions

6.1   Avatar/Information

The plant will be have avatar.

6.2   Humidity data

The information about the level of humidity data will help to ensure that the user would received a message about the need for watering in time.

7. FP- Calculation

Calculation of DET/RET/FTR: DET/RET/FTR Table

Domain Characteristic Table

MEASUREMENT PARAMETER	COUNT (value >= 0)	WEIGHTING FACTOR		
		Simple	Average	Complex
Number of User Input	2	●	○	○
Number of User Outputs	1	●	○	○
Number of User Inquiries	2	●	○	○
Number of Files	0	●	○	○
Number of External Interfaces	0	●	○	○

Complexity Adjustment Table | FP Calculation

8. Extension Points

(n/a)