Working Prototype Known Problems Report
Planted!
Team Name: Planted
Date Revised: December 2, 2019

The current known problems of the software that have been identified:

1. No form validation for add AddPlant form - able to submit an empty form

    ● Input/action: If the user were to add a new plant, they could possibly submit an empty form. This empty plant isn't stored in the user's profile so there won't be an empty plant showing on the 'MyPlants' page. But the user shouldn't be able to submit an empty form.

    ● Location of fault: This bug may be located in the AddPlant.dart file.

    ● Possible action for removal of fault: We could possibly implement a separate validator function to fix this bug.

2. No form validation for add reminder form - able to submit an empty form

    ● Input/action: If the user were to add a reminder to a plant they've previously stored, they could possibly submit an empty form. This empty reminder isn't stored in the user's profile so there won't be an empty reminder showing on the 'View and add reminders' and 'Reminders' page. But the user shouldn't be able to submit an empty form.

    ● Location of fault: This bug may be located in the AddReminders.dart file.

    ● Possible action for removal of fault: We could possibly implement a separate validator function to fix this bug.

3. An error message is sometimes produced when the user logs into the application.

    ● Input/action: When the code of the application is left out for a long time, at the same time the emulator is also running with the login page, the user may be unable to log in. The error that's produced is: `[FirebaseAuth: ] getGoogleApiForMethod() returned Gms: com.google.firebase.auth.api.internal.zzak@37dc7b3`

    ● Location of fault: Unknown

- **Possible action for removal of fault:** Possible action for removal is to find the cause of the error that's being produced, but it may be an error with the firebase database.

4. When the user presses the logout button, then pressing the return button on an Android device causes the user to be logged in again.

   - **Input/action:** When the user logs out of their account, and they then press the return button at the bottom left of an android device, the user is logged back into their account and they're navigated on the last page they were on.

   - **Location of fault:** This fault is most likely located in PlantsPage.dart

   - **Possible action for removal of fault:** Possible action for removal of fault could be to implement a separate function that redirects the user back to the login page and prevents the user from accessing any other page on the application when the user presses the return button on an android device.

5. When a user deletes a plant, the reminders corresponding to the deleted plant will still cause a notification to appear at the time and date the reminders were set to.

   - **Input/action:** When the user clicks on the '-' icon for a plant entry, representing the removal of a plant, the plant's corresponding reminders disappear from the reminders list. However, notifications are still received for all reminders of that deleted plant.

   - **Location of fault:** The fault is likely located in SeePlantsView.dart.

   - **Possible action for removal of fault:** Edit the event handler method for plant deletion, deletePlant, such that it removes all scheduled reminders for plants that have been deleted.

6. When the user sets a reminder for a plant and they choose a date and/or time prior to the current date/time, the reminder doesn't display in 'Reminders for [plant name]' but a notification is still sent to the user.

   - **Input/action:** When the user creates a new reminder for a plant and the input value for the date and time for the plant reminder is prior to the current date/time, the reminder isn't displayed to the user in the 'Reminders for [plant name]' page but a notification will still be sent to the user. This notification is sent once the reminder is submitted.

   - **Location of fault:** The fault is located in the AddReminders.dart file

- ● Possible action for removal of fault: Check the input values for the date/time is valid and not a prior date/time, then implement an if-else statement checking if the input is valid. If it's not valid don't send the notification and if it's valid, send the notification.

7. Once the user clicks the submit button in the add plant form, an exception sometimes occurs after the user is taken to the 'My Plants' page, although the user isn't hindered in any apparent way.

   - ● Input/action: After the user takes their plant photo, inputs the necessary text fields in the add plant form, and submits it, the following error occurs in the Android Studio console after being taken to the My Plants Page:
     ```
     [ERROR:flutter/lib/ui/ui_dart_state.cc(148)] Unhandled
     Exception: setState() called after dispose():
     _AddPlantPageState#802f3(lifecycle state: defunct, not
     mounted.
     ```

   - ● Location of fault: The fault is likely located in AddPlant.dart.

   - ● Possible action for removal of fault: To remove this fault, we would check that we are popping and pushing the navigation screens properly and in the correct order.

8. After the user clicks the submit button in the add plant form, the user should be taken to the 'My Plants' page of the app. However, this only happens sometimes.

   - ● Input/action: Upon the user clicking the submit button in the add plant form, the user is sometimes not taken to the 'My Plants' section of the app. Other times, the user is left at the 'Add Plant' page.

   - ● Location of fault: The fault is likely located in AddPlant.dart.

   - ● Possible action for removal of fault: To remove this fault, we should edit the event handler function for the submission of the add plant form.