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INFM382

**Final Work Proposal - Revised**

# Application

For my final project, I want to make an informative productivity app for plant care. The app will allow users to add their plants and give them reminders on when to water them through an in-app calendar.

# Description and Purpose

As someone who often forgets to water their plants, I want to create a simple plant-care app that allows users to create a library of plants and assign watering reminders to each of them.

# Front-end

* Plant Library page: This is where all the users plants are visible
  + Card-based ScrollView
  + 5 individual plant cards
    - Shows image of plant as the background
    - Plant name
      * Each plant has a button to view an editor
* Menu button on top right opens drop down menu
  + View plant Library
  + View calendar
  + Account
* Individual plant editor page
  + Image of plant at the top
  + editText - Plant name
  + Q: When did you last water this plant?
    - A: editText – Date
  + Q: How often should you water this plant?
    - A: Once every ‘editText – Number’ ‘Spinner – Days or Weeks’
  + Q: How many ounces of water should you use during each watering
    - A: ‘editText – Number’ oz
  + Floating action button to save and return to the plant library
* Calendar Page
  + Top of screen
    - Weekly view calendar
    - Tabs structure to select current week or next week
  + Bottom of screen
    - Card-based scrollview
    - Each plant that requires watering has a card
      * Date it should be watered
      * ‘CheckBox’ Water ‘PlantName’
      * Photo of plant
  + Floating action button to return to plant library
* Account page
  + Login or Register
    - Input email and password

# Back-end

* Requirements
  + Android Studio
  + Code in Kotlin
* Database – What information is stored?
  + User Information
    - String - Email
    - String – Password
  + Plant
    - String – Name
    - String or date object – Date the plant was last watered
    - Int – Number of days the user has specified to wait between watering.
    - Boolean – did the user specify to water the plant every \_\_ days (0) or \_\_ weeks (1)

.jpg – Photo of plant

# Explanation of Resources

* Database – I will start with hosting all of the data locally, but the app could scale to include database interaction
* Frameworks – The Android Studio IDE will be used to construct the app
* Languages – Kotlin and XML code will be used to develop the app with changes to the Gradle and other app files for camera and notification permissions
* Libraries
  + import android.content.Intent
  + import android.os.Bundle
  + import com.google.android.material.floatingactionbutton.FloatingActionButton
  + import com.hfad.plantapp.ui.main.SectionsPagerAdapter
  + import com.hfad.plantapp.databinding.ActivityCalendarBinding
  + import com.google.android.material.tabs.TabLayout
  + import androidx.viewpager.widget.ViewPager
  + import androidx.appcompat.app.AppCompatActivity
  + import android.os.Bundle
  + import android.view.Menu
  + import android.view.MenuInflater
  + import android.view.View
  + import android.widget.ArrayAdapter
  + import android.widget.Spinner
  + import android.widget.Button
  + import android.app.Activity
  + import androidx.lifecycle.Observer
  + import androidx.lifecycle.ViewModelProvider
  + import androidx.annotation.StringRes
  + import android.text.Editable
  + import android.text.TextWatcher
  + import android.view.View
  + import android.view.inputmethod.EditorInfo
  + import android.widget.EditText
  + import android.widget.Toast
  + import com.hfad.plantapp.databinding.ActivityLoginBinding

# App Flow