

Gardener's Best Friend

Shakira Perry, Lucy Gauldin, Vrushank Mali, and Chase Duclos

UT-Martin

October 31, 2023

Motivation

So why did we pick this project?

- ① Love of plants
- ② Keep plants ALIVE!!!
- ③ Improve plant health



Project Goals

So what do we think we need to have?

- **Plant Journal**

- Keep record of plant's health with journal entries.

- **Photo records**

- Journal entries will contain photos that can be updated by the user.

- **Calendar Reminders**

- Depending on the schedule assigned by the user, a reminder will be sent to water their plants.

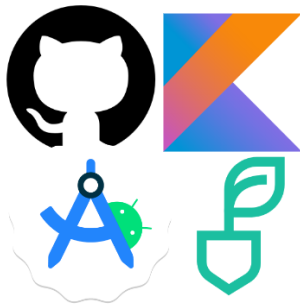
- **Plant Information**

- If the plant is within the app's database, the user will be presented further information about their plant's care.

Technology

Technology used:

- 1 Android Studio
- 2 Kotlin programming language
- 3 SQLite
- 4 Plant API from Perennial
- 5 GitHub



Android Studio

- ❶ Integrated Development Environment
- ❷ Developed By Google
- ❸ Based on IntelliJ IDEA
- ❹ Emulator
- ❺ LINT Checker
- ❻ Android Jetpack



Kotlin

- ❶ Official Language for Android
- ❷ Interoperability
- ❸ Comprehensive Standard Library
- ❹ Multiplatform Development
- ❺ Gradle Support
- ❻ Concise and Readable



SQLite

- 1 Embedded Database
- 2 Zero Configuration
- 3 ACID Compliant
- 4 Cross-platform
- 5 Highly Reliable
- 6 Low Maintenance



Plant API from Perennial

- 1 Plant Marketplace
- 2 Based on RESTful API
- 3 Stateless
- 4 Uniform Interface
- 5 Cacheability
- 6 Security



Github

- 1 Version Control
- 2 Code Hosting
- 3 Collaboration
- 4 Branches
- 5 Security Features
- 6 Code Search



Journey to the App

First Mockup



First Splash Screen



First Plant Entry



Demonstration

Demonstration Video

Results

Describe any results of your work here.

Things that worked?

Things that didn't work?

Challenges?

Getting Android Studio to link with Github for version control

Deciding on what features the app needed

Conclusions

While it has been a fun project, there is a lot more left to do.

- Journal entry storage for retrieval.
- Access database with help of API.

Any Questions?

Questions?

Comments?

Further project/author information:

Wesley Duclos: wescducl@ut.utm.edu

Lucy Gauldin: bildgaul@ut.utm.edu

Vrushank Mali: vrujmali@ut.utm.edu

Shakira Perry: shaaperr@ut.utm.edu

