Team 9: Initial Project Description

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Project Name

PillPal

Project Synopsis

Medical app that reminds people to take their medication and makes medication management simple.

Project Description

PillPal has been undertaken to help individuals keep track of their daily medications. Many people have multiple prescriptions and it can be easy to lose track of them. This app aims to help manage that load. PillPal's medium will be reminders set on a mobile device and optionally will work through Alexa. These reminders will tell a person or caregiver when the next time and dosage is along with an image of the medication and if a dose has been missed. This will be done through a series of text-based, mobile notification and/or vocal alerts. Furthermore, the PillPal will allow the user and/or caregiver to monitor usage and record any side effects. It will also have reminders of contraindications and when supply is running low for the given medication. An additional function would be a journal to allow people to recall any information regarding any changes in health such as vital signs, symptoms, sleep, reasoning for withheld medication, etc. PillPal would allow people or caregivers to take their health into their own hands, including a better method to communicate information.

Project Milestones

| Semester | Milestone | Estimated Completion Date |
|-------------|--|---------------------------------|
| Fall 2019 | Finalize project details and setup project on GitHub | 10/06/2019 |
| Fall 2019 | Decide on initial design of user interface | 10/06/2019 |
| Fall 2019 | Get familiar with React Native and other technologies | 10/20/2019 |
| Fall 2019 | Finish skeleton of application so it works on mobile devices | 10/27/2019 |
| Fall 2019 | Finish skeleton of database and connect it to application | 10/27/2019 |
| Fall 2019 | Finish basic UI for each page | 11/10/2019 |
| Fall 2019 | Finish basic functionality for each page | 11/10/2019 |
| Fall 2019 | Improve UI for each page | 11/24/2019 |
| Fall 2019 | Improve functionality for each page | 11/24/2019 |
| Fall 2019 | Finish testing for current state of project | 12/08/2019 |
| Fall 2019 | Finish documentation for current state of project | 12/08/2019 |
| Spring 2020 | Improve UI for each page | 02/16/2020 |
| Spring 2020 | Implement functionality for each page | 02/16/2020 |
| Spring 2020 | Finish skeleton of Alexa Skill | 02/23/2020 |
| Spring 2020 | Finish building and integrating Alexa Skill | 03/01/2020 |
| Spring 2020 | Transition to a non-KU database (TBD) | 03/15/2020 |
| Spring 2020 | Finish testing | 04/12/2020 |
| Spring 2020 | Finish documentation | 04/12/2020 |
| Spring 2020 | Submit application to Android App Store and Apple Store | 04/19/2020 |
| Spring 2020 | Add enhancements/defect fixes and update on both App Stores | 05/03/2020 |

Project Budget

Everything that we are doing can be done for free with the exception of getting an Apple Developer Account. However, there are optional paid tiers available for several of the resources listed below. We are going to use the KU database for the majority of development, but may or may not decide to transition to another free database option before graduating from KU in May 2020.

| Resource | Special Training? | Vendor | Estimated Cost | Date Needed By |
|------------------------------|----------------------|---|-------------------|-------------------|
| GitHub Repository | No | Microsoft Corporation | \$0 | 10/06/2019 |
| IDE | No | Many options, up to each developer based on personal preference | \$0 | 10/20/2019 |
| Android phone for testing | No | Not Applicable | \$0 | 10/20/2019 |
| iPhone for testing | No | Not Applicable | \$0 | 10/20/2019 |
| KU database | Yes | University of Kansas | \$0 | 10/20/2019 |
| React Native | Yes | Facebook Inc. | \$0 | 10/20/2019 |
| Alexa Skills Kit | Yes | Amazon.com, Inc. | \$0 | 03/01/2020 |
| Apple Developer Account | No | Apple Inc. | \$99 | 03/01/2020 |

Work Plan

The tasks listed below will generally be assigned to these specific team members. However, other tasks may be assigned as needed and everyone is encouraged to contribute wherever they would like to or wherever is especially needed.

| Task | Andrew Hubbard | Lauren Stephenson | Grant Stewart | Brian Quiroz | Shogun Thomas |
|-------------------|-------------------|----------------------|------------------|-----------------|------------------|
| Frontend, UI | | Х | | | Х |
| Backend, Database | Х | | Х | Х | |
| Testing | Х | Х | Х | Х | Х |
| Documentation | X | X | X | Х | X |