Presented by: Team pharmacon



PROJECT PROPOSAL

ITC303 – Pharmacy Error Tracker (PET)

Version 1.0

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## BACKGROUND

Currently some pharmacists track errors they make in their processes (for instance not signing off on a certain medication correctly, incorrect dispensing amounts, etc.) by writing it on a piece of paper that is then typed up and emailed around to the other pharmacies each month to increase the awareness of the different errors that are occurring in the pharmacy. This is obviously time consuming, cumbersome and prone to errors. Further to this the pharmacists are trying to collate the data in excel spreadsheets to report on the issues errors so that they can produce diagrams for people to be better able to understand the data, again this is a tedious and manual process which many people within the team are struggling to use.

## 

## REQUIREMENTS

The initial list of high level requirements based on the current understanding of the project is:

* Ability to easily input data on errors that have occurred.
* Centralised repository to store the data for future reporting.
* Generate reports that are easy to read and understand.
* Ability to search and filter error records.
* Automatically email reports and alerts to other pharmacies.
* User account management.
* Application needs to be mobile friendly to work on a tablet.

## USE CASES

* Add error to system.
* Modify/update error in system.
* Delete error from system.
* Add new user.
* Manage user details/preferences.
* Delete user.
* Display all submitted errors.
* Search/filter submitted errors by specified criteria.
* Produce printable report of error data within a given time frame.
* Display graphs/charts/visualisations of monthly errors within a given time frame.
* Produce summary of monthly data and automatically email all users.

## 

## PROPOSED SOLUTION

The proposed solution is a native Android application for the input of error tracking information by the users of the application, this will provide the best experience on tablets and mobile devices to the end user. The application will connect to a cloud server hosting a MySQL database instance which will act as a persistent data store for the application and reporting. To ensure that the system can continue to function in the event that the cloud server is not reachable due to outage or network issues a SQLLite database instance will be used locally on the Android device until a connection can be made to ensure there is no data loss. Finally, for the customer to be able to visualize and report on the data entered by the users of the application, we will use a COTS product called Redash to provide web based reporting capabilities, dashboards, and email alerts.

## 

## OUTCOME

The outcome for the project is to build an application that will be mobile friendly with a database and reporting functionality on the backend. This will result in the customer being able to quickly and easily report on and understand the health of their business. Further to this, the application will automate what is currently a manual process, this will allow the customer more time to look at how to resolve the issues rather than just tracking them in the future.

## TEAM STRUCTURE

Team Pharmacon consists of four members: Beau Johnson, Leonard Meerwood, Ryan Smith and Jette McKellar. They are all committed, highly skilled, and willing to work on this project to deliver the benefits listed in this document. The four members of the team have a vast array of skills and experience that they can draw on to ensure that the project is a success.

### **PHARMACY ERROR TRACKER (PET) PROJECT TEAM**

| Name | Proficiencies |
| --- | --- |
| Beau Johnson | Java, Python, HTML, CSS, JQuery, MySQL, Mongo, and System Admin. |
| Leonard Meerwood | Java, Python, Rust, Android, Network and Server Admin. |
| Ryan Smith | Java, Android, Web Design, and Databases |
| Jette McKellar | Java, Android, MySQL and Web Design |

## 

## TEAM ROLES AND RESPONSIBILITIES

Each team member will be taking turns to chair and secretariat meetings that the group runs, this will ensure that all members are engaged in the meeting process and removes the issues of an individual feeling as though they are being stuck with the administrative tasks.

All team members will share the responsibilities of writing code and documentation pertaining to the project, each team member has strengths and weaknesses and by harnessing these the team can better function to achieve outcomes that a single person could not on their own.

## 

## RISKS AND ISSUE MANAGEMENT

| Date recorded | Risk description | Probability | Impact | Mitigation plan |
| --- | --- | --- | --- | --- |
| 08/03/2018 | Team Member Leaving | Low | High | Ensuring all members are working across tasks we can ensure that no one member has all the subject knowledge. |
| 08/03/2018 | Insufficient Skillset | Low | High | Ensuring that the team is using technologies that they are proficient in and by providing guidance where necessary to members who are less proficient |
| 08/03/2018 | Team Member Absences | Medium | Low – High | Ensuring that all team members are accountable for their actions ensures that they understand their role and responsibilities as well as the consequences. |

## CHANGE MANAGEMENT PROCESS

As part of this project; team Pharmacon will be using a mix of Unified Process (UP) and Agile methodologies as part of their change management process. By implementing these two key software methodologies the team can quickly adapt and change the project as is required to best meet the customer needs.

### AGILE METHODOLOGY

