# Introduction

Team Pharmacon have identified a need for hospital pharmacists to be able to easily and reliably track medicinal errors and wastage within their pharmacy. In order to address this need Team Pharmacon are proposing to build an application called Pharmacy Error Tracker (P.E.T.). This application will use a web interface that is designed using a mobile first methodology in order to ensure that it has cross platform support for mobile, tablet and desktop use. The interface will also be customisable to allow the pharmacists the ability to create their own custom forms to track errors as the need arises. Finally, the application will allow hospital pharmacists to see visual representations of all the tracked errors; helping them track down deficiencies in instructions, routines and training.

# 2. Positioning

## 2.1 Problem Statement

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| --- | --- |
| The problem of | Not being able to easily and reliably track errors. |
| affects | All hospital pharmacists |
| the impact of which is | Errors not being logged correctly or at all |
| a successful solution would be | A system that would allow hospital pharmacists to easily and quickly log and track errors |

## 2.2 Product Position Statement

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| --- | --- |
| For | Hospital pharmacist |
| Who | Need to track errors made in medicinal deliveries |
| The “Pharmacy Error Tracker” | Is a single page web application |
| That | Provides an easy and efficient method for entering data |
| Unlike | Spreadsheets which are slow and limited to one computer |
| Our product | Can be accessed via Android tablets and web interfaces removing the limiting factor of one computer and is extremely quick compared to filling out spreadsheets. |

# Stakeholder Descriptions

### Stakeholder Summary

| **Name** | **Description** | **Responsibilities** |
| --- | --- | --- |
| Hospital Pharmacist | Control drugs and medicines in hospital. Main user of the system | * Responsible for distribution of drugs and medicines throughout the hospital * Responsible for tracking any errors made in drug distribution |
| Data Reviewer | The person who looks at the results of the data gathered about errors | Responsible for gathering information about errors gathered by the system. |
| Team Pharmacon | The project developers | * Responsible for developing the project * Responsible for communicating with client |
| Rory | Hospital Pharmacist aiding in the design of Pharmacy Error Tracker | * Responsible for informing development team about how hospital pharmacists operate * Responsible for giving feedback to team on the system that is being designed |
| Hospital I.T. Department | Department in charge of nearly every computer and network connected device in the hospital | * Responsible for making sure the designed system is compatible with the hardware they have |

## 3.2 User Environment­

In the current environment every pharmacist is responsible for tracking errors they make. They are required to go to a specific computer that has a spreadsheet on it and enter the data in that spreadsheet. If the computer is in use, then they must wait until it is free. Once they get on the computer they must open-up the file, scroll to the end and then finally add the error. While this is simple, having to complete this task, sometimes many times in one day makes a simple routine tedious. Further to this, the manual entering of data into a spreadsheet is prone to errors and accidental deletions which results in the data being unreliable. Once the errors have been captured in the spreadsheet another pharmacist must then manually create queries with excel to produce reports on the errors that have been entered. This again is a lengthy and tedious task which is prone to errors due to the manual process.

Pharmacy Error Tracker (P.E.T.) will combat these issues by firstly allowing errors to be entered across many machines at the same time. Next, P.E.T. will make it extremely simple and streamlined to enter errors by providing an interface that requires minimum interactions to complete and is customisable to the pharmacists needs. This will result in pharmacists no longer finding the error capturing process to be so tedious. Finally, P.E.T. will be able to provide customisable and dynamic data visualizations that the pharmacist can use to easily identify the causes of errors, generate reports for users and management, as well as training and continuous improvements.

# Product Overview

## 4.1 Needs and Features

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| --- | --- | --- | --- |
| **Need** | **Priority** | **Features** | **Planned Release** |
| Ability to amend and track errors | High | A streamlined flow that will allow adding, editing and storing of errors | V1.0 |
| Ability to customise error form. | High | Customisable web form that the admin user can create and update as needed. | V1.0 |
| Ability to visualize data about errors in order to formulate conclusions | High | An entire page dedicated to viewing the data in a variety of visualizations | V1.0 |
| Ability to view errors in a spreadsheet program | Medium | An option to export all data to a spreadsheet filetype. | V1.0 |
| Manage who receives reports about the data | Medium | An ability to Create, Update and Delete users from the mailing list | V1.0 |

# Other Product Requirements

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| --- | --- | --- |
| **Requirement** | **Priority** | **Planned Release** |
| Fast Response Times | High | V1.0 |
| Compatible with modern web browsers | High | All |
| Recoverable | High | V1.0 |
| Maintainable | High | All |
| Client computer, tablet or mobile device with access to internet | High | All |
| Online manual | Medium | V1.0 |
| 99% Uptime | Medium | V1.0 |
| Auditability | Medium | V1.0 |
| Usable within certain time frames for different levels of experienced operators | Medium | All |