# Patient Information Management System PIMS

Team 6

**Backlog** 

March 2, 2016

Ina Carter Brandon Kibler Jennifer Paulsen Max Twente

## **Table of Contents**

1.0 Project Overview	1
2.0 Features	2
3.0 Epics	3

#### 1.0 Project Overview

Hospitals must maintain current information on all patients in the hospital as well as those recently released. This information has to be readily available to a number of hospital personnel such as doctors, nurses, office staff, and volunteers. The Patient Information Management System (PIMS) shall have a Graphical User Interface (GUI) that the users interact with, a database holding patient information, and a server allowing access across multiple machines.

#### 2.0 Features

The Patient Information Management System (PIMS) shall have a Graphical User Interface (GUI) that the users interact with, a database holding patient information, and a server allowing access across multiple machines. The creation of PIMS shall be done using the Agile Project Management System, specifically the Scrum development approach. The Scrum approach breaks up the creation of software into multiple Sprints. Sprint 1 has already been completed. The creation of PIMS shall be completed in Sprints 2-5. PIMS shall be broken down and shall be completed during the remaining Sprints as follows:

Sprint	Date To Be	As a	I want to	for/to/of/a(n)	Something
Number	Completed	<user></user>			
2	02/17/2016	Developer	Design the GUI	То	Allow the information to be
			Frames		displayed in the proper area
4	03/30/2016	Developer	Create the Backend Tables	То	Store various information
4	03/30/2016	Developer	Create the Backend Queries	То	Allow searching for the various information
4	03/30/2016	Developer	Create the Backend Permissions	То	Ensure proper access control
3	03/30/2016	Developer	Create the GUI Frames	For	Allowing the user to interact with PIMS
4	03/30/2016	Developer	Design and Program the Controller to Interact with the GUI	То	Allow the programmer to implement functionality easier
4	03/30/2016	Developer	Design and Program the Controller to Interact with the Backend	То	Allow the programmer to implement functionality easier
4	03/30/2016	Developer	Create the Report Generator	То	Allow the user to create various reports on the patients
5	04/18/2016	Developer	Polish and Cleanup PIMS	То	Make PIMS more user friendly for its users
5	04/18/2016	Developer	Prepare Documentation	То	Streamline the development process

# 3.0 Epics

## 3.1 GUI Frames Designed

Verb	Something	for/of/to/a(n)	Something Else
Design	Login screen frame	For	Users to login to PIMS
Design	Main window screen frame	For	Users to search for patients
Design	Patient profile information	For	Displaying patient information
	frame		
Design	Visitor information frame	For	Displaying visitor information
Design	Admittance information	For	Displaying admittance
	frame		information
Design	Insurance information frame	For	Displaying patient insurance
			information
Design	Billing insurance frame	For	Displaying patient billing
			information
Design	Scheduled procedures frame	For	Scheduling patient procedures
Design	Doctor's notes frame	For	Displaying doctor's notes
Design	Nurse's notes frame	For	Displaying nurse's notes
Design	Volunteer frame	For	Displaying information
			volunteers need

## 3.2 Backend Tables Created

Verb	Something	for/of/to/a(n)	Something Else
Design	ER Model	То	Establish relationships between entities
			and their respective keys
Create	Login table	For	Storing login information
Create	Staff table	For	Storing staff information
Create	Patient table	For	Storing patient information
Create	Billing table	For	Storing billing information
Create	Insurance table	For	Storing insurance information
Create	Treatment table	For	Storing treatment information
Create	Prescription table	For	Storing prescription information
Create	Location table	For	Storing location information

## 3.3 Backend Queries Created

Verb	Something	for/of/to/a(n)	Something Else
Create	Patient query	For	Searching through the names and
			returning basic patient information
			from the patient table
Create	Login query	For	Searching for assigned usernames
			and password
Create	Staff query	For	Searching through the staff table for
			staff members and their positions
Create	Location query	For	Searching through the location table
			for certain units/rooms/beds in the
			hospital
Create	Insurance query	For	Pulling up patient's insurance
			information
Create	Billing query	For	Pulling up patient's billing
			information
Create	Treatment query	For	Pulling up patient's treatment
			information
Create	Prescription query	For	Pulling up patient's medication
			information

#### 3.4 Backend Permissions Created

Verb	Something	for/of/to/a(n)	Something Else
Grant	Permissions to view patient	For	Volunteers
	name, room number, and		
	visitor list only		
Grant	Permission to see/edit	For	Doctors
	patient medical information		
Grant	Permissions to edit/add	For	Doctors
	notes in the doctor's notes		
Grant	Permissions to edit/add	For	Nurses
	notes in the nurse's notes		
Grant	Permissions to see patient	For	Nurses
	medical information		
Grant	Permissions to view/update	For	Office Staff
	patient account/billing/		
	insurance information only		

#### 3.5 GUI Frames Created

Verb	Something	for/of/to/a(n)	Something Else
Create	Login screen frame	For	User to login to PIMS
Create	Main window screen frame	For	User to search for patient
Create	Patient profile information frame	For	Displaying patient information
Create	Visitor information frame	For	Displaying visitor information
Create	Admittance information	For	Displaying admittance
	frame		information
Create	Insurance information frame	For	Displaying patient insurance
			information
Create	Billing insurance frame	For	Displaying patient billing
			information
Create	Scheduled procedures frame	For	Scheduling patient procedures
Create	Doctor's notes frame	For	Displaying doctor's notes
Create	Nurse's notes frame	For	Displaying nurse's notes
Create	Volunteer frame	For	Displaying information
			volunteers need

## 3.6 Design and Program the Controller to Interact with the GUI

Verb	Something	for/of/to/a(n)	Something Else
Design	Data Structure	То	Represent user
Design	Response	То	Login request
Design	Data structures	То	Match fields in GUI for doctors and
			medical staff
Design	Data structures	То	Match fields in GUI for office staff
Design	Data structures	То	Match fields in GUI for volunteers
Design	Data structures	For	Reports
Program	Data Structure	То	Represent user
Program	Response	То	Login request
Program	Data structures	То	Match fields in GUI for doctors and
			medical staff
Program	Data structures	То	Match fields in GUI for office staff
Program	Data structures	То	Match fields in GUI for volunteers
Program	Response	То	Request for data for doctors and medical
			staff
Program	Response	То	Request for data for office staff
Program	Response	То	Request for data for volunteers
Program	Response	То	Request to write data for doctors
Program	Response	То	Request to write data for medical staff
Program	Response	То	Request to write data for office staff
Program	Data structures	For	Reports
Program	Response	For	Report printing requests

#### 3.7 Design and Program the Controller to Interact with the Backend

Verb	Something	for/of/to/a(n)	Something Else
Add	SQL connection	To	MS SQL database
Design	Function	To	Process login request
Design	Function	То	Process doctor's information
			requests
Design	Function	For	Process medical staff's information
			requests
Design	Function	For	Process office staff's information
			requests
Design	Function	For	Process volunteer's information
			request
Program	Function	For	Process login request
Program	Function	For	Process doctor's information
			requests
Program	Function	For	Process medical staff's information
			requests
Program	Function	For	Process office staff's information
			requests
Program	Function	For	Process volunteer's information
			request
Add	Printer framework	For	Printing reports
Design	Function	For	Requesting information to fill and
			print reports
Program	Function	For	Requesting information to fill and
			print reports

#### 3.8 Report Generator Created

At this time, we do not know what user stories we will need to implement for this epic. However, we know that this is an epic we will need to implement.

#### 3.9 Polish & Cleanup PIMS

At this time, we do not know what user stories we will need to implement for this epic. However, we know that this is an epic we will need to implement.

## 3.10 Prepare Documentation

Verb	Something	for/of/to/a(n)	Something Else
Create	Controller UML Diagram	То	Visualize interaction easier
Create	Patient Controller UML	То	Visualize interaction easier
	Diagram		
Create	User Controller UML	То	Visualize interaction easier
	Diagram		
Create	Database UML Diagram	То	Visualize interaction easier
Create	Administrator State Diagram	То	Visualize interaction easier
Create	Volunteer State Diagram	То	Visualize interaction easier
Create	Nurse State Diagram	То	Visualize interaction easier
Create	Doctor State Diagram	То	Visualize interaction easier
Create	Office Staff State Diagram	То	Visualize interaction easier