

**Patient Information Management System
PIMS**

Team 6

Backlog

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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 Number | Date To Be Completed | As a <user> | I want to | for/to/of/a(n) | Something |
|----------------------|-----------------------------|--------------------------|--|-----------------------|--|
| 2 | 02/15/2016 | Developer | Design the GUI Frames | To | Allow the information to be displayed in the proper area |
| 3 | 03/02/2016 | Developer | Create the Backend Tables | To | Store various information |
| 3 | 03/02/2016 | Developer | Create the Backend Queries | To | Allow searching for the various information |
| 3 | 03/02/2016 | Developer | Create the Backend Permissions | To | Ensure proper access control |
| 3 | 03/02/2016 | Developer | Create the GUI Frames | For | Allowing the user to interact with PIMS |
| 4 | 03/28/2016 | Developer | Design and Program the Controller to Interact with the GUI | To | Allow the programmer to implement functionality easier |
| 4 | 03/28/2016 | Developer | Design and Program the Controller to Interact with the Backend | To | Allow the programmer to implement functionality easier |
| 4 | 03/28/2016 | Developer | Create the Report Generator | To | Allow the user to create various reports on the patients |
| 5 | 04/18/2016 | Developer | Polish and Cleanup PIMS | To | Make PIMS more user friendly for its users |

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 frame | For | Displaying patient information |
| Design | Visitor information frame | For | Displaying visitor information |
| Design | Admittance information frame | For | Displaying admittance 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 | To | 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 name, room number, and visitor list only | For | Volunteers |
| Grant | Permission to see/edit patient medical information | For | Doctors |
| Grant | Permissions to edit/add notes in the doctor's notes | For | Doctors |
| Grant | Permissions to edit/add notes in the nurse's notes | For | Nurses |
| Grant | Permissions to see patient medical information | For | Nurses |
| Grant | Permissions to view/update patient account/billing/insurance information only | For | Office Staff |

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 |
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| 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 | To | Represent user |
| Design | Response | To | Login request |
| Design | Data structures | To | Match fields in GUI for doctors and medical staff |
| Design | Data structures | To | Match fields in GUI for office staff |
| Design | Data structures | To | Match fields in GUI for volunteers |
| Design | Data structures | For | Reports |
| Program | Data Structure | To | Represent user |
| Program | Response | To | Login request |
| Program | Data structures | To | Match fields in GUI for doctors and medical staff |
| Program | Data structures | To | Match fields in GUI for office staff |
| Program | Data structures | To | Match fields in GUI for volunteers |
| Program | Response | To | Request for data for doctors and medical staff |
| Program | Response | To | Request for data for office staff |
| Program | Response | To | Request for data for volunteers |
| Program | Response | To | Request to write data for doctors |
| Program | Response | To | Request to write data for medical staff |
| Program | Response | To | 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 | To | 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.