

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
THE UNIVERSITY OF TEXAS AT ARLINGTON**

**PROJECT CHARTER
CSE 4316: SENIOR DESIGN I
SUMMER 2016**



**SMART HOSPITAL DEV TEAM
S.H. MANAGEMENT TOOL**

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REVISION HISTORY

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1 VISION

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2 MISSION

The Smart Hospital project is given the duty of creating an system for the students and staff of the Smart Hospital. The system will accomplish being able to keep track of time of employees, inventory, and schedules. It might appear simple, but Soohyun Kim, the head of the Smart Hospital has requested more specific items under each of the categories previously listed. Achieving the end goal will require the team to learn HTML, CSS, Javascript, Nodejs, MySQL, and use the Bracket IDE. Upon learning these items the team also must keep a constant communication with Stone Kim to assure everything is to his expectations. The team will work rigously to meet the demands of this project and in the end produce a product to the liking of Soohyun Kim.

3 SUCCESS CRITERIA

We feel that the project will be successful when the following major functionality is implemented:

- The system or some aspect of our deliverable will allow the smart Hospital Faculty to easily view which workstations are free and which workstations are taken from a calendar view.
- The system allows inventory to be checked easily and quickly.
- Event notifications and confirmations are correctly sent to the correct faculty or student members.

and these issues are addressed:

- The system is easy to learn to use.
- Information is easily managed.
- The data is correct and is organized such that interaction between data, such as dates and events, are valid.

4 BACKGROUND

The Smart Hospital is using several websites such as mysignup.com, signupgenius.com, quartz, time-clockwizard.com, and outlook calendar. It is a system to keep track of students clocking in and out, inventory management tracking, simulation schedules, and student hours. This system is currently used by faculty and students to maintain the smart hospital. This project is being undertaken in order to establish a single web application for the smart hospital. The web application is being created to speed up the everyday proceedings and to better manage the inventory of the smart hospital.

5 RELATED WORK

Current work that is related to this project includes:

- mysignup.com - This is a website that basically allows for online sign-ups
- signupgenius.com - This is another website that allows for online sign-ups.
- quartz.com - This is a website that manages employee times.
- outlook.com - Outlook contains a calendar feature that the Smart Hospital faculty desired.

6 SYSTEM OVERVIEW

The Smart Hospital Management Tool is a deployable website for use in UT Arlington's Smart Hospital. The management tool will be based on a node.js back end with HTML, CSS, and Javascript front ends. The website will be fast and responsive in order to keep up with the demands of a fast paced simulation hospital. Tools within the program will be touch friendly and easy to understand for use on tablet devices throughout the Smart Hospital and future deployment locations. Students and faculty will be able to log in using UT Arlington's universal log in. Future document updates will include updated detailed information as the system becomes more clear.

7 ROLES & RESPONSIBILITIES

The team members are split up with the following responsibilities:

- Scrum Master: Edward Fankhauser
- Project Owner: Edward Fankhauser
- Development Member: Victor Garcia
- Development Member: Allison Johnsgard
- Development Member: Narayan Rimal
- Development Member: Neelim Haider

8 FACILITIES & EQUIPMENT

The facilities and equipment needed for this project are extremely simple. The team will be using the layout of the entire Smart Hospital for references and the scanning system the Smart Hospital already has in place. As for other equipment, the team will use their personal computers with Brackets, Github, Nodejs, and MySQL. All of the items listed will help move the team forward as the project goes under-way.

9 COST PROPOSAL

The Smart Hospital project is a deployable, web based management tool. Costs for the project will focus solely on server and domain costs.

9.1 PRELIMINARY BUDGET

The Preliminary costs will be low. The Smart Hospital project is a software one. Little to no hardware is required at the current stage. As the project moves forward, costs for server services will be researched. A quality shared hosting server for websites can be as low as \$50 per year, some even for free. This will likely be the teams cost for testing and deploying before the management tools are officially released.

9.2 CURRENT & PENDING SUPPORT

The current budget for the program is \$800 provided by the senior design class through the use of tuition fees. Pending support will come from UT Arlington and the Smart Hospital stakeholders in the form of long term server and maintenance fees. UT Arlington may be able to provide a server for the Smart Hospital to run on after the product release. Secondary options are still being considered in case UT Arlington cannot provide a suitable server.

10 DOCUMENTATION & REPORTING

In this section, you will describe all of the various artifacts that you will generate and maintain during the project lifecycle. Describe the purpose of each item below, how the content will be generated, where it will be stored, how often it will be updated, etc.

10.1 PROJECT CHARTER

The purpose of the Project Charter is to lay out an idea of what the project will be about and what the finished product will be. The Project Charter will be posted on GitHub with the rest of the team's documents.

10.2 PRODUCT BACKLOG

The team will be using scrumdesk.com to keep track of the amount of hours worked on certain aspects of the project.

10.3 SPRINT PLANNING

Sprint planning will be done in person and recorded in journals on the third week on a Thursday.

10.3.1 SPRINT GOAL

The sprint goal will be recorded in team members journals and will be recorded in the future on scrumdesk.com.

10.3.2 SPRINT BACKLOG

The team will be using scrumdesk.com to keep track of the amount of hours worked on certain aspects of the project

10.3.3 TASK BREAKDOWN

Task breakdown is all recorded in journals during meeting times.

10.4 SPRINT BURNDOWN CHARTS

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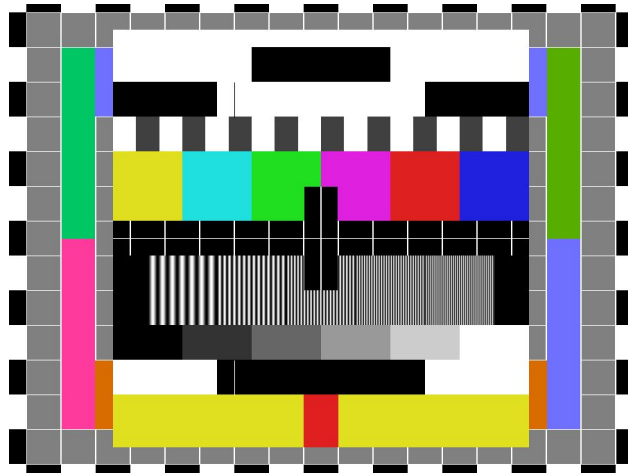


Figure 1: Example sprint burndown chart

10.5 SPRINT RETROSPECTIVE

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10.6 INDIVIDUAL STATUS REPORTS

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10.7 ENGINEERING NOTEBOOKS

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10.8 CLOSEOUT MATERIALS

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10.8.1 SYSTEM PROTOTYPE

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10.8.2 PROJECT POSTER

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10.8.3 WEB PAGE

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10.8.4 DEMO VIDEO

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10.8.5 SOURCE CODE

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10.8.6 SOURCE CODE DOCUMENTATION

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10.8.7 HARDWARE SCHEMATICS

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10.8.8 CAD FILES

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10.8.9 INSTALLATION SCRIPTS

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10.8.10 USER MANUAL

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