



ROSE-HULMAN INSTITUTE OF TECHNOLOGY

University of Wisconsin–Madison | Department of Computer Sciences  
Human-Computer Interaction Laboratory



TEAM ENGINEERING JOURNAL

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## 1 Thursday, December 8, 2011

In the week of November 28th, we got back into the swing of working on our project. I personally had not worked on this project before, so one of the main goals for that week was to get me up to speed. As we completed the compilation document of Milestone 1, I reviewed what the project was and how we were expecting to implement it. We did not have our weekly meeting with our client or project manager, but we did set times for those meetings. After our regular meeting with Dr. Chenoweth, we had several action items to take care of. Specifically, we needed to discuss the scope of our project with our client to make sure we were all on the same page. We also needed to get me ready to go with Latex, Redmine, and Git.

## 2 Friday, December 9, 2011

In this past week, we continued bringing me up to speed, and began our work on Milestone 2. On Monday, we met with our client, Allie, and I was introduced. We also made sure that all of us had the same understanding with regards to the scope of the project. We were also given a feature request; Allie and her co-workers wanted to have the ability multiple people sign up for any given time slot, up to a maximum set at the event's creation. We replied that we would give her our answer at the next meeting. Later in the week, we decided that the feature would be trivial to implement, so we will be accepting the request. In our first project manager meeting, we discussed how the quarter was going to go. We decided that, in general, we would turn our milestones in to our PM a week before they are due, so that we have time to edit them before turning them in. We also worked on Milestone 2 and installed Git and Latex on my computer. For next week, we are to finish the milestone and get Redmine working for me.

## 3 Thursday, December 8, 2011

Today, we wrote our initial deployment guide for our client, Allie. The introduction is below.

This document will provide a very good sense of how to deploy the Participant Scheduling System, but it will not be a definite guide. Though most instructions include concrete examples, some steps may be missing. Pay special attention when configuring Nginx, Apache, and PostgreSQL. Furthermore, some values will need to be changed, like the references to `rose-hulman.edu`. Good luck!

## 4 Friday, December 16, 2011

Last night, we received a response from our client, Allie, regarding our initial deployment guide. We expected her to have a server similar to our CSSE virtual

machine for our prototype. It turns out that she does not have a full virtual machine; rather, she just has an AFS folder through CSL (her IAIT). We have not yet decided how to proceed, but hopefully, this will not be a huge hurdle.

## **5 Friday, January 6, 2012**

Today, we decided upon who will work on what for milestone 3. Samad worked on the Package Diagram and revising and trouble shooting the deployment guide. I Worked on the Sequence diagram, Operation contracts and interaction diagram for browsing an experiment and signing up for an experiment. Katie did the same work as I did, but for creating and modifying an experiment. Kevin also did the same, but for creating an account and login. As a team we produced a Design Class Diagram and will continue working on parts of this milestone to make it better.

## **6 Monday, January 9, 2012**

Today, we meet with Allie to work on setting a meeting time and make contact in the new year. We set a meeting time for our normal time (Mondays at 10:50 am Est) until told otherwise. We talked about possible changes for deployment and also a possibility of getting login information to work on the deployment ourselves if need be. We asked if there were any changes that she could think of, but she had nothing for us. We ended the meeting by finishing putting together our rough draft of Milestone 3 for submission to our Project Manager. We also discussed who will be taking what tickets in Redmine, but not much came of this since it was not on our agenda.

## **7 Monday, January 23, 2012**

As usual we met with Allie for our weekly client meeting. We have been working with her to setup a vm for the deployment of our web application. This process has been taking a lot longer than we anticipated. Part of this is due to the fact that we misunderstood what she meant on week 1 of the fall quarter. She stated that she had a machine to run the system on and gave us a list of version numbers. Based on this and her wording, we determined that it was a full virtual machine on which she had rights. Instead, she was intending to run the server on her local account on a department computer. Since we discovered this, we had to convince her to get a full virtual machine from CSL (their IAIT) and this process has taken over 2 weeks so far. She is going to contact them again this week to determine the status. We have a deployment guide that we know works so once we are able to get Allie setup with a virtual machine we will be able to move quickly into the deployment phase.

## 8 Thursday, January 26, 2012

This week has been focused primarily on implementing secondary features and making some minor bug fixes that we had found earlier in the project. One of the secondary features that we were focusing on was how to make the experiments table look better. The reason behind this was that the table has a lot of information that can be sorted by and this was a requested feature by Allie. We determined that there were a few options regarding the layout of the table and the method of which to sort. Samad intended to try to do the work on the back end in python and return it to the browser. I suggested that we use an open source jQuery JavaScript library that I had worked on and with at my internship. The library enables you to make any HTML table into a sortable, searchable table with ease. This required a bit more knowledge to setup but was not beyond the ability of our group. We were able to implement this feature and not spend as much time have to come up with a solution to do it ourselves.

## 9 Thursday, February 9, 2012

Our client finally reported back to us with details about her production server. Over nineteen weeks ago, she led us to believe that our web application would be deployed on a Fedora virtual private server. None of us were too familiar with Fedora, but we prototyped on a Fedora virtual private server anyway. Even though we preferred Ubuntu, we decided it was more important to match the client's specifications than our preferences. Everything works very well on our prototype, and we even wrote a step-by-step deployment guide for this setup.

With one week remaining in the project, some major obstacles have been placed before us; for example, the client actually does not have a virtual private server! Hence, we cannot use all of the tools we initially planned to use like nginx for static content or mod\_wsgi. Furthermore, our client does not even have sudo privileges on her "server." We are hoping that we can make the required adjustments to our deployment plan in the remaining time. It would be a travesty for our project to not be used, not because it was not awesome software but because our client could not deploy it.

## 10 Friday, February 10, 2012

For the sake of focusing on deploying our project, we have had to make a difficult decision to not finish a few minor coding tasks. First, there are two small bugs that will not be addressed: one is that dates and times are sorted alphabetically and therefore incorrectly in our tables, and the other is that `ExperimentDateTimeRanges` are not completely validated in the administration, part of a very rare use case. Additionally, when researchers modify or delete `Experiments`, `ExperimentDates`, or `ExperimentDateTimeRanges`, they are not warned of deleting related `Slots` or `Appointments`. Researchers also wanted the ability to create `Buildings\Rooms` and `Qualifications` themselves, but instead

an administrator will have to do so for them. Finally, allowing researchers to mass-delete **Experiments** and view all **Appointments** in a calendar will not be implemented. We sincerely believe that none of this will detract from the overall usefulness of our product.