Swole Patrol

Our project tackles one of the main excuses people tend to tell themselves in order to justify not attending the gym: “There’s too many people!” We plan to implement a model that estimates the current capacity of the Pohl Recreation Center weight room (and possibly the distribution of the gym as a whole, if feasible), so that members may make the most educated decision on when to attend. Our project is named Swole Patrol because it allows users to “Patrol” the current capacity of the gym.

Group Nerd Herd

Our group consists of four members:

1. Jacob J Hanson
2. John Nguyen
3. Anthony Hicks
4. Ibrahim El-Rayes

Tech Stack

For our project, we plan on using the IoC framework: Spring on top of Java. In order to stand up a web server that can easily provide gym capacity data and our generated distribution model, we plan on implementing the web server framework that is built into Spring. This will allow us to handle web requests with minimal code, minimum library requirements, and enterprise level security.

Because the Spring framework can run anywhere the JVM can, our application can be stood up in a number of free services that host web applications. For instance, Heroku is a popular choice for hosting web applications, and can be easily integrated to reflect code changes in GitHub branches.

The way the Spring framework is set up, allows us to develop our application in ‘Components.’ Components are fragments of code that are written for different responsibilities of the application. For instance, one Component of our code would be responsible for collecting “swipe” data from UNT. Another Component would be responsible for handling web requests and serving back the site’s main page.

Repository

Our project’s GitHub repository can be found at https://github.com/jacobhanson1010/csce4444 Our work and reports will be committed to the development branch (not master). Group members shall:

- Not commit to the master branch. This branch is reflected live in our Heroku deployment.
- Checkout local branches for development, and make pull requests before code is merged into the main development branch.
- Not store sensitive information in code, where it can be seen publicly in our repository.

Risks

The Swole Patrol project comes with a number of potential risks that could impede the success of our project. The top five we recognize are as follows:

1. The main risk we expect to encounter is UNT not providing us with the required “swipe” data needed to a live report of gym capacity.
2. Team members not contributing.
3. Our distribution model’s accuracy might be affected by outside factors, such as weather, seasonal motivation, and students’ class schedules.
4. Issues in team members learning the new frameworks and systems.
5. Integration issues between UNT’s systems and our application development.

Risk Management

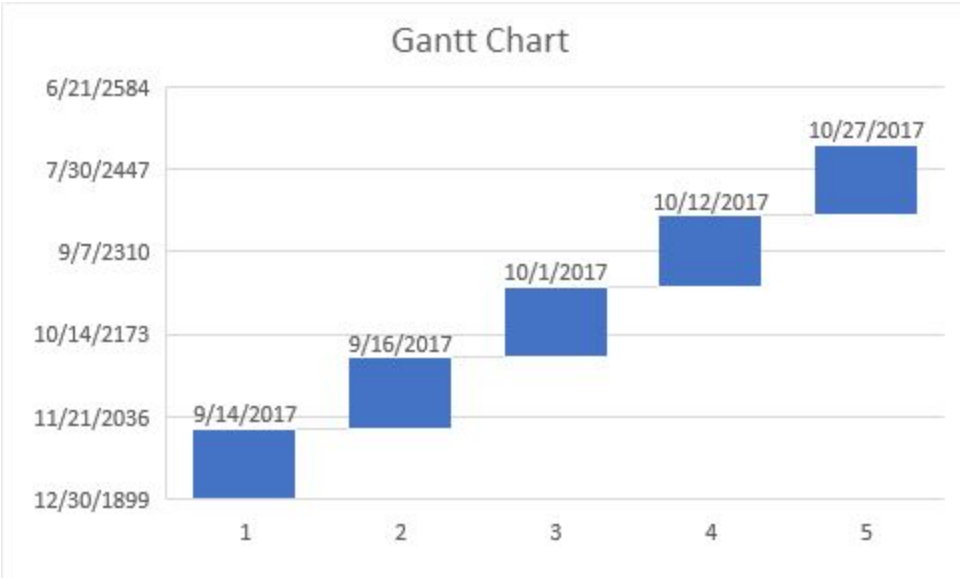
With respect to the items in the above section, these are our proposed solutions and workarounds for those risks.

1. If UNT decides not to provide us with entry data for the Pohl Recreation Center, then there’s not much we can do to provide *live* information. We can, however, post up at the gym and try to record trends that would be supplementally helpful. Then for the sake of completing the project, we could just make up data.
2. We plan on holding the utmost accountability of our group members. If responsibilities are not being met, and it affects the group’s progress, then there will be repercussions.
3. While the distribution model is intended to be one of our main selling points, it is only a model. There’s not a lot we can do about unexpected bursts of gym usage. We will do our best to estimate the distribution of gym go-ers.
4. There a multiple online tutorials and documentation resources for the Spring framework we plan on using. Additionally, Java is very syntactically similar to other languages we all have used in the past. So the learning curve shouldn’t be too steep.
5. This is another big hurdle. Hopefully there will be an API or similar outlet for us to collect the entry data. Otherwise we might have a lot more work cut out for us.

Plan

This is a description of our plan, preceding the gantt chart of the plan.

1. Milestone: Request from UNT gym to see how many people are checking in. If they say no, we will need to collect data ourselves and derive our own model
2. Milestone: Establish a working webpage in Java
3. Implement the data/our model into the webpage
4. Milestone: Implement the functions that will produce the desired information based on the data
5. Finalize the webpage and debug/ensure everything runs smoothly



Meeting Minutes

Date	Time	Participants	Group Progress Description
9/12/2017	3PM-3:40PM	Hanson Nguyen El-Rayes Hicks	- Defined our 5 risks. - Worked on our Deliverable 1 report as a group, broken into sections. - Shed light on the internal problems we as a group might have.

Member contribution table

Member name	Contribution description	Contribution (%)	Note
Jacob J Hanson	Created repository and managed documents. Contributed to risks section.	25%	
Ibrahim El-Rayes	Generated concise project plan and gantt chart. Contributed to risks section.	25%	
John Nguyen	Documented Meeting Minutes and contributed to risks section.	25%	
Anthony Hicks	Wrote project description and contributed to risks section.	25%	