

# Milestone 2

11<sup>th</sup> March 2018

**Table of Contents:**

[PROJECT MANAGEMENT AND TOOLS:](#)

[REQUIREMENTS](#)

[Functional](#)

[NonFunctional](#)

[PROJECT PLAN/ PLAN CYCLE:](#)

[PROJECT PLAN IN TOOL:](#)

[AGILE SCRUM METHODOLOGY:](#)

---

## **PROJECT MANAGEMENT AND TOOLS:**

For the project management software, our team has chose to use Trello. Trello is a website that will allow our team to identify important goals and work collaboratively. We have set up one board for each sprint and within each board we have three sections: "To Do" "Doing" and "Done". This will help us stay organized and document our work.

The requirements for our project are broken up into two sections: Backend (SQL Database) and the Frontend (Website).

### **Backend(SQL Database)**

1. Entity-relationship diagram
2. All tables in third normal form
3. Front end integration
4. Create a way for people to make/access accounts
  - a. Username/password recognition
5. Establish database
  - a. Draft tables
  - b. Code tables through SQL
  - c. Integrate with front-end
6. Form integration
  - a. Add to tables through forms
7. Connect to APIs
  - a. Calendar
  - b. Map

### **Frontend(Website)**

1. Sketch Website
  - a. Identify Fonts

- b. Template Design
  - c. Identify Color Palette
  - d. Create Logos
  - e. High-Quality Images
  - f. Google Analytics
- 2. Integrate Google Accounts
  - a. Integrate Google Maps
  - b. Moodle?
- 3. Sign-In Page
  - a. Use form.html we made in class to log in
  - b. Connect to SQL database of user ID's
- 4. Main Page
  - a. Display calendar
  - b. Ask each user what classes they are currently enrolled in
- 5. Website Domain
  - a. Pick Domain Name
  - b. Register domain (not sure if required)
- 6. Research TA/CA Information
  - a. Get photos of TA/CA's
  - b. Find schedules of TA's

## **REQUIREMENTS**

### **Functional**

- Schedule adjustments and cancellations
- Announcements of changes (can opt in via Google notifications)
- Administrative functions - changes to locations
- Authentication for users
- Authorization levels- only CAs and TAs can make changes
- External Interfaces- connected to Google accounts (possibly)
- Legal - policy reminders on the Honor Code and Proper Conduct

### **NonFunctional**

- Performance – instant response time
- Scalability- can adapt to other campuses
- Capacity- can accommodate any number of CAs/TAs
- Availability- relies on school and Google servers
- Reliability- highly reliable if utilized by CAs/TAs
- Security- login credentials required
- Usability- anyone with internet access can use it
- Interoperability- compatible with school-assigned Google accounts

## **PROJECT PLAN/ PLAN CYCLE:**

Using the agile methodology as the framework for our project development, we decided to incorporate four, two week sprints to keep development cycles short and maintain accountability between the team. With about 8 weeks left in the semester to develop a working application, our team is planning on four sprints, during which the designated scrum teams will work on their assigned deliverables to bring to the scrum review meeting at the end of each 2 week period.

Our team development team will be split into two scrums, one dedicated to front end development and one for back end. Our back end scrum team has team members Alexander Louie, Colin Murphy and Roman Zaytsev. The front end team consists of Elsa Velazquez, John Osborne, and Thadeus Labuszewski.

The schedule of sprint goals is as follows. In order to stay true to the nature of the agile methodology, these goals will remain flexible and allow for adjustments as needed. The objectives for each spring will be finalized at the beginning of each period in order to give teams precise development milestones to shoot for. Future goals, as well as team member distribution, will be adjusted on an as-needed basis.

### **Sprint One:** 5 March – 19 March

Front End: Rough draft of site layouts, logos, visual elements  
Back End: Entity-relationship model

### **Sprint Two:** 19 March – 2 April

Front End: Finish design and create website  
Back End: Finish design and create SQL tables

### **Sprint Three:** 2 April – 16 April

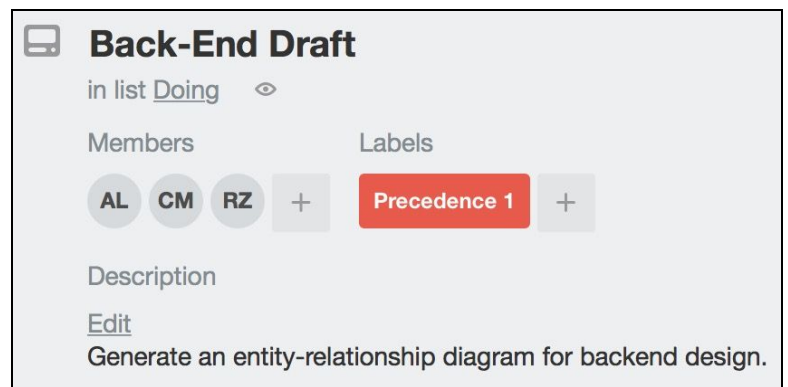
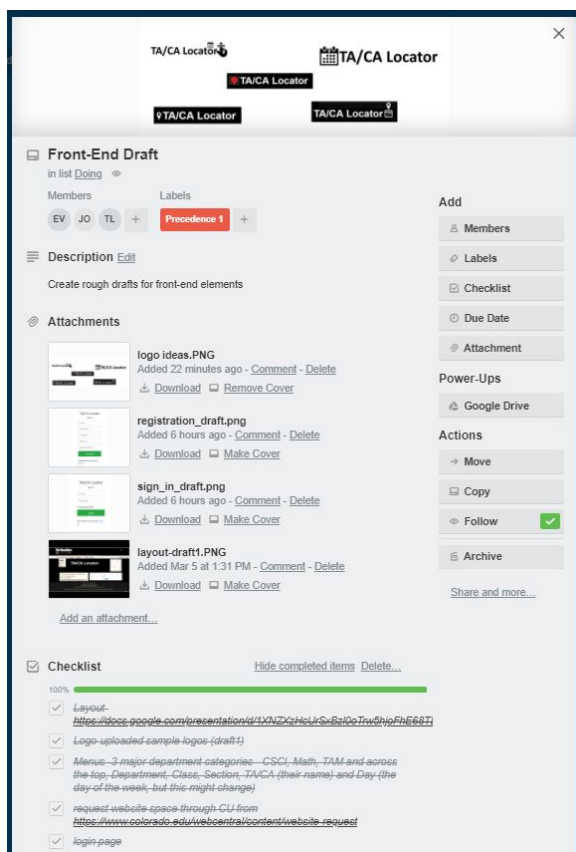
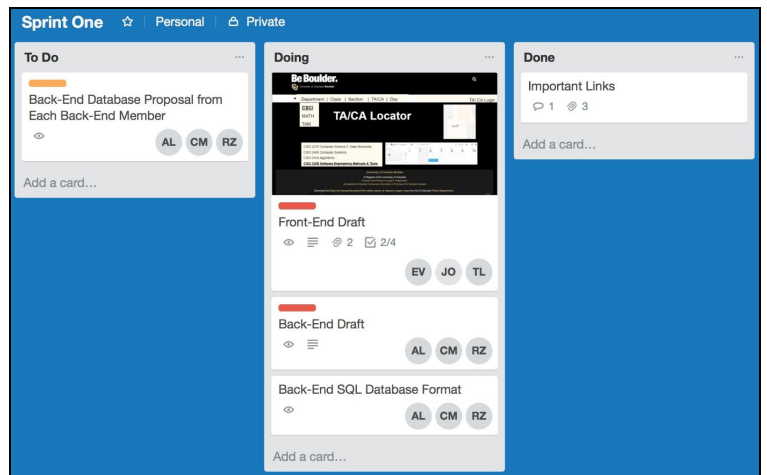
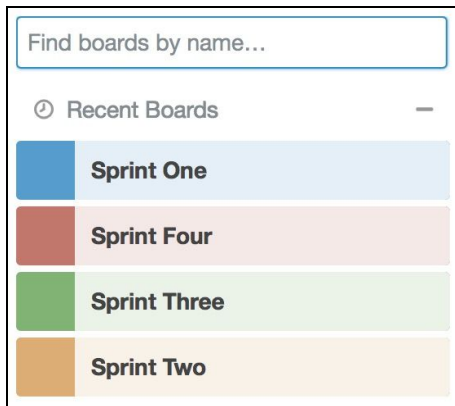
Front End: Debug front end elements  
Back End: Debug and work with front end team on needed queries

### **Sprint Four:** 16 April – 30 April

Front End/Back End: Finish debugging and front-end/back-end integration

## PROJECT PLAN IN TOOL:

Trello- <https://trello.com/b/II8S973j/sprint-one>



## **AGILE SCRUM METHODOLOGY:**

Alexander Louie, Colin Murphy and Roman Zaytsev on the backend team all worked on researching SQL and database management to create a rough plan for the implementation of the database for our project. Roman added to the plan cycle section and updated our Trello project management site. A roadblock many of the backend team brought up was inexperience with database implementation and a poor sense of direction on the project. To help with this and the project moving forward, the backend team has made plans to meet and brainstorm in their smaller group.

Elsa Velazquez, John Osborne, and Thadeus Labuszewski on the frontend team worked on designing the layout for the proposed site, and planning for what tools they would use to make it. Elsa created a prototype layout for the website in Google Slides that has become the working plan for the group <https://trello.com/c/1gbJy9NV/1-front-end-draft>. Thadeus introduced the team to Trello, our new project management software <https://trello.com/b/1l8S973j/sprint-one>. The frontend team's plan in the next sprint is to solidify a plan for the page, and begin prototyping in html and css, as well as figuring out how the site will be hosted. Roadblocks that have occurred for the frontend team mainly involve trying to get information from the TAs and not having a cohesive sense of the site design. As with the backend team, the frontend team plans to meet in their small group to help get everyone on the same page and brainstorm a plan moving forward.