

## Sprint 1 Plan

**Product Name:** All Aboard Attendance

**Team Name:** The Bolts

**Sprint Completion Date:** July 7, 2019

**Revision:** 1

**Revision Date:** 07/1/19

**Team Members:** Donghyun Kim, Matt Jacobs, Suleyman Saib, Trevor Weger, Wesley Smith

### **High level Goals:**

1. Become adept and proficient in the django framework enough to build the basic infrastructure of our web app.
2. Begin to design our database and experiment with data organization.
3. Research how to develop QR code and key generation tools to implement into the web app.
4. Create a basic web app where a professor can start a session, students can give their ID, and then the ID's are listed for the professor.

### **Sprint 1: 07/01 - 07/07**

- **Spike:** Database/django framework research
- **Spike:** Keygen/ QR code research
- As a student, I want to scan a projected QR code so that I can quickly access the session attendance webpage and log in.
  - Task 1: QR generated from attendance session URL **1 hour**
  - Task 2: Login field (just CruzID, no password functionality yet) for attendance webpage **1 hour**
- As a student, I want to exchange a temporary ID with other nearby students so that I can be marked present.
  - Task 3: Generate a session-unique batch of temporary IDs for each student in the class **2 hours**
  - Task 4: Attendance webpage serves a student who has logged in to the attendance session their temporary ID. **4 hours**
  - Task 5: Attendance webpage fields for entering the temporary IDs of nearby students. **2 hours**
  - Task 6: Attendance webpage field for general location in class of student (front, middle, back, etc) **1 hour**
  - Task 7: In addition to storing the ID pairs for an attendance entry, also store the direction of the key exchange edge (*arrow leads to student who has entered another students ID*), the time of the key exchange **3 hours**
- As an instructor, I want to be able to host a unique attendance session for each lecture so that I can track attendance throughout the quarter.
  - Task 8: Create an instructor homepage with functionality for opening a new session (leave open for integration with: URL gen, student temporary ID batch

keygen, session model instancing, URL QR gen, session instance data),  
accessing the data from previously closed sessions **2 hours**

- Task 9: Create Django model for a session that stores: Directed student-student edges, times of edge formation, the number of students fully marked present (ie, has connected to three other students), students marked partially present, and students not marked present at all **2 hours**
- Task 10: Create an instructor attendance session webpage with the option to close the current session (disabling any future updates to that session's data, deny future requests for that session's URL, store session data for future reference and analysis) **3 hours**
- Task 11: Create session-unique temporary URL generator (alphanumeric 15 symbols long) for newly opened sessions **1 hour**
- Task 12: Create URL collision table model that stores all generated session URLs that ensures a new session URL isn't already occupied by another session **1 hours**
- As an instructor, I want a simple list of all students marked present for a session.
  - Task 13: Algorithm that compiles attendance data into three lists (no sort pattern yet): List of students marked fully present, list of students marked partially present, and list of students not marked present. **2 hours**
  - Task 14: Implement sort functionality for simple attendance lists (e.g., alphabetized) **1 hour**

#### **Team Roles:**

- Donghyun Kim: Developer,
- Matt Jacobs: Developer,
- Suleyman Saib: Developer,
- Trevor Weger: Developer, Initial Scrum Master
- Wesley Smith: Developer, Product Owner

#### **Initial Task Assignments:**

- Donghyun Kim:
  - Task
- Matt Jacobs:
  - Task B
- Suleyman Saib:
  - Task E
  - Task F (tentative, shouldn't be hard after E)
- Trevor Weger:
  - Task D
- Wesley Smith
  - Task 3: Student ID batch gen

**Scrum Times:** (TA meet up TBA when schedule given)

- Monday: 12:30-1:00pm
- Wednesday: 12:30-1:00pm
- Friday: 12:30-1:00pm

**Initial Scrum Board:**

Due to complex schedules and a lack of a dedicated space of the team, our team will use the *Trello* app to keep track of tasks progression and completion.