**Project Increment (9/25/2018)**

Project 7 (Matchmakers)

**Matchery**

In our first PI, our group will be creating the basic implementation for our two-way “individual to event” matching solution. The first iteration will provide a web application for users to logon and choose their role in the group’s event(s) with a basic React front end, a Node Express back end, and UI functionality for group joining and matching. We will be testing the ability of our algorithm to provide optimal matches on a small scale, as well as refine the user experience.

* **Objective 1: Create an application with basic user creation and authentication**
  + Mock up page designs (login/signup, dashboard, candidate page, judge page, event admin page)
  + Investigate React and stand up a skeleton for a client
  + Investigate Node Express and stand up a skeleton for a client
  + Investigate MongoDB and create a simple database for user credential models
  + Wire up MongoDB to Express back end for API functionality
  + Wire up Express server for connectivity with the front end (user creation and login functionality)
* **Objective 2: Add in user type definition for candidates, judges, and event admins, as well as event permissions for those user types**
  + Prepare database for user permissions by modifying models to support them
  + Prepare React client UI for user type determination
  + Add event model to database
  + Prepare React client for event display and functionality (creation, add members)
  + Define user type permissions on the front end
* **Objective 3: Investigate algorithm viability**
  + Determine algorithm inputs and outputs
  + Determine algorithm functionality for group to individual ranking
  + Test algorithm on test data for functionality usage cases
  + Investigate algorithm functionality in the context of our Express server
* **Objective 4: Prepare application for simple matching process**
  + Update models to support matching candidates and events
  + Integrate algorithm functionality into back end
  + Prepare UI for matching process based on user type
  + Integrate front end selections with back end processing for input selection and output display