# **Sprint 1 Plan Template**

3D Matrix Calculator
Completion Date; July 10th, 2018
Revision: 1.0 July 1st, 2018
Team Name: Matrix Masters

### Goals:

Our goals include getting acquainted with github and starting the core/beginning aspects of the calculator (mathematical expression parser, webpage, 3D viewport).

#### **User Stories:**

- As a matrix calculator developer, I want a working github repository and have everybody acquainted with Github so that we can share code more easily. (Total time: 4 hours 20 minutes)
  - Task 1: Everyone making a github account **Time Estimate: 20 minutes**
  - Task 2: Everyone looking at a github tutorial **Time Estimate: 4 hours**
- 2. As a matrix calculator user, I want a 3D viewport to be implemented so that I can view any 3d models I import into the calculator.
  - Task 1: Creating the 3D viewport **Time Estimate: 1 Day**
- 3. As a matrix calculator developer, I want a user input parser so that the user can provide complex matrix calculations.
  - Task 1: Develop a mathematical expression parser Time Estimate: 4-7
     days
- 4. As a matrix calculator developer, I want the top bar to take user input so that the user can specify matrix calculations.
  - Task 1: Adding the top bar to the html document **Time Estimate: 1 day**
- 5. As a matrix calculator user, I want to be able to import/export OBJ files so that I can display the on screen. (**Total time: 1 and ½ day**)
  - Task 1: Familiarizing oneself with how three.js handles external files **Time Estimate:** ½ day.
  - Task 2: Developing the external file loader/exporter Time Estimate: 1 day
- 6. As a matrix calculator user, I want to be able to move the camera within the 3d viewport so that I can see my 3D model at different angles.
  - Task 1: Develop camera functionality within the 3D viewport Time
     Estimate: 1-3 days
- 7. As a matrix calculator developer, I want a matrix cell parser so that a user can define scalars such as complex numbers, trig functions within their matrices.
  - Task 1: Develop the matrix cell parser TimeFrame: 2-3 day
- 8. As a matrix calculator developer, I want a sidebar variable parser so that a user can define complex combinations of defined matrices. **TimeFrame: 2-3 days** 
  - Task 1: Develop the sidebar variable parser

- 9. As a matrix calculator user, I want changes to any matrix to affect the other defined matrices so that my calculations can be more impactful.
  - Task 1: Develop a dependency tree for keeping track of matrix changes
     Time Estimate: 2 days
- 10. As a matrix calculator developer, I want a sidebar so that we can put matrix variable items on that sidebar.
  - Task 1: Add a sidebar element to webapp's html code Time Estimate:
     1-2 days

## Team Roles:

Alfredo Rivero: Developer, Product Owner

Zoe Tacderas: Developer Tianyi Tang: Developer

Abraham Cardenas: Developer

Jacob Schwartz: Developer, Scrum Master

# **Initial Task Assignment:**

**Alfredo Rivero:** As a matrix calculator developer, I want a working github repository and have everybody acquainted with Github so that we can share code more easily.

Task 1: Making a GitHub account.

**Zoe Tacderas:** As a matrix calculator developer, I want a working github repository and have everybody acquainted with Github so that we can share code more easily.

Task 1: Making a GitHub account.

**Jacob Schwartz:** As a matrix calculator developer, I want a working github repository and have everybody acquainted with Github so that we can share code more easily.

Task 1: Making a GitHub account.

**Tianyi Tang**: As a matrix calculator developer, I want a working github repository and have everybody acquainted with Github so that we can share code more easily.

Task 1: Making a GitHub account.

**Abraham Cardenas:** As a matrix calculator developer, I want a working github repository and have everybody acquainted with Github so that we can share code more easily.

Task 1: Making a GitHub account.

## **Scrum times:**

Monday, Wednesday, Friday, after 1:30pm.