

# Unity Optics

## Sprint 2 Plan

Team Unity  
Sprint Completion Date: 7/15/2019  
Revision 1: 7/8/2019  
University of California, Santa Cruz

July 8, 2019

## 1 High Level Goals

The high level goals for this week are to take data from the game demo and store it into Google's Realtime Firebase Database. From this database, we want to create useful visualizations of the data and display them on a webpage alongside the game.

## 2 Task Listing

Below are the tasks for each team member organized by user story.

### 2.1 User Story 1

As a game developer I want to format and store my data in a database.

- Task 1: Write Firebase "save data" scripts that takes JSON data from the game and stores it into the Firebase Database. (3 hours)
- Task 2: Write Firebase "read data" scripts that retrieves data from the database for use in visualizations. (3 hours)

## 2.2 User Story 2

As a game developer I want a simple API to access data from my players' game sessions so I can derive useful information from the game.

- Task 1: Incorporate Firebase SDK into Unity plugin scripts that calls methods for Firebase "save data". (2 hours)
- Task 2: Incorporate Firebase SDK into website Javascript that calls methods for Firebase "read data". (2 hours)

## 2.3 User Story 3

As a game developer I want to display my game on a website with visualizations of the data so that I can analyze what my players are doing.

- Task 1: Parse JSON data to create objects containing telemetry data for each advertisement in-game. (3 hours)
- Task 2: Create static visualizations using the data from Firebase. (3 hours)
- Task 3: Create a website framework that displays the game demo, and visualizations below the game. (4 hours)

## 2.4 User Story 4

As a game developer I want more advanced telemetry such as interactable objects to be tracked so I can see how my players react to advertisements.

- Task 1: Create a "read advertisement" method that allows players to click on an advertisement and store this data in the database. (2 hours)
- Task 2: Make objects in-game movable. (2 hours)
- Task 3: Fix bug in-game that makes objects obscured by other objects still read as "visible" in camera view, despite not being seen by the player. (2 hours)

### **3 Team Roles**

- Matthew Rhea: Product Owner, Developer
- Shealtiel Mulder: Scrum Master, Developer
- Minsu Jang: Developer
- Boaqing Xie: Developer
- Ninghao He, Scrum Master, Developer

### **4 Initial Task Assignments**

- Minsu Jang: User Story 4, Task 1
- Shealtiel Mulder: User Story 3, Task 1
- Baoqing Xie: User Story 3, Task 3
- Ninghao he: User Story 4, Task 3
- Matthew Rhea: User Story 1, Task 1

### **5 Initial Burnup Chart**

[This section will be updated at a later date]

### **6 Initial Scrum Board**

[See this on Trello]

### **7 Scrum Times**

Our Scrum times throughout the week:

- Mondays at 1:30PM until 3:30PM.
- Tuesdays at 1:30 until 3:30PM.

- Wednesdays at 1:30PM until 3:30PM.
- Thursdays at 2:00pm until 4:00PM.

TA Meetings:

- Mondays at 3:30PM until 4:00PM.
- Thursdays at 3:15 until 3:45PM.