

## **Heading**

Sprint 3 Plan

EZ 3D

Revision 1

Nov. 3, 2021

## **Goal:**

The goal for this Sprint is to

- Fix some of the bugs that have carried over from foundational user stories that can't go on the backlog
- To start adding some efficient workflow functions to the viewport

## **Task Listing, organized by user story:**

**User Story 1:** As a 3D modeler, I need to be able to manipulate Translate/Rotate/Scale with click/drag and/or by units so I can be as precise as I want.

Task 1: Make it possible to select one gizmos at a time

Task 2: (*BUG*) Disable orbit controls as the gizmo is activated

Task 3: Gizmos need to be toggled off until user wants to manipulate a mesh

**User Story 2:** As a 3D modeler, I need to be able to manipulate the light sources so the shading looks the way I want.

Task 1: Make controls for an ambient light source in the outliner

Task 2: Make creation and controls for directional lighting in the outliner

Task 3: Make a create button and controls for each point light in the outliner

Task 4: Make a way to remove different light sources

**User Story 3:** As a 3D modeler, I need all of my options in a nicely formatted dropdown or outliner menu, so I can work efficiently.

Task 1: Use React to set up the Navbar menu and the Outliner (Monday) Cameron

Task 2: Make the menu bar cut off with the outliner

Task 3: Make list of instances added to the scene

Task 4: Make the instances selectable from the outliner and viewport

Task 5: Mesh visibility toggle from the outliner

**User Story 4:** As a developer of the project, I need the code to be uncluttered

Task 1: Document everything. Mandatory for all.

Task 2: Add components folder to src

Task 3: Make most functions in App.js a component in it's own file.

**User Story 5:** As an artist, I need Wireframe/Faceted/Smooth shading options so I can specialize the aesthetic of my scene.

Task 1: Make a selector in the outliner  
Task 2: Make Wireframe shading option  
Task 3: Make Faceted shading option

**User Story 6:** As a 3D modeler, I need to be able to change the color of each of my meshes so I can make distinct meshes in my scene.

Task 1: Make a color wheel selector available in the outliner (Can pull from old code)  
Task 2: Make selected object change color to the selected one

**User Story 7:** As a regular user of EZ 3D, I need to be able to export/import my work so I can easily pick up where I left off.(obj/stl)

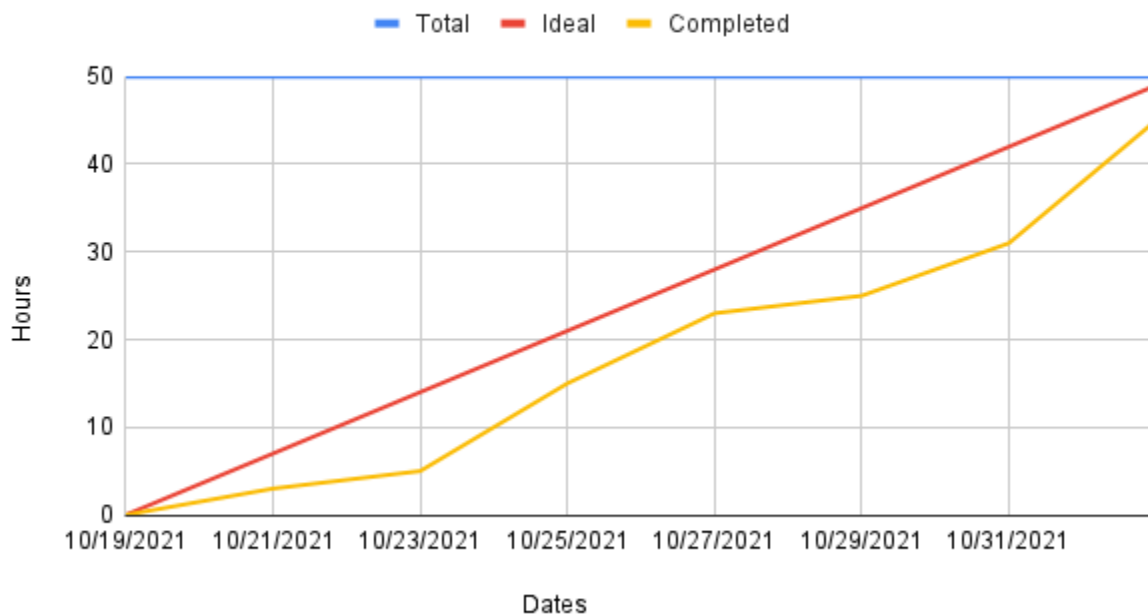
Task 1: Export the object in different formats (obj/stl)  
Task 2: Import objects into the scene (obj)

### **Team Roles:**

Antonio Ibarrola: Scrum Master, Developer  
Cameron Taylor: Product Owner, Developer  
Eric Huang: Developer  
Gabriel Aizenman: Developer  
Ruiyang Liu: Developer  
Zachary Booth: Developer

### **Initial burnup chart:**

Burnup Chart



## Initial Scrum board and Task Assignment:

|   |   |   |  |
|---|---|---|--|
| <p><b>User Story 1:</b> As a 3D modeler, I need to be able to manipulate Translate/Rotate/Scale with click/drag and/or by units so I can be as precise as I want.</p> | <p>Task 1: Make it possible to select meshes from the outliner (Antonio)</p> <p>Task 2: Make it possible to select meshes by clicking them (Antonio)</p>  | <p>Antonio Ibarrola</p>   |  |
| <p><b>User Story 2:</b> As a 3D modeler, I need to be able to manipulate the light sources so the shading looks the way I want.</p>                                   | <p>Task 1: Make controls for an ambient light source in the outliner (Antonio)</p> <p>Task 2: Make creation and controls for directional lighting in the outliner (Antonio)</p> <p>Task 3: Make a create button and controls for each point light in the outliner (Antonio)</p> <p>Task 4: Make a way to remove different light sources (Antonio)</p> |   |  |
| <p><b>User Story 3:</b> As a 3D modeler, I need all of my options in a nicely formatted dropdown or outliner menu, so I can work efficiently.</p>                     |   | <p>Task 4: Make the instances draggable from the outliner (Cam and Gabi and Rui)</p> <p>Task 5: Mesh visibility toggle from the outliner (Cam and Gabi and Rui)</p> | <p>Task 1: Use React to set up the toolbar menu and the Outliner (Cameron)</p> <p>Task 2: Make the menu bar cut off with the outliner (Cam and Gabi and Rui)</p> <p>Task 3: Make list of instances added to the scene (Cam and Gabi and Rui)</p> |
| <p><b>User Story 4:</b> As a developer of the project, I need the code to be uncluttered</p>  |   | <p>Task 1: Document everything. Mandatory for all.</p>  |  |
| <p><b>User Story 5:</b> As an artist, I need Wireframe/Faceted/Smooth shading options so I can specialize the aesthetic of my scene.</p>                              | <p>Task 1: Make Smooth (Cameron) shading option (Cameron)</p> <p>Task 2: Make Wireframe shading option (Cameron)</p> <p>Task 3: Make Faceted shading option (Cameron)</p>   |   |  |
| <p><b>User Story 6:</b> As a 3D modeler, I need to be able to change the color of each of my meshes so I can make distinct meshes in my scene.</p>                    | <p>Task 1: Make a color wheel selector available in the outliner (Can and Nam and Gabi)</p> <p>Task 2: Make selected object change color to the selected one (Gabi)</p>   |   |  |
| <p><b>User Story 7:</b> As a 3D modeler, I need to be able to manipulate vertices and faces to my models</p>  | <p>Task 1: Display the vertices of a model</p> <p>Task 2: Be able to select the vertices of the model</p> <p>Task 3: Be able to transform and manipulate the selected vertices</p>  |   |  |

## Scrum times:

MWF