# Sprint 3 Plan

3D model generator

team name(Henry Chang, Andrew Dato, Nir Jacobson, William C King, Austin Shelton)

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**Goal:** We want to work to improve the algorithm and UI from the previous parts. As well we want to start working on being able to allow the user to edit the imported images within the UI.

User stories

Sprint 3

**Story 1** As a consumer, I would like an interface to tweak the settings of the model generator so that I can have more control over the output/outcome.

Task 1: Implement the Opengl widgets Input (1). Nir

Acceptance Criteria:

- -Be able to view the widget on the UI
- -Be able to rotate the image around using a wheel
- -Zoom in and out using a slider
- -Make sure it displays the side images on display cube.

Task 2: Implement the Opengl widgets Output (1). Connor

Acceptance Criteria:

- -Open up a new OpenGl Widget
- -UI displays 3D model in widget
- -3D model matches up with the input images

Task 3: Fix the bugs within the UI image importing code (3). Nir

**Story 2** As a consumer, I would like a tweak on the shape algorithm to improve the smoothing and faces of the shape to make it look a lot more like the desired image.

Task 1: Smoothing Algorithim (3) Connor

Task 2: Face Algorithin (3) Connor

**Story 3** As a consumer, I would like options and tools to be able to change the input images so that I have more control over how the output model will end up looking in the end.

Task 1 Add an option to allow the user to choose the weights of the different colors on the image. (3) Andrew Acceptance Criteria:

- -Open up a new window to add the weight paint
- -Have some way to tell the weight paint is being added
- -A Right click adds weight
- -A left click subtracts weight
- -Weight is saved as a matrix and used in the model.

Task 2 Allow the user to crop and resize the images so that they line up with each other. (3) Nir

Acceptance Criteria:

- -Be able to view the images within UI
- -Be able to move images and change their location
- -Be able to zoom in and out of images
- -Be able to rotate images

Task 3 Implement a straight edge tool so the user can line up the images with each other. (3)

Acceptance Criteria:

- -Be able to place rulers
- -Be able to remove rulers
- -Use rulers to line up images in the UI

Task 4: Give the ability to change the color of the output image. (3) Acceptance Criteria:

- -Be able to choose the color of output image
- -Output image is changed to the set color

Task 5: Eyedropper tool (3) Austin Acceptance Criteria:

- -Be able to change to an eyedropper tool
- -Be able to select a color on an image to nullify
- -3D model changes to the nullified image

Task 6: Saving the edited images (3) Nir Acceptance Criteria:

- -Have a way to save image edits
- -Image edits are taken to account in the preview cube

Task 7: Projecting the sides (2) Nir Acceptance Criteria:

- -Have a way to choose a side projection
- -Images added to UI to create a projection
- -Can change and remove projection on user input

Task 8: Movable Rulers (2)

## Acceptance Criteria:

- -Be able to place ruler
- -Be able to move ruler
- -Be able to move or change the position of a ruler.

Task 9: Combine the Box class with window editor (1) Andrew Acceptance Criteria:

- -Be able to move the information from the window editor to the box class
- -Window edit images are taken account for in preview 3D Model

**Story 4** As a consumer I would like to be able to output a .obj file from the output 3D model/.

Task 1 Add the ability to create a .obj file from the vertices (1) Henry

Task 2: Finish the export feature that exports the .obj file. (1)

#### Team roles:

Project owner: William King
Srum Master: Austin Shelton
Developers: Andrew Dato
Nir Jacobson

Nir Jacobson Henry Chang

### Initial task assignment:

William C King: story 2 task 1. Nir Jacobson: story 3 task 2

Andrew: story 1 tasks 1 Austin: story 3 task 1 Henry: story 4 task 1

#### Scrum times:

Tues Thurs at 5:00pm,