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# **User Manual**

**for**

# **Teals Conference Man in the Mountain**

**Version 1.1**

**Prepared by Areej Cluntun, Eli Swanson, Zechariah Speer, Derek Sams**

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**Needed Hardware:**

Webcam, Computer, Monitor

**Start Up:**

To start the program all that is needed is to double click the MiTM.exe and to select what type of resolution the program should run in and whether it should be run in full screen or windowed mode.

**Menu Items:***Webcam Controls:*

Play: This button makes the program resume/start the live feed it is getting from the webcam that will start updating the terrain to change.

Pause: This button makes the program stop reading in the live feed of the webcam therefore the terrain mesh will stay the same and not change.

Change Webcam: If the computer that is running the program has multiple webcams connected to it this button will cycle through them.

*Camera Controls:*

Speed: The bar will increase or decrease the speed of the In-Program camera as it moves around the terrain. Note reducing the speed to the minimum point will make the camera no longer move.

*Texture Menu:*

This menu item has 6 different controls that deal with the different starting heights of the different terrain textures. These control the values of water, sand, grass, rock, mountain, and snow in this order. Values range from 0.0 to 1.0 which can be defined by sliding the control bar or entering the value manually in the box.

*Map Controls:*

Texture Scaling: This adjusts the applicable range of heights for textures to be mapped to. In other words, as texture scaling is increased, the values for which a given height will be applied a certain texture will grow i.e. a large texture scale results in more sand because the sand texture height traverses a greater range of possible values while the actual height remains unchanged. This is primarily used to adjust the overall look and feel of the colored mesh for highly variant light sources or extreme settings.

Height Multiplier: This controls the height of the terrain mesh in the Y dimension. This has no effect on the Texture Mapping.

*Noise Controls:*

Scaling: This controls how much noise is applied to the terrain mesh. Noise can make the mesh appear more natural, like a real terrain.

Octaves: One of the coherent-noise functions in a series of coherent-noise functions that are added together to form Perlin noise. This controls how many different Octave graphs that the program is using for the noise applied to the terrain.

Persistence: A multiplier that controls how quickly the amplitudes diminish for each successive octave in a Perlin-noise function.

Lacunarity: A multiplier that determines how quickly the frequency increases for each successive octave in a Perlin-noise function. This controls the frequency of the octaves that are in use on the noise applied to the terrain.