



## ICT371 Tutorial 2

**Due: Week 5**– For internal students, you can make arrangement with your tutor to submit during your tutorial session in that week. For external students, you can email to your tutor or make other arrangement with your tutor.

### Objectives

- Demonstrate the ability to set up and manipulate the camera.
- Understand the concept of importing content and using the content management system.
- Demonstrate the ability to display 3D model.
- Demonstrate the use of version control tool.

### References:

- MonoGame Tutorial: <https://github.com/mono/MonoGame/wiki/Tutorials>
- Git guide: <https://book.git-scm.com>
- Git resources: <https://www.atlassian.com/git>

### Tutorials:

- 1) Most of the time, before you can render a 3D world on the screen, a camera needs to be set up. Write the code in C# using MonoGame so that your program will set up the camera position and the direction at which it is looking at.

After you have successfully set up the camera, try to modify your code such that the camera behaves like those in most first person shooter game. You can use the mouse to rotate the camera, and use the keyboard to move the camera.

NOTE: You can use any 3D world you have created or any 3D world you can find.

**Submission:** Save this as Tut2\_1 and submit this.

- 2) You have to write C# code using MonoGame to import your own 3D model into MonoGame. You can use any 3D modeling software (e.g. 3D Studio Max or Blender) to create the model. After you have created the model, you will need to convert it to the right standard before importing to the MonoGame.

Note: You are allowed to use any prior 3D model you have created in other unit to complete this tutorial. Alternatively, you can start creating one of the 3D models for your project and use it

**Submission:** Save this as Tut2\_2 and submit this.

- 3) Provide steps in setting up Git on your machine. Discuss and demonstrate to your tutor how you would perform the following tasks using Git. (Note: you will need to do some set up with example files before performing the following tasks).
- (a) How do you revert an unwanted commit?
  - (b) How do you see the commit history?
  - (c) How do you merge branches?
  - (d) How do you resolve conflicts?
  - (e) How can I create a branch on a remote repository?

**Submission:** Save the steps for each task above as Tut2\_3 and submit this.