

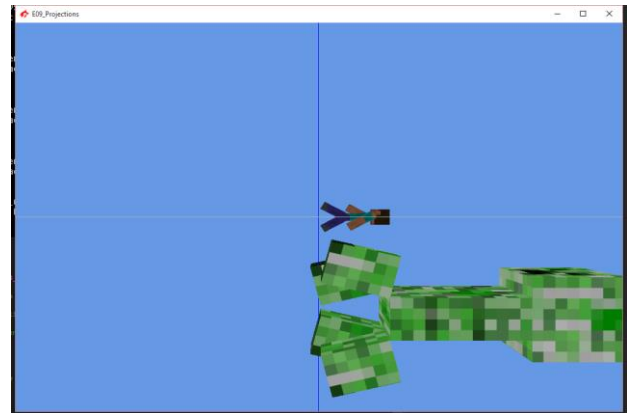
**Data Structures & Algorithms for Games & Simulation II**  
**IGME 309, 2015 Fall**  
**E09: Projections**

For this in-class exercise you are asked to implement 5 different camera views by pressing F1 to F5, the actual values for the camera are entirely up to you but they should look like these:

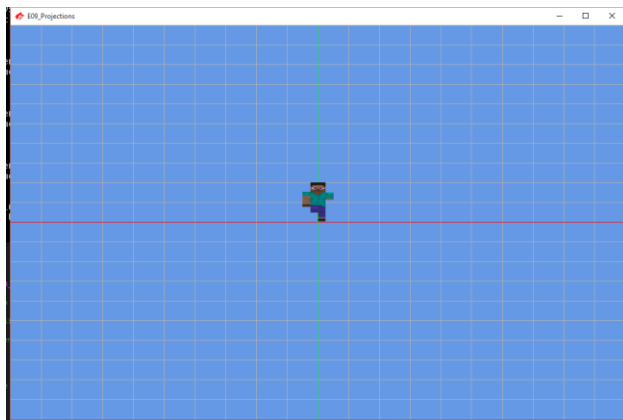
F1:



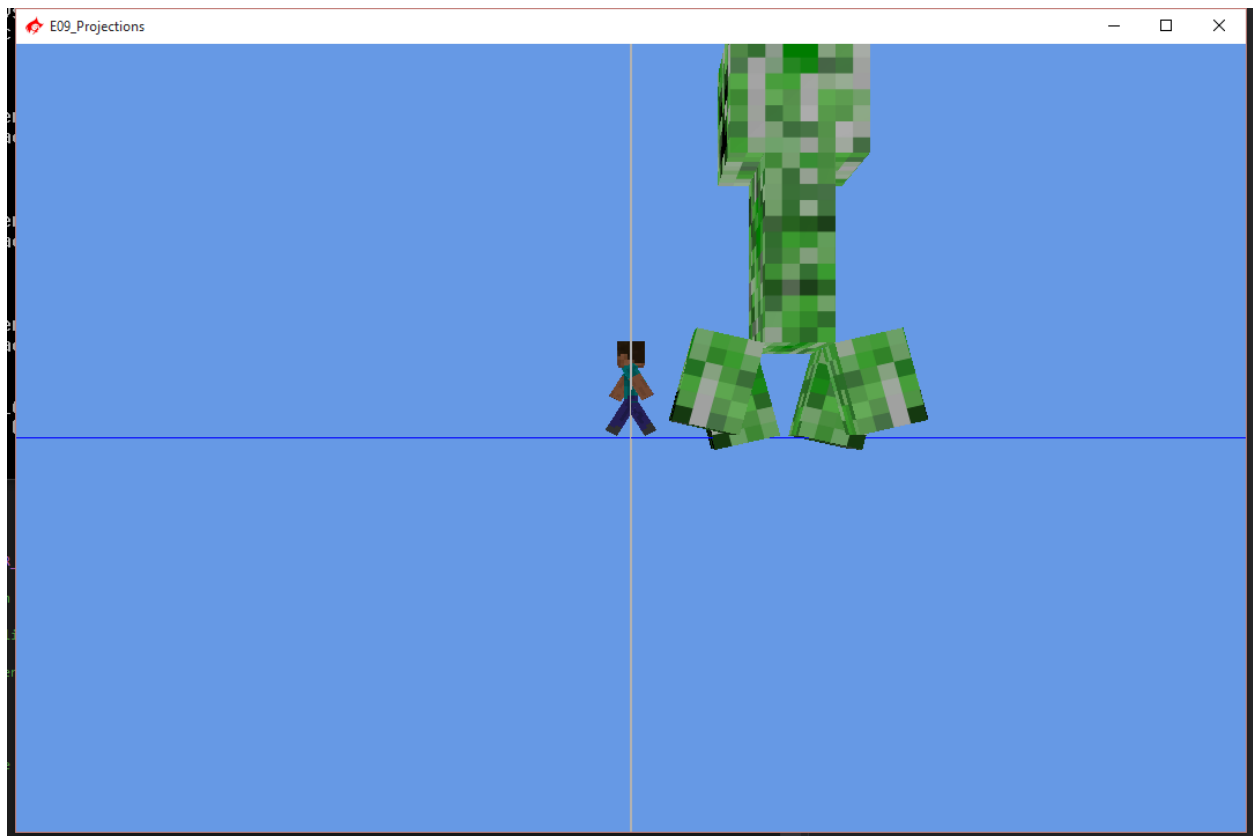
F3



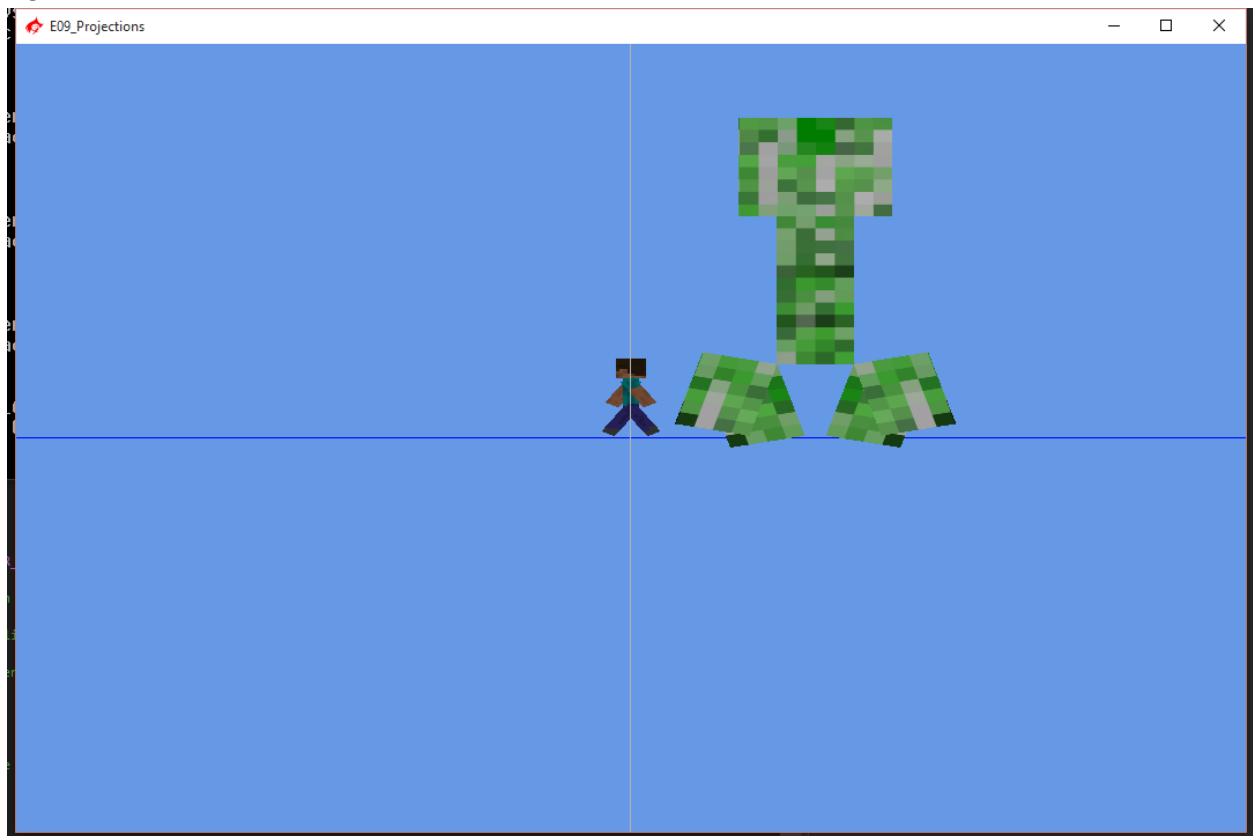
F2



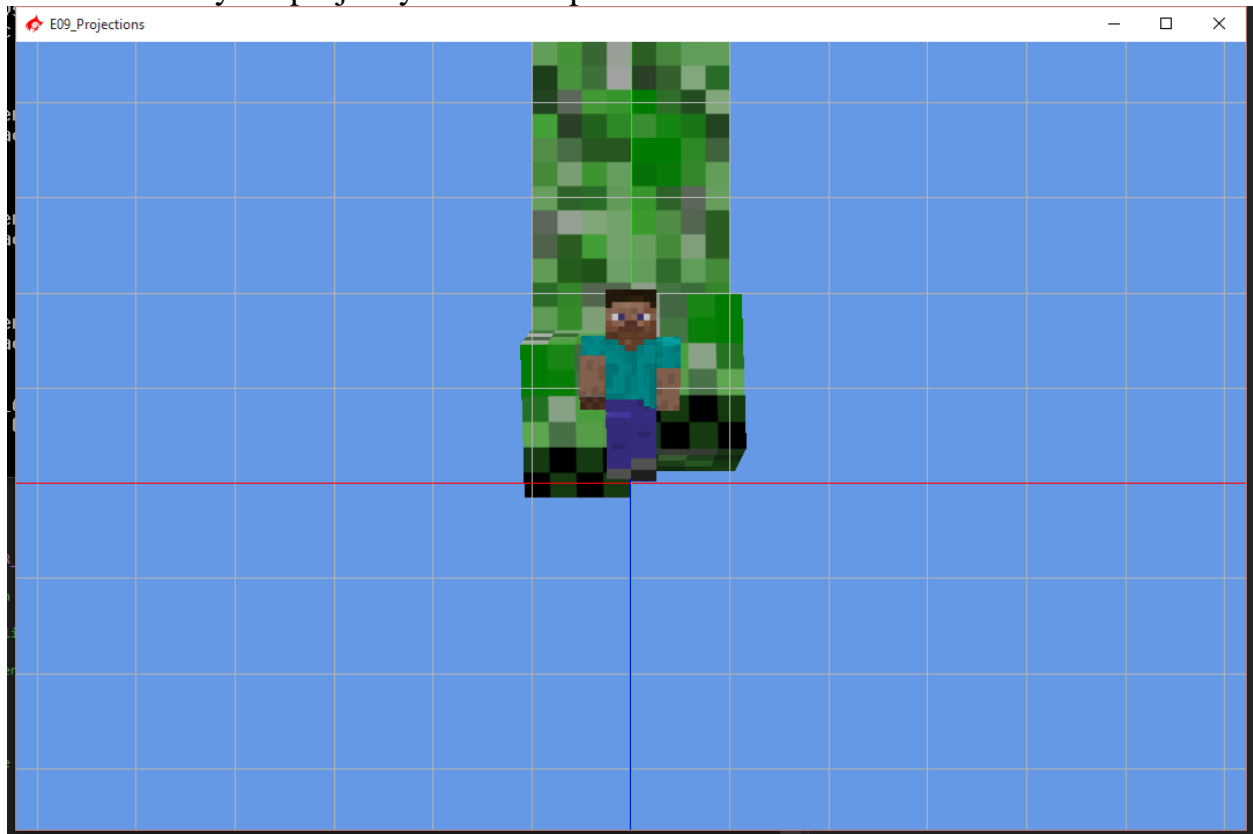
F4



F5



At the start of your project you will be provided with this view:



If you are using the provided code, all of it should go in the `AppControllers.cpp`; `m_pCamera` takes two matrices one for the View and one for the Projection with the `SetView` and `SetProjection` methods respectively. For F4 and F5 I'm using the same values except that one of them has a Perspective and the other has an Orthogonal matrix.

Show the work to the TA or professor and explain what you did in order to avoid the Gimbal Lock.