3D First Person Shooter

Charles E

Roy B

Lizandro P

Nicholas G
Our game will be a mouse-and-keyboard first person shooter. We plan to use some of the opengl and x11 examples made available to get the game running but we will need to learn how to incorporate 3D graphics into those frameworks to get the style of game we are after.

We currently have a few things to help us reach our goal. We have a framework for taking mouse and keyboard input and displaying visuals on a fullscreen application. We have some level maps created in sketchup that could possibly be loaded into our game. Finally, we have a website framework for user accounts and multiplayer interaction, currently only turn-based.

**Planned Features:**

- Full screen 3D display with mouse and keyboard controls.
- 2.5D environment with collision detection, obstacles and cover.
- On screen display (OSD), weapon crosshairs and player weapon visuals.
- Basic AI that can detect and interact with the player.
- Texturing, lighting and other visual effects.
- Health or point system and player objectives.
- Sound effects and music.
Preliminary Division of Labor:

- Graphics
  - Textures and Lighting
  - Models and 3D art
  - GUI and OSD
- Audio
- AI
- Physics engine and core gameplay mechanics
Advanced “Tier 2” Features:

- Destructible, exploding barrels
- Interactable 3D objects (player can pick up blocks or press buttons to open doors)
- Attempt cutscenes before levels
- Online multiplayer. P2P or client-server.
- Map importing or map editing.
- Advanced AI that can act more intelligently