First Person Shooter Game

Essential Requirements

- Project's implementation should be done using Modern OpenGL pipeline taught in the labs.
- Your project should have the following features:
  1) A well designed code is essential.
  2) A textured skybox for the project's environment. (Choose appropriate six faces of any room).
  3) Basic collision detection between **the camera** (1st person camera) and the **environment's walls** (i.e. the skybox, buildings, and enemies).
     a. Use and manipulate a camera to move in the scene as discussed in the 6th lab "First Person Camera" lab.
  4) Scene lighting: a **Pin point source** is required.
  5) Load 3D models (**Animated models** for both player and enemies).
  6) Camera must be (FPS) First person shooter.
  7) You need to kill all enemies to complete the level.

## Bonuses

  1) Design more than 1 level.
  2) Create at least one animation based on keypress that starts with pressing a key and ends after a certain period of time. (ex: Jump)
  3) Multiple light sources.
  4) Build a more complex environment (a real environment that contains buildings, obstacles, vehicles, trees …).
  5) Add missions to the game.
  6) Implement some kind of AI to allow enemies to chase and attack you in the game.
  7) Add GUI screens (ex: start screen, option screen, loading screen …).
  8) Add Health bar for both you and enemies.

Helper screen shots
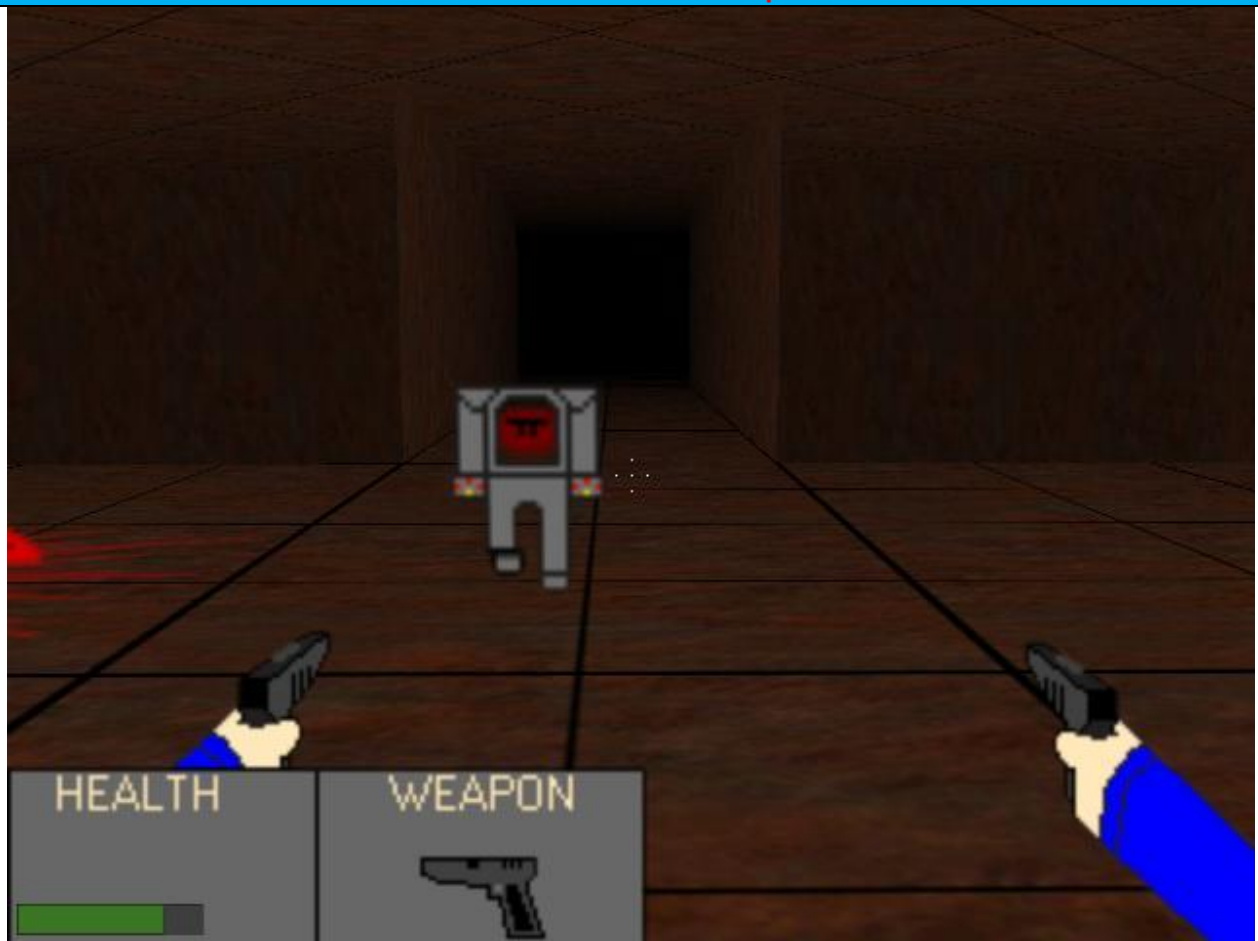
This is the minimum requirement

More complicated environment

Realistic game