1. Project Overview

Group Members:
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Project Title: TerminalCraft

Description:
A basic barebones version of Minecraft rendered through text in the terminal. Design similar to Minecraft classic which has a fixed world size and only a small selection of blocks that could be placed down and broken in the world. The player would be able to move around and interact with the world and build anything that they want to.

2. Key Features and Functionalities

2.1 3D rendering to the screen (25 pts)
The game will be rendered using text and colors in the terminal on the screen to be able to view the world. The screen will be colored in in polygons that will fill the area on the screen that is inside of sets of three points.

2.2 Basic Creating blocks and assigning polygons (20 pts)
The program will create a base world and create a mesh for the world to be able to draw it to the screen.

2.3 Ordering polygons (10 pts)
Get the z order of the polygons and draw them from back to front and include things like culling to allow the program to run faster by removing polygons that are not visible.

2.4 Player Movement/Collisions (15 pts)
Players will be able to move and interact with the world. They will be able to walk over blocks and jump up to higher blocks.

2.5 Placing/Breaking blocks (15 pts)
When the user clicks the block, they are looking at should either break or the block they are holding should be placed in the air gap above it.

2.6 Menu (15 pts)

Adding a start menu where you would be able to select a world to start from or create a new one.

Bonus Feature (5 pts)

Saving worlds so that you could load them in the future and change which world you are playing and including an inventory to be able to select blocks.