

Maze Runner

Team Members:

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Game Description:

‘Maze Runner’ is a browser-based 3D maze game implemented using **Three.js** and standard web technologies (HTML, CSS, JavaScript). The player navigates a 3D maze from a third-person or first-person perspective and must reach a glowing exit cube. The game demonstrates core computer graphics concepts: 3D modeling with primitives, model/view/projection transforms, camera control, lighting and shading, texture mapping, simple animation, and user interaction.

Proposed features:

- **3D World:** Maze built from box primitives (walls, floor, ceiling). Optional simple skybox.
- **Camera:** Toggleable first-person / third-person camera; responsive to keyboard and mouse look.
- **Lighting:** Ambient light and directional light to create visible shading and depth.
- **Textures/Materials:** At least two textured surfaces (walls and floor) and material variation for the exit.
- **User Interaction:** Keyboard movement (WASD), mouse look, space to jump, and object interaction (*collectible coin additional*).
- **Animation:** Rotating glowing exit cube marking the goal; subtle animated particles at the exit (optional).
- **Game Mechanics:** Reach the exit to win; time and score display (*additional*). Collision prevents walking through walls.

Tools/technologies to be used:

- **Primary:** Three.js
- **Languages:** JavaScript (ES6+), HTML5, CSS3
- **Development:** VS Code, Node.js (for local static server)
- **Assets:** Small texture images
- **Version Control:** Git + GitHub repository for source, assets, and report