

Unity Game Developer Job Test

Welcome to the Game Developer job test! In this exercise, you will be creating a simple yet fun 3D game using Unity. This exercise will evaluate your skills in game development, Unity, and your ability to work with Scriptable Objects and Custom Editor Windows.

Game Concept:

You are tasked with creating a 3D game called "Treasure Hunt." In this game, the player controls a character who must navigate through a 3D maze to find a hidden treasure while avoiding obstacles. The goal is to reach the treasure as quickly as possible.

Game Mechanics:

3D Maze Generation:

Create a procedural generated 3D maze using Unity's built-in 3D modeling tools or external assets (if needed). Create a custom editor window where inputting some parameters and single button click will generate random maze for a level in scene.

Character Control:

The player can control the character's movement using WASD or arrow keys. Implement character look using mouse movement.

(You can use Unity's third person controller template)

Obstacles and Challenges:

Populate the maze with obstacles and challenges, such as locked doors, finding keys, moving platforms, traps (must have), patrolling enemies using navmesh (must have) etc according to your imagination. The character should have a health or lives system to account for potential hazards. When player is in sight of enemies (show the enemy sight so that player can avoid it), it's a Game Over.

Hidden Treasure:

Place a hidden treasure or valuable item in the maze that the player needs to find. The player's objective is to reach the treasure.

Custom Editor Window:

Create a custom editor window that allows designers to adjust maze parameters. Parameters to adjust should include maze size.

User Interface (UI):

Create main menu, ingame, game over UI.

Requirements:

Implement the game using Unity, C#, and the provided concept.

Develop a custom editor window for modifying maze parameters and design choices.

Implement character control, obstacle interactions, and a win condition when the player finds the hidden treasure.

Ensure the game is visually appealing and provides user feedback. Use particle effects, sound effects, camera shake, slow motion, etc. Add as much juice as you can to polish game.

Create a start screen and a game over screen.

You are free to use any assets from the assetstore and other websites. You can follow any tutorials, documents, etc. Feel free to make most use of the internet.

Submission:

When you have completed the task,

Upload your project to GitHub. Make it public so that we can access it.

Write clean code with simple comments.

Mention time required by you to create this game in hours. You can complete the given task in your own time (no strict submission time).

Any additional notes or improvements you can add to game to make it fun exiting and ready to publish.

Evaluation Criteria:

Game functionality and adherence to the given concept.

Effective use of Custom Editor Window.

Code quality, organization, and comments.

User interface and visual design.

Creativity and innovation in the game.

Good luck, and enjoy the process of developing the game! If you have any questions or need clarification on any aspect of the exercise, please feel free to ask.

<https://discord.gg/n7zzWKXrx2>