



Freddie Mercury

He wants to break free

Summary: In this project, you will code a brand new concept in VR! The player will have to resolve subtle puzzles and mysteries to unlock new steps and finally break free!

Ok, it's an escape game in VR...

Version: 1

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Chapter I

Preamble

Here we are, born to be kings
We're the princes of the universe
Here we belong, fighting to survive
In a world with the darkest powers

Why is this project called Freddie Mercury? Well, it's not based on This song...

Chapter II

Introduction

Your goal is to code an Escape Game in VR.

This project mix up game design, some 3D, et some VR-specific interactions.



You will need a VR headset at some point in this project at least for the correction! Use your own!. PS: On some Campuses, you might be able to borrow one for a small amount of time.

Chapter III

Objectives

This project aims to master the basics of VR controls and VR game development.

Chapter IV

Instructions

General instructions :

- You must use a Game Engine: Unity, Unreal Engine, any other GAME ENGINE.
- You can use any 3D Asset (Meshes, animation...), audio free of copyright the graphical quality is not an important part of the correction scale.
- Assets are not directly evaluated but the overall game must be as professional as possible.
- You must use default official APIs and scripts for VR gameplay no advance packages are allowed.
- You must code objects interaction, rotation, and movement using the rawest API for your game engine/headset.

Chapter V

General instructions

Your Escape Game must feel like this for the user/ gamer :

- Full VR game.
- Compatible with one VR headset Vive, Oculus, WMR, or any other VR headset with hand tracking.
- A lobby: a starting zone before the game showings controls, tutorials, options.
- Entering the first level must be done with an action in the lobby and with an adequate transition (screen fade or loading...)
- Elements in the lobby or the first level start telling a little story (like in an escape game !)
- The gamer must understand by the situation and space that he is locked and must escape the room.
- The gamer can move in the space and interact with some objects. At least :
 - grabs objects with his hands, manipulate, turn, passing them hands to hands, drop them, throw them.
 - interacts with rotative elements, on one or more axes, like doors, lock, bottle caps...
 - interacts with elements by push/pull.
- The gamer can make objects interact with other objects. like a key with a keylock or smoke with fire-detection and water with electricity...
- Some actions create automatic events.
- The game has coherent sound according to events and ambiance.
- The game contains at least 2 levels.
- The game, adventure, and story have an End whether in the lobby or a new level.
- Other considérations :

- The game must be polished, no weird bug or glitch, no crappy control or collision.
- VR comfort is a must if motion sickness is too high nobody will play and correct you.
- Hands control must be as natural as possible.
- The game FPS is stable and fluid on every occasion.

Chapter VI

Bonus Part

Anything making the game more professional, Some examples :

- The game handle multiples VR headset.
- Lot of content.
- Multiplayer mode.
- Coherent and beautiful world.
- Interaction with characters.
- Saving system.

Chapter VII

Turn-in and peer-evaluation

As usual, turn in your work on your repo `GiT`. Only the work included on your repo will be reviewed during the evaluation.

if your assets are over 1Go it will be a good idea to not push them directly in your repo and replace your asset folder with a clean md5 recursive hash of the folder. and bring this folder to your correction.