



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...*

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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.