Don’t Panic!

Capstone Project Planning and Scoping Document

Description:

For my capstone project, I’m planning to build a space based mystery-cum-adventure game. The game will be a story-based walking simulation where the player will have to dig around and interact with the surrounding to find clues and proceed further.

Game synopsis:

The game is set in the far future with advanced space technology. The player, an astronaut aboard an exploratory spaceship, wakes up from a hypersleep to realise that he is all alone, with all of his crew members being missing in a mysterious manner. The player has to look around for any clues which could help him solve the mystery.

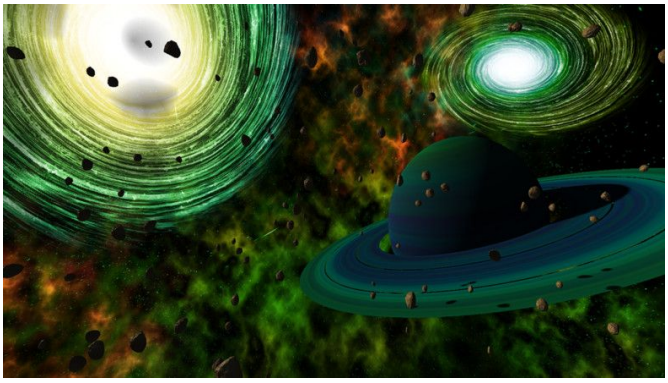
Features and dependencies:

1. **Assets and 3D models**
    a. Sci-fi styled modular package for building spaceship.

b. Grunk Alien model

c. Space themed skybox

d. Planet 3D models



2. Game loop

a. Player uses reticle to interact with surroundings and waypoints to navigate around.
b. Collectibles scattered across the environment for user to hunt and collect.
c. UI based cues to guide user around/display current objective.
d. Speech recognition for interacting with locked doors.

e. Choose-your-own-adventure kind of interaction where player's decisions affect game progress.
f. Space-gun for killing alien
g. Space-shuttle for escaping the spaceship

3. **Other effects**
    a. Door opening/closing animation
    b. Real-time lights for dramatic effects
    c. Robotic voice of AI computer
    d. Holograms
    e. Spatial sounds for doors, AI, alien.
    f. Particle effects to highlight collectibles.

Scoping:

Features and dependencies:

4. **Assets and 3D models**
    a. Sci-fi styled modular package for building spaceship.
    Revised: Going ahead with this. Using this asset: Sci-fi Styled Modular pack

    b. Grunk Alien Model
    Revised: Going ahead with this. Using this asset: GRUNK Alien

    c. Space themed skybox
    Revised: Going ahead with this. Using this asset: Real Stars skybox

    d. Planet 3D models
    Revised: As this will increase the build size considerably, using the models sparingly. Using this asset: Vast Outer space

5. **Game loop**
    a. Player uses reticle to interact with surroundings and waypoints to navigate around.
    Revised: Using GVR Reticle pointer for the same

    b. Collectibles scattered across the environment for user to hunt and collect.
    Revised: Going ahead with this for gamification achievement

    c. UI based cues to guide user around/display current objective.
    Revised: Adding a HUD kind of GUI for displaying current objectives and collectible scores

d. Speech recognition for interacting with locked doors.
Revised: Using IBM Watson API for achieving this functionality

e. Choose-your-own-adventure kind of interaction where player's decisions affect game progress.
Revised: This will be the most suitable gameplay style for mobile based VR. Going ahead with this

f. Space-gun for killing alien
Revised: Using following asset for the same: Sci-fi gun

g. Space-shuttle for escaping the spaceship
Revised: Though this will just be a prop and not an interactive item, I have decided to include it. Using following asset: Space shuttle of the future

6. Other effects

a. Door opening/closing animation
Revised: Still a go.

b. Real-time lights for dramatic effects
Revised: Will forgo this effect as it may affect the performance.

c. Robotic voice of AI computer
~~Spaceship computer will use voice to interact with player~~
Revised: Using computer voice just for alert message purpose.

d. Holograms
Revised: Will not be including this as it doesn't fit in the story.

e. Spatial sounds for doors, AI, alien.
~~*Going ahead with this*~~
Revised: Using spatial sound for doors and computer. Not including one for the alien. Alien will have a text based interaction system.

f. Particle effects to highlight collectibles.
Revised: Using an Outline shader for highlighting collectibles. Also using particle effects as a feedback when the object is collected.