

XR Games Developer Test Writeup

Core Task

- Implement simple character movement using WASD;
- Add 4 walls so the player is restricted to the level boundaries;
- Implement a simple pickup system that adds points when a star is collected;
- Points are displayed in the UI somewhere;
- You must have at least 5 pickups in the level;
- After all the pickups in the level have been collected, the game can be completed by entering the finish zone;
- Entering the finish zone before all the pickups are collected will not complete the game;
- Demonstrate good use of git.

Suggested Embellishments

- A full game loop. i.e. Start → Play → Win/Lose → Restart
- Controllers (Xbox/PS4) support.
- Some basic audio.

Personal Embellishments

- Extra level
- Door and exit extension
- Star map displayed on door
- Adjusted camera

Proposed Improvements

- Implement a jump with platforms and adjust the star map to display a 3d model with simple blocks to show the layout of the level. For clarity move the 3d model to the floor, maybe the centre of the room.
- Create a UI element for the game and show the 3d model of the level in the menu, or as a transparent overlay.
- Add some form of new movement tied to a certain spot, like jump pads that launch you into the air, or linked teleporters.
- Shift the game to the puzzle genre, maybe each star appears one at a time and you have to go about the level in a different order. This could easily be achieved with the Init() method in the Pickup class, having the collection of a pickup trigger the Init() of the next star
- Conversely change the focus to a parkour/speedrun style game, focus on movement and trying to get the fastest time. Could also use stars appearing one at a time to create a freeform circuit of the room. UI map overlay could work well for this one.
- More levels in the direction I choose to take it, with a couple of prototypes of each to test if the idea can be fun, if not then I would have to shift direction again.
- As I'm not an artist I would find some models with animations matching my needs that have creative commons rights to give the game less of a prototype feel

- Move the final screen into a UI menu allowing you to restart and quit from any part of the game

Comments and Thoughts

- I enjoyed the developer test. I think it's more interesting to create a mini project with some clear goals when testing my level of knowledge in the field. I would prefer to do more coding tests like these rather than the more generic tests I have seen.
- Thank you for your consideration and I hope to hear from you soon