

# VR Game Night

Social VR game with multiple playing environments

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## Description

(1) One paragraph about **why** this app

We chose this project idea because we think tabletop games are a very good way to bring people together, even from long distances. This app would thus allow players to socialize while having fun together. Why would they choose this app: because we offer an elevated experience to the real versions of the games, with dynamic effects, and increased movements.

(2) One paragraph about **how** this app will achieve the why

It will bring people together by allowing them to play through the network, socialize using voice chat, and creating unique characters. Since Meta Quest 2 allows 6 Degrees of Freedom (DoF) the app can track local movements and the games can require such movements.

(3) **What is different** compared to other solutions

The environment will dynamically change based on what is happening in the game (and depending on the game being played, itself), and the app will require players to move in order to play the game, unlike most alternative solutions.

## Similar products & Relevant Links

**Name:** Tabletop Simulator

**Url:** [https://store.steampowered.com/app/286160/Tabletop\\_Simulator/](https://store.steampowered.com/app/286160/Tabletop_Simulator/)

### **Relevant Features**

- Games such as Chess, playing cards, etc
- Multiplayer sandbox environment for custom games
- Physics-based, interactive board game experience

**Name:** Table Games VR

**Url:** [https://store.steampowered.com/app/1035430/Table\\_Games\\_VR/](https://store.steampowered.com/app/1035430/Table_Games_VR/)

### **Relevant Features**

- Virtual board and card games in immersive VR
- Multiplayer support with social interactions
- Customizable, realistic table games

**Name:** Tavern Tables: Tabletop Adventures

**Url:** [https://store.steampowered.com/app/1500620/Tavern\\_Tales\\_Tabletop\\_Adventures/](https://store.steampowered.com/app/1500620/Tavern_Tales_Tabletop_Adventures/)

**Relevant Features**

- Tabletop game simulator
- Cooperative multiplayer
- Character customization

**Name:** Jackbox TV

**Url:** <https://jackbox.tv/>

**Relevant Features**

- Accessible party games
- Variety of games
- Fun experience

**Name:** VR Chat

**Url:** <https://hello.vrchat.com/>

**Relevant Features**

- Game variety
- Social VR experience with avatar customization
- Supports mini-games and immersive environments

**Name:** Inscryption

**Url:** <https://store.steampowered.com/app/1092790/Inscryption/>

**Relevant Features**

- Unique blend of deck-building and horror
- Evolving gameplay with roguelike mechanics
- Art style, atmosphere, dynamic environment

**Name:** Buckshot Roulette

**Url:** [https://store.steampowered.com/app/2835570/Buckshot\\_Roulette/](https://store.steampowered.com/app/2835570/Buckshot_Roulette/)

**Relevant Features**

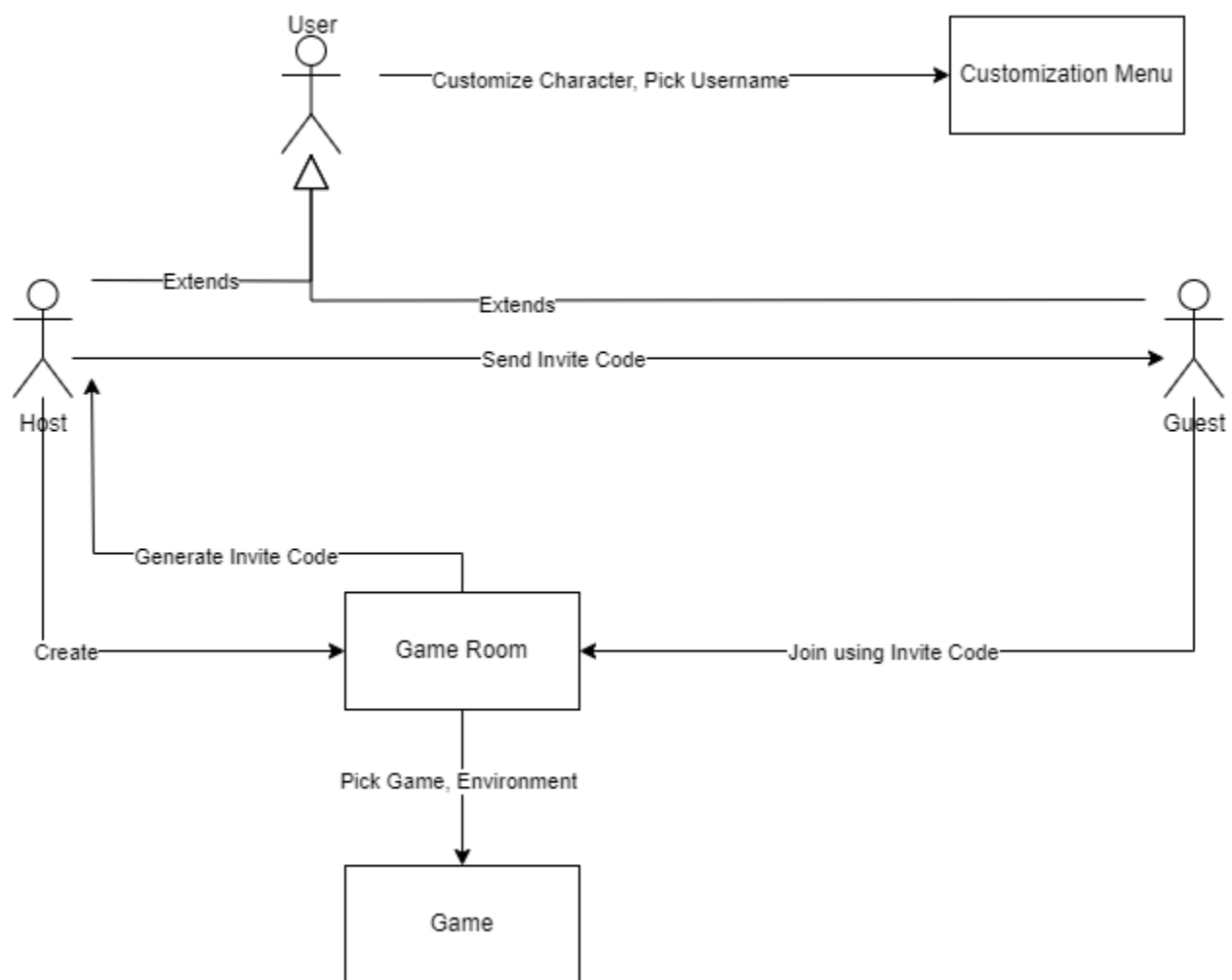
- Designed for quick, intense rounds
- Character appearance: floating head with hands
- Dark humor party game theme

## Main Features

- **PRINCIPAL MAIN VERY IMPORTANT FEATURE:** *Playing multiplayer tabletop games*
- **Other features:**
- Character customization
- Movement (Some games would require players to move around)

- Dynamic environments and effects (Environment reacts to players' moves)
- If possible, we would like to integrate voice chat

## User Journey Diagram - Step by step flow through app



When a player opens the game, they have two menus: Customization and Play. In the Customization menu, they are able to change their appearance and username, which are by default randomly generated. In the Play menu, they are prompted to either join an existing game room using an invite code, or create a new room. In the latter case, they will have a code they can send to their friends.

The game room starts as an empty lobby in a “Lounge” room, where the players can wait for the others to join. The lounge room is a comfortable area with a few interactables, its main purpose is for players to select the games they will want to play.

In order to select a game, players must select the interactable object that corresponds to the game, in the lounge. For example, in order to play “Big Chess”, two players will have to walk to the chess piece in a part of the lounge room and select it.

When a game is selected, the players that have chosen it will be moved to a new environment, suited for the specific game.

In the new environment, the players will interact with game props to play their desired game.

## Moodboard

<https://app.milanote.com/1T4EVT10IbLS4n?p=s3IQz8wl7HN>

## Technologies, Libraries, Assets - Links

1. Headset: Meta Quest 2
2. Game Engine: Unity
3. Modeling/Animation: Blender
4. Libraries:

For multiplayer networking: Photon Unity Networking

<https://assetstore.unity.com/packages/tools/network/photon-unity-networking-classic-free-1786>

OpenXR:

<https://docs.unity3d.com/Packages/com.unity.xr.openxr@1.12/manual/index.html>

XR Interaction Toolkit:

<https://docs.unity3d.com/Packages/com.unity.xr.interaction.toolkit@3.0/manual/index.html>

5. Assets:

<https://assetstore.unity.com/packages/3d/environments/fantasy/green-forest-22762>

<https://assetstore.unity.com/packages/3d/props/chess-pieces-board-70092?srlti d=AfmBOOpYv1AoAu5Fw4o77maS-an8NUpGosjWESEbDLLBCOff7L473P-F>

<https://assetstore.unity.com/packages/3d/props/furniture/medieval-tavern-pack-112546>

<https://assetstore.unity.com/packages/3d/props/tools/free-playing-cards-pack-154780>

<https://assetstore.unity.com/packages/vfx/particles/fire-explosions/fire-spell-effects-36825>