

# Intro to VR Diary



2023 Aalto summer school

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# DAY 1

- I LEARNED

- I got into VR wearables, I had only used pico before that, and I think the overall grip and experience of this VR device that Aalto University provided us with is better than the pico, as reflected in the fact that when the user puts on the headset there is a very distinct light guiding the user to the grip.

- OUR ASSIGNMENT

- My idea was inspired by the movie Truman's World. The utopian world can be interpreted as an ideal, warm and comfortable life, and the main character in the movie grew up in such an environment, but in the end he chose to break the existing state and rules, to look for the outside world, and to pursue reality.
- So I think our sketch can be a picture of an "anti-utopia", where there are all the comforts and material conditions of life, but people's life paths are planned and have no independence. The protagonist needs to find a way out of this utopian world and escape from it.

# DAY 2

## • I LEARNED

- We learned the meaning of immersion and presence in VR design. Immersion means that designers need to think about different details from multiple perspectives to make the user's experience immersive and interesting. In a virtual VR world, the first thing we need to do is to structure the story line of the world, so that the player can feel immersed in it. In addition, we also need to improve the user experience from different perspectives, such as UI design, game mechanics, and sound feedback.
- The latter implies some of the content that needs to be considered for presentation when building a VR world. Before learning it, I might only think of visual effects and sound effects, but in reality there are also details such as how the characters move and how they are socialized that need to be taken into account.

## • OUR ASSIGNMENT

### Immersion

#### • Visual Realism

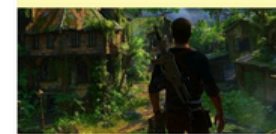
A material rich family, the protagonist living in the big house. The outside of the house is beautifully landscaped with birds and flowers facing the sea.

Yueer Sun



#### • Storytelling

The game starts off with a narrative of a person living a monotonous routine life in a "utopian" environment which is like a movie set. It then explains **how the person wants to escape but needs to find a way**. The first player plays as this character.



#### • Gameplay mechanics

Mechanics 1: The man needs to talk to other people, finds the clues to leave the world.  
Mechanics 2: Only going back and forth between the current cabin and the office, similar to the life simulation. (so it will be a little boring)  
Mechanics 3: Players are divided into a protagonist and a multiplayer player who prevents the protagonist from leaving, and the protagonist wins by successfully leaving.

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#### • Audio Realism

Sounds of nature and other sounds of daily life. when the player character moves or jumps, there could be sounds that evoke a feeling of lightness or soaring through the air, enhancing the player's sense of freedom and mobility within the game world.

Janessa

#### • User interface(UI)

Played as first-person, character has basic human mobility and players are able to move around the virtual world and talk to other people through a chat function



### Presence

#### • Social Interaction: Multiplayer

- One or two other players can join this game to **prevent the protagonist from leaving the world**.

Yueer Sun

#### • Accurate Tracking and Interaction

Eye tracking, movement tracking, teleportation, interaction with other characters or players in the game

Janessa

#### • Freedom of movement

Players can move freely within the VR world following the laws of physics

Yueer Sun

#### • Spatial Audio

Upbeat and uplifting music can accompany moments of triumph or accomplishment  
Serene and contemplative melodies can enhance moments of introspection or exploration

Janessa

# DAY 3

- I LEARNED

- We learned and tried a relatively easy to get started and good to use VR world building platform, **mozila!**
- I learned about the difference between different viewpoints in VR design. Generally speaking, the first viewpoint will give the user a more immersive feeling; but other viewpoints, such as the third viewpoint, also has its unique characteristics, which can take into account the surrounding scenes and landscapes, and is suitable for VR worlds in which the user needs to observe or experience a wide range of scenes.
- I also learned some disadvantages of the VR world, interaction methods and other things to consider. But what impressed me most was the meaning of Accessibility and inclusivity in VR, which was introduced at the end of the class, that is, we need to consider the needs of different groups of people, and the characteristics of different groups of people, so that they can accept VR and use VR to better realize the things that are not so easy to accomplish in real life, and this is the significance of VR.

- OUR ASSIGNMENT

- Two scenarios were simply built on the mozilla platform.

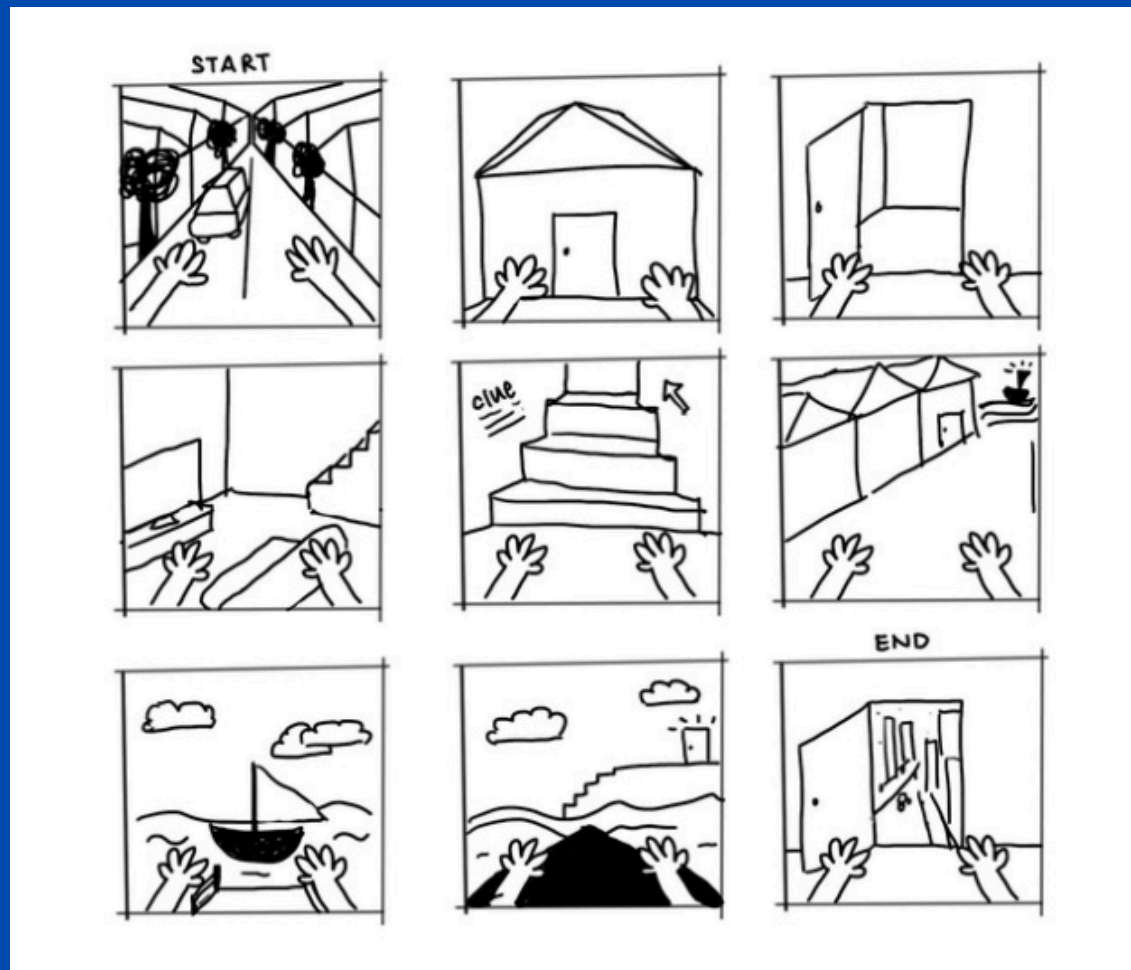


# DAY 4

- I LEARNED

- I learned about storyboard related content. Learned about the usefulness of storyboards in different specialties and usage scenarios through flinga in class.

- OUR ASSIGNMENT

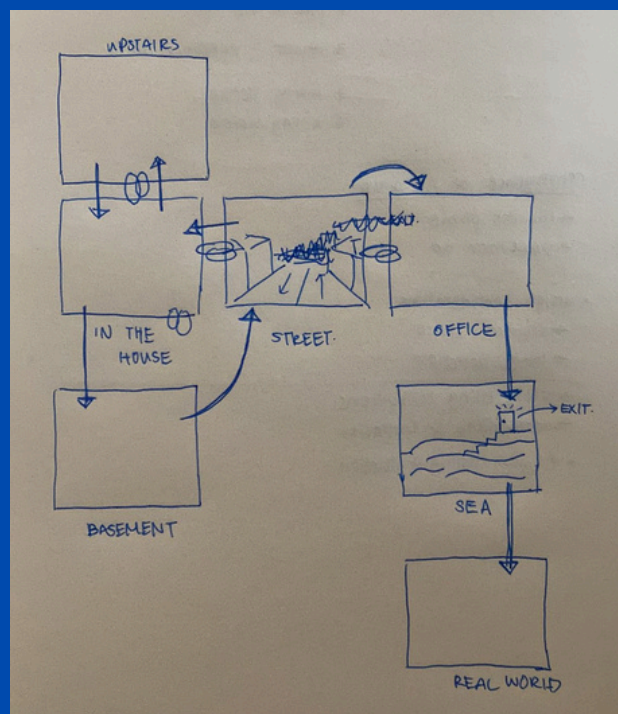


# DAY 5

- I LEARNED

- We learned about the use of AR in different areas and looked at some examples. Compared to VR, I feel that AR can be more useful in real life because it does not need to use specialized equipment like VR, but only need electronic devices in daily life to open the door to the AR world, which can be used in a wider range of scenarios. Therefore, it is worth to be widely promoted in the field of medical treatment or education, which is really convenient.

- OUR ASSIGNMENT



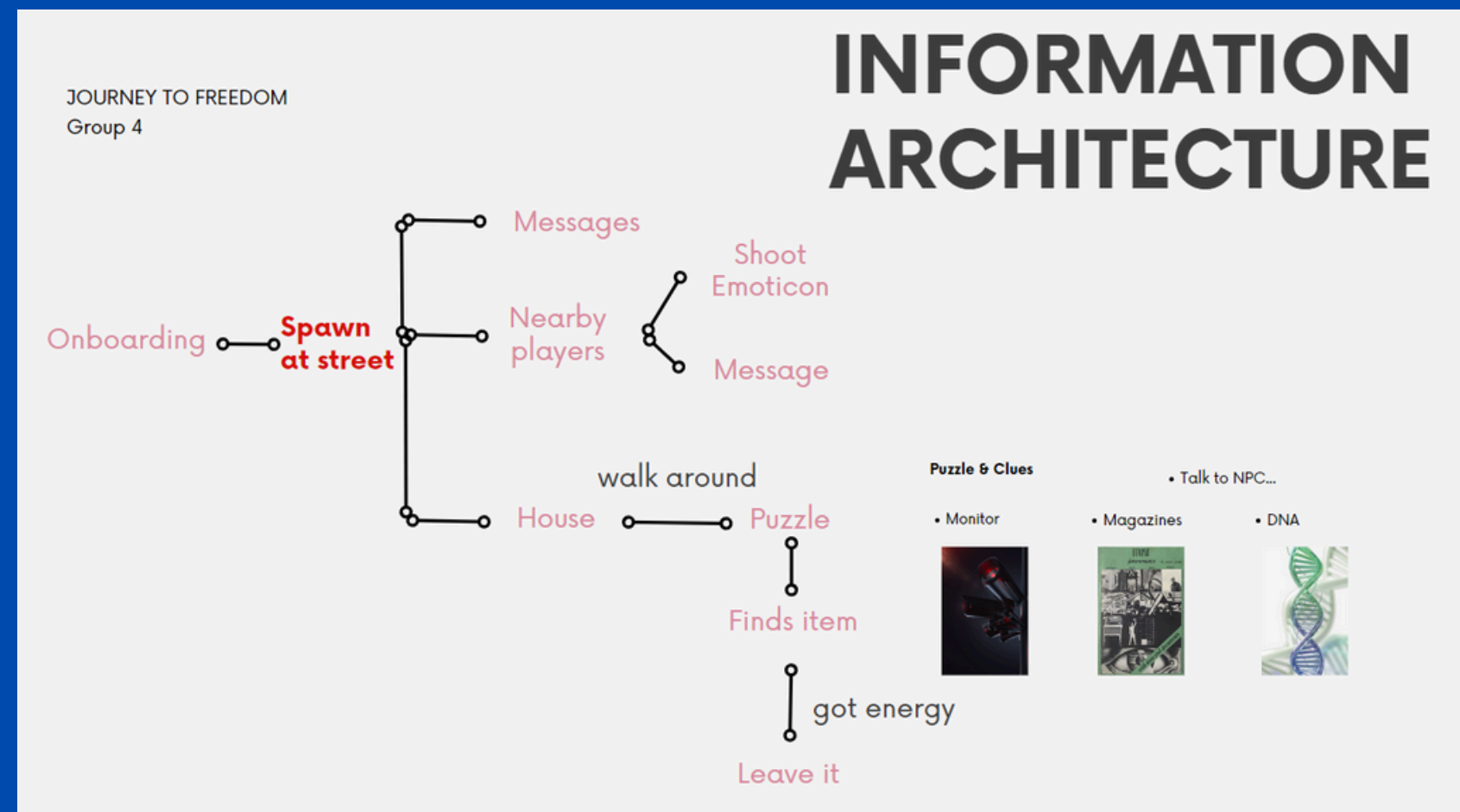
Discussed a bit about the order in which the different scenes enter in the VR world we're building.

# DAY 6

- I LEARNED

- I listened to Timo's lecture and was very impressed with the Fukushima VR documentary he shared, it was the first time I learned that documentaries can be presented in such a format that does a great job of restoring a major event that is unfamiliar and distant to the vast majority of people.
- It made me realize that VR is not just a showroom for games or 3D world platforms, but also a good platform for narratives.

- OUR ASSIGNMENT



# DAY 7

- I LEARNED

- Today I listened to a lecture on sound design. It was very informative. First we learned that in the world of VR we need different sound effects, background sounds, sounds that mimic the real world and follow the laws of physics, including the possibility to set up some special sounds in the first view.
- Then learned some details about sound design, such as the difference between mono and stereo sound, which really makes a difference to the user's experience.
- Finally, some experiences of recording natural ambient sounds and some audio websites are shared, which are very useful.

- OUR ASSIGNMENT

- We made posters and then further refined the building of the 3D scenes in the mozilla.



# DAY 8

- I LEARNED

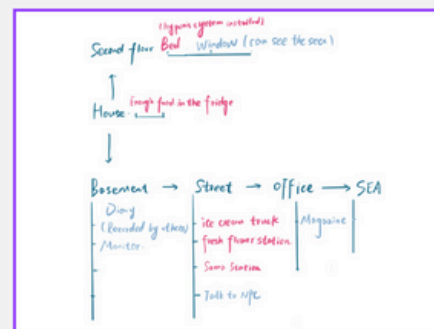
- Learned some research methods and analyzed and discussed the scenarios where different research methods are applicable.
- Learning to use evaluation methods to help our program progress.
- Try to use audio zone in mozilla hub.
- Play AR game in the campus, very interesting!

- OUR ASSIGNMENT

- Continued our project and added the audio zone..

The work need to do

- Add object about clues into the model
- Change the model into the same style
- Select the right bgm for different environment
- Select the sound effect for each clue
- Build some real world's 3D model



# DAY 9

- I LEARNED

- All the groups experimented with their VR worlds, and it was interesting to see how different everyone's styles were.
- In this kind of process we learned some things from other people's projects that we didn't do well, I think we didn't do enough sound effects in our VR world, and the sound effects of interacting with the objects didn't come through; secondly, the lack of textual guides made the users don't know how to explore the new scene after entering it.
- I had some trouble with the last scene because the file was too big to import into the mozilla hub, so I had to zip the file and cut down some of the models.

# DAY 10

- DEMO DAY

Harvested some feedback from the test.

- Highlight
  - Users thought the model I made of the real world of Escape from Utopia at the end was amazing. Also liked.
  - Loved the design concept of our entire world and our story line.
- Weaknesses
  - Our story line is not well developed enough and players can get confused.
  - There are places where there is motion sickness, which affects the experience when playing VR.

Thanks