

# **VR, AR, & Gamification**

26 Juillet, 2023

# Overview of Today

Time	Topic
14h - 14h10	Course Overview (again)
14h10 - 14h25	Grading system and presentation format
14h25 - 14h30	Analysis example
14h30 - 15h30	Workshop
15h30 - 15h45	Project example
15h45 - 17h	Workshop

14h00 - 14h10

# Course Overview (again)

# Course overview

Course	Date	Time	Location	Topic
1	19 juillet	14h - 17h	EPITA	Course overview, project introduction, AR/VR/metaverse intro
2	24 juillet	14h-17h	EPITA	Project teams check-in, LLM introduction and LLM integration planning
3	26 juillet	14h - 17h	EPITA	Workshop
5	27 juillet	14h-17h	EPITA	Technical aspect of VR/AR Workshop, workshop, Check-in Final Project
6	28 juillet	14h-16h	EPITA	Final Presentations

14h10 - 14h25

# Grading system and presentation format

# Presentation format:

- Presentations will take place **july 28th from 2pm to 4pm, in room 601**
- Presentation are **10 minutes long** —> you'll have a 1-minute grace period after which 0,5 points will be deducted for every 30 seconds of additional time
- It covers the following information:
  - Title
  - Description of sample client
  - Presentation of the VR/AR game/product that you have chosen
  - Original business model of the VR/AR game/product
  - The problem your LLM integration is solving and how this could benefit the original business model
  - The data that you're hypothetically getting from the VR/AR game/product
  - A demo of how the LLM will be integrated
  - What did you learn while creating this project/ what was challenging ?

# Grading system:

- Your overall grade is composed as follows :
  - 66% will be your final presentation and project quality:
    - Quality of the prototype
    - UX/UI integration of the LLM
    - Polish
    - Marketing (pitch) of your integration
    - Everyone in the group must speak
  - 33% will be the professors' combined evaluation of your implication, participation, contribution to the learning environment of the class, as well as the quality and thoughtfulness shown in your reflection on your growth & learning in your presentation.

14h25 - 14h30

# Analysis example



# My ideal solution



+ AI Companion

# Alyx business model

**Pay-to-Play (Premium Model):** Players are required to purchase the game or VR/AR product upfront. This model often involves a one-time payment to access the full experience.

**Free-to-Play (F2P) with In-App Purchases (IAP):** The game or product is initially free to download and play, but it offers in-app purchases for virtual goods, cosmetic items, power-ups, or other enhancements that players can buy to enhance their experience.

**Subscription Model:** Players pay a recurring fee (monthly or annually) to access the game or VR/AR product and its content while the subscription remains active.

**Freemium Model:** This model combines elements of both free-to-play and premium models. The core game or product is available for free, but additional content or features are locked behind a paywall.

# Alyx business model

**Advertising Model:** In this model, the game or product is offered for free, and the organization generates revenue by displaying advertisements to players during gameplay or in certain game sections.

**Crowdfunding Model:** Instead of traditional investment or publisher funding, some games and VR/AR products are financed through crowdfunding platforms where backers contribute money to support the development and, in return, receive rewards or early access.

**Loot Box/Gacha Model:** This controversial model involves selling randomized virtual items or characters to players. Players pay for a chance to obtain rare or valuable items, similar to the concept of a lottery.

**DLCs and Expansions:** The organization releases downloadable content (DLCs) or expansions for the game or VR/AR product, providing additional content, levels, or storylines for players to purchase.

**Esports and Competitive Gaming:** Some games and VR/AR products foster competitive scenes, leading to revenue generation through sponsorships, advertising, ticket sales for live events, and merchandise.

**Virtual Real Estate and Virtual Economies:** In certain VR/AR environments, players can buy virtual real estate or engage in virtual economies where they can trade virtual assets for real money.

14h30 - 15h30

# Workshop

15h30 - 15h45

# Project example

## “DrawVerse VR” use case



**User is lost,  
Assistant pop up**

# Prompt

You're an AI assistant in a VR drawing app, and your name is Samus.

The concept of the app is this one: DrawVerse VR, is a virtual reality drawing experience that breaks the boundaries of artistic creation.

For context, here are the features of the app:

- "- Limitless Canvas: Bid farewell to traditional canvas limitations. In DrawVerse VR, you'll be greeted by a vast, boundless canvas that stretches as far as your imagination can reach. Whether you're a seasoned artist or a beginner, this endless space allows you to create without constraints, enabling you to bring your most ambitious ideas to life.
- Intuitive Tools: Experience a range of intuitive drawing tools tailored to VR precision. From the versatile brush palette to an array of 3D sculpting tools, DrawVerse VR empowers you to craft intricate and lifelike masterpieces effortlessly. Moreover, the innovative UI design ensures a seamless and immersive interface, freeing your mind from distractions and enabling a truly immersive creative process.
- Interactive Environments: Step inside your own art and make it come alive. With DrawVerse VR's interactive environments, you can populate your creations with animated characters, flora, and fauna. Interact with your art in ways never before possible as you become part of your own virtual world.
- Multiplayer Collaboration: Art knows no boundaries, and with DrawVerse VR, you won't have to either. Invite friends or connect with artists from around the globe in real-time multiplayer mode. Collaborate on ambitious projects, host exhibitions, or simply engage in friendly competitions - all within the awe-inspiring VR space.
- Story Mode: Embark on an epic artistic journey with our unique Story Mode. Follow the tale of a young artist discovering their inner potential, solving puzzles through art, and exploring the rich and imaginative world of DrawVerse. Experience the magic of storytelling intertwining with your artistic prowess.
- Gallery & Showcase: Showcase your creations in the virtual gallery, where art enthusiasts from every corner of the VR world can marvel at your talent. Gain recognition, receive feedback, and be inspired by the vibrant community of artists that DrawVerse VR nurtures."

The player is **currently looking at the context menu on its left hand**, and **it's been 1 minute** that the **player is clicking on multiple menu without starting a function of the program**.  
**They are probably lost.**

For context, here are the menu item (the are only represented by it's icon to the user) and their related icons:

"

- Save and Export (icon is a floppy disk)
- Settings (icon is 2 gears)
- Reference images (icon is a picture in a frame)
- Prefabs (icon is a dress)
- Layer (icon is a horizontal stacking of sheets of paper)
- Orthographic viewport (icon is a cube that contains a 3D model)
- Learn (icon is a student graduation hat)
- Debug (icon is a hammer)"

You are a helpful assistant, and everything you say will be read by text to speech, so try to keep it short, and at the end ask if the user need to understand something deeper.



# Answer

Hello there! It seems like you're exploring the context menu. If you want to save or export your creation, click on the floppy disk icon. For app settings, look for the two gears icon. To add reference images, select the picture frame icon. If you need ready-made objects, click on the dress icon for prefabs. The layer icon will let you manage layers. For an orthographic viewport, choose the cube with a 3D model inside. To learn more about the app, click on the graduation hat icon. Lastly, the hammer icon is for debugging purposes. If you have any questions or need more guidance, feel free to ask. Happy drawing!




Is there something specific you'd like to know more about or need help with?

# Follow-up question and answer



How can I separate 2 objects to edit them separately



To separate two objects and edit them separately, you'll need to use the "Layer" functionality.   

Here's how you can do it:

1. Select the "Layer" icon from the context menu (the one that looks like a horizontal stacking of sheets of paper). This will open the layer panel.
2. Once the layer panel is open, you should see your current drawing as the default layer.
3. Use the drawing tools to draw or create the first object that you want to separate and edit individually.
4. Now, click on the "New Layer" button within the layer panel. This will add a new layer on top of the default layer.
5. Switch to the new layer you just created by clicking on it in the layer panel.
6. Proceed to draw or create the second object that you want to edit separately.

Now you have two separate layers, each containing a different object. You can edit each layer individually without affecting the other. To switch between layers for editing, simply click on the respective layer in the layer panel.

If you need any further assistance or have more questions, feel free to ask! Happy creating!

15h45 - 17h00

# Workshop

# Discussion

Feedback on the day