

VRDD/XRDD (Virtual/Extended Reality Design Document) template

Preface: (don't include in the final doc)

Your design document is an opportunity to show your team's process of co-creating your VR projects together. It also serves as a portfolio piece. It should be considered a working document that you can start to populate now and includes specific aspects of the design you need to articulate, in addition to some reflection that helps your reader understand why you made some of the choices you did.

Try to be as clear, structured, and concise as possible without losing relevant content. Appropriate use of terminology is essential and a prerequisite for professionalism.

Feel free to re-use materials from your presentations and written documents, of course (self-plagiarism is okay here ;-)

All text in blue contains instructions that should be deleted or replaced with content before submission. It is meant to explain the assignment but should not be part of the final submission.

How to Submit:

Submit one copy per team as instructed. Please reduce the .pdf sizes to a reasonable limit: not more than 6MB each

Note that over the course of this class, we will ask you to expand on this document and keep your project website updated with the latest version. You can see this as a continually and iteratively refined working document to support your project. Don't worry about being stuck with certain initial ideas (e.g., razor or slogan) as these will adjust as you work through your agile process. So please update and revise it as you go along - and use it to document your process.

Permission to Show Your Work in Future Classes/Presentations:

We hereby grant permission to show this report in future courses/presentations as a sample project.

[Delete the above statement if you prefer not to grant this permission; you can also ask to make it anonymous]

1. Title & basic info

Title:

MindScape

Team members:

Hayyan Liaqat

Length:

10 Minutes

Intended audience:

Healthy young adults. 18 - 30. Not very active or concerned about lifestyle choices. Students that are more focused on work, and don't spend time sleeping, eating well, etc.

0. Razor

Our VR experience empowers users to see the future of their brain health through the lens of their current lifestyle choices, fostering emotional connection, cognitive shift, and sustained behavior change

Detailed instructions

A "razor" is a one-sentence statement that helps your team focus on the core essence of your VR/XR experience. It acts as a filter for decision-making, helping you determine what features, mechanics, or content align with your project's core vision and what might be unnecessary distractions.

Think of it as a guiding principle that keeps your team aligned and focused on the most important aspects of your project.

Example Razors:

- "Our VR experience will transport users to a world where they can embody a refugee and experience their journey firsthand."
- "We will create a VR simulation that allows users to safely confront their fears and develop coping mechanisms."
- "Our project will use abstract visuals and sound to create a dreamlike VR experience that explores the subconscious mind."

0. Slogan

Inside Your Mind – A Journey Through Time

Detailed instructions

A "slogan" is a catchy phrase that captures the essence of your project and sparks interest in potential users. It's like a mini-advertisement for your experience, designed to grab attention and make people curious to learn more. It should give audiences a sensible impression if they'd like to experience/play it.

Think of it as a headline that communicates the unique value proposition of your VR/XR experience.

Example Slogans:

- "Step into their shoes: A VR journey of empathy and understanding."
- "Conquer your fears in a safe, virtual space."
- "Unlock the secrets of your dreams in this immersive VR experience."

Important Note: Both the razor and slogan can evolve as your project develops. Don't be afraid to revisit and refine them as you gain new insights and feedback.

0. Vision statement & top level summary of your project idea

Step inside your mind and witness the impact your daily choices have on your brain in our immersive VR experience, MindScape. Explore the connections between your lifestyle and the vibrant neural landscapes that change in real time based on your decisions. Feel the weight of potential future outcomes—both hopeful and alarming—and discover that the path to brain health is within your control.

0. Project Goals & Desired User Experience

Project Goals:

We want users to experience shock and awe, accompanied by a sense of urgency to live a healthier lifestyle. Although there should be some regret and fear, the prevailing feeling should be hope and motivation to make behavioral change.

Target Audience:

Describe your ideal users in detail. Consider their demographics, interests, prior VR experience, and any specific needs or considerations that will inform your design choices.

Desired User Experience:

Paint a vivid picture of the ideal user experience.

- How do you want users to feel during and after the experience? What emotions, thoughts, or actions do you hope to evoke?
- How will your project leverage the unique affordances of VR/XR to achieve this?

Example:

We want users to feel a sense of awe, wonder, and curiosity as they explore the vastness of space. We aim to evoke a sense of smallness in the face of the cosmos, yet also a feeling of interconnectedness with all living things. Through stunning visuals, immersive soundscapes, and intuitive interactions, we will create a sense of presence that allows users to truly feel like they are exploring the universe.

Impact and Transformation:

Explain how your project aims to create a lasting impact on users. Will it change their perspectives, behaviors, or understanding of a particular issue?

How will you measure or assess this impact? What specific metrics or indicators will you use to evaluate the effectiveness of your design in achieving your goals?

Example (just for illustration how short it can be, it's not a great example ;-):

We believe that "Cosmic Drift" has the potential to shift users' perspectives on their place in the universe, fostering a sense of humility, wonder, and environmental responsibility. We will measure impact through pre- and post-experience questionnaires assessing changes in attitudes towards space exploration, environmentalism, and interconnectedness. We will also track user engagement metrics within the experience, such as time spent exploring different areas and interactions with specific elements.

Team Motivation:

Explain why your team is passionate about this project. What personal connections or experiences drive your interest in this topic? How does this project align with your team's values and aspirations?

0. Design & Implementation

Core Mechanics:

Describe the fundamental interactions and mechanics that define your VR/XR experience.

How will users **navigate** the virtual environment?

What **actions** can they take? How will they interact with objects or characters?

Visual Style & Aesthetics:

Describe the **visual style** of your experience. Will it be realistic, abstract, stylized, or something else?

What kind of **mood** or **atmosphere** are you trying to create? Include visual references (images, mood boards, etc.) to illustrate your vision.

Sound Design:

Explain how sound will be used to enhance the experience. Will you use music, sound effects, voiceovers, or ambient sounds? How will sound contribute to the overall atmosphere and emotional impact of your project?

Technical Implementation:

Briefly outline the technical tools and platforms you'll be using to create your VR/XR experience. If applicable, describe any specific software and hardware requirements or considerations.

0. Iterative Development & User Testing

Agile Development Process:

Describe how you plan to use an agile development approach (e.g., Scrum, Kanban, whatever) to manage your project.

How will you break down tasks, prioritize features, and incorporate feedback throughout the development process?

User Testing Plan:

Outline your plan for user testing. Who will you test with? How will you gather feedback (e.g., observations, questionnaires, interviews)?

What specific aspects of the experience will you focus on testing?

How will you use the feedback to iterate and improve your design?

0. Inspiration & Theoretical Foundations

Inspirational Projects:

Identify 3-5 existing VR/XR experiences or other media (films, games, art installations) that inspire your project. For each, describe what you find compelling and how it influences your design choices.

Theoretical Frameworks:

Identify relevant theories or frameworks from the readings or other sources that inform your design approach. Explain how these theories will guide your decision-making and help you achieve your project goals.

0. Innovation, Relevance, and Impact

Innovation:

What makes your project unique or different from existing VR/XR experiences? What new ideas or approaches are you bringing to the table?

Relevance & Meaningfulness:

Why is your project relevant and important? How does it address a real-world problem or challenge? What kind of impact do you hope to have on users or society? Why?

Selling Points:

Imagine you are pitching your project to potential users, investors, or future employers. What are the key selling points that would make them excited to experience or support your project?

0. Ethical Considerations

Discuss the potential ethical implications of your VR/XR experience. Are there any risks of harm, discomfort, or exclusion for certain users? How will you mitigate these risks and ensure a safe and inclusive experience for all?

0. Multi-Layered Storyboard

Please provide an updated multi-layered storyboard ([based on this template](#)) that describes one complete run-through of your experience, including any pre- and post-VR interactions. Ensure your storyboard is sufficiently annotated to be self-explanatory.

Include all the different layers discussed in class, such as:

- **Scene:** A brief description of what's happening in the scene.
- **Actions:** What the user and any non-player characters (NPCs) are doing.
- **Environment:** Description of the virtual environment, including key objects and features.
- **Audio:** Description of any sound effects, music, or dialogue.
- **User Interface (UI):** Description of any UI elements present in the scene.
- **Emotions:** What emotions do you want the user to feel in this scene?
- **Goals:** What are the user's goals in this scene? What do you want them to accomplish or understand?

Also, include your team's vision for the 'real world' setup of your project and the 'virtual reality' space your project will create, and how the users enter and exit your immersive experience.

0. Conclusion & Next Steps

Summary of Key Points:

Provide a concise summary of the most important aspects of your VR/XR project. Briefly reiterate your project's core goals, target audience, intended impact, and the unique elements that differentiate your experience from others.

Next Steps (For Intermediate Submissions):

Outline the next steps you plan to take in your project development. What are the most pressing challenges you anticipate, and how will you address them? What specific features, functionalities, or refinements do you aim to achieve in the next iteration of your prototype? (If this is the final VRDD submission, you can briefly touch on potential future directions for your project beyond this workshop.)

Example:

In summary, our project aims to create an immersive and emotionally resonant VR experience that fosters empathy and understanding for the refugee experience. We plan to achieve this through a combination of first-person perspective, realistic environments, interactive storytelling, and subtle haptic feedback.

Our next steps include refining the character interactions to make them more nuanced and engaging, implementing additional sensory cues to enhance presence, and conducting user testing to gather feedback and iterate on our design. We also aim to explore the potential of adding a voiceover narration to further guide the user through the experience.

Important Considerations:

- **Reflection:** In your final submission, reflect on the overall journey of creating the VRDD and the evolution of your project concept. What were the most valuable insights you gained? How did your understanding of VR design change over time?
- **Future Directions:** Even in your final submission, briefly discuss any potential future directions for your project, highlighting areas you'd like to explore further or improvements you envision.