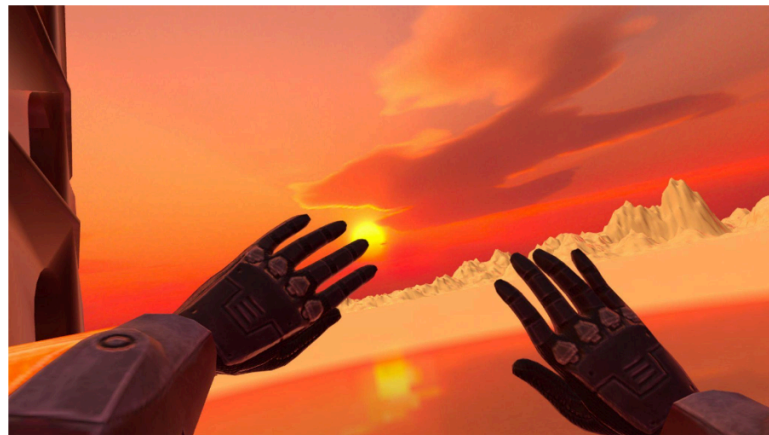
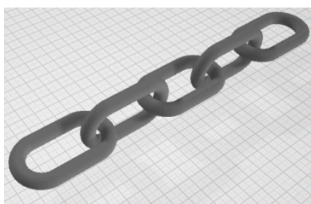
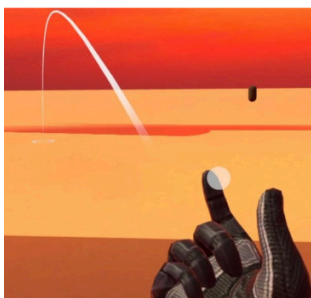


Milestone 6: Final Release



Summary of Finalizing Changes

After the alpha release and multiple rounds of play testing, we made several improvements and refinements to our game:

- **Drastically improved the immersion of the control room** by adding textures and materials using AI. (meshy.ai)
- **Colorized the arena** to make it more visually appealing and better differentiable from the foreground objects using AI. (meshy.ai)
- **Added Background Music** to enhance the overall atmosphere in the wander scene, which was created by AI. (suno.com)
- **Implemented AI Voice Guidance** at the beginning of each scene to help guide the player.
- **Introduced Two Additional Opponents**, making a total of three with increasing difficulty.
- **Added Two More Conversational NPCs**, making a total of three, each providing different information and representing a new character.
- **Enhanced Portal Visibility** for better clarity.
- **Refined Tutorial Screens** to make the game easier to understand.
- **Adjusted Positions of Some Interactable Canvases** for improved accessibility.
- **Fixed a Projectile Bug** where trajectory alignment was slightly off when hitting an opponent.
- **Resolved Reset View Functionality** issue in the tutorial scene.

These adjustments significantly improved the user experience and game mechanics, ensuring a smoother and more immersive gameplay experience.

Experience During the Class

The structured approach of the course greatly supported our development process. The project structure, which included the development schedule, prototype phases, and playtesting, was particularly beneficial in keeping us on track. The intermediate deadlines helped us prioritize tasks and maintain a structured development process, ensuring steady progress towards our milestones.

The course was overall well-organized and effectively structured. However, one issue we encountered was contradicting information available online about the course. Initially, we found a webpage ([TUM CIT Master Informatik Games Engineering](#)) that stated, *“Die Themenvergabe erfolgt somit vergleichbar zu einer Bachelor- oder Masterarbeit.”* Additionally, we found an outdated course page ([TUM Games Lab](#)), where the most recent entry was from 2022. This led us to believe that forming a group and starting development before the semester was the correct approach. Consequently, we faced challenges integrating the actual course theme. Despite this, we successfully incorporated it through the LLM-evaluated karma score and the exploding chain projectile mechanic. While we do not know if it is within the organizers' power to update these pages, we recommend clarifying this information for future students.

Reflection on the Course and Development Process

We are very proud of our game and grateful for the opportunity to experiment with and combine new technologies. The course's open approach, without restrictions on tools and technologies, allowed us to develop our skills in the directions we preferred.

Regarding the course schedule, we found that the structure up until the alpha release was well-paced. However, we believe that the two weeks allocated for testing and the final two weeks before the release could be compressed into one week each. This adjustment would provide more time before written exams.

Q&A

What was the biggest technical difficulty during the project?

- Ensuring the game ran smoothly on the Quest build.
- Implementing hand and body tracking along with animations.
- Transitioning from a traditional WIMP interface to an interactive VR UI.

What was your impression of working with the theme?

Initially, it was challenging to find a way to incorporate the theme meaningfully. However, once we developed a solid idea, it enhanced our game significantly.

Did the theme enhance your game, or would you have preferred total freedom?

The theme added an extra mechanic under the hood, which we might not have considered otherwise. Overall, it was a positive addition.

What would you do differently in your next game project?

- Set stricter internal deadlines with clear deliverables.
- Plan the feature timeline more carefully to minimize dependency bottlenecks.

What was your greatest success during the project?

- Implementing LLM-powered NPCs.
- Achieving smooth animations for tracked body movements.

Are you happy with the final result of your project?

Yes, we successfully implemented everything we initially planned.

Do you consider the project a success?

Yes, as we achieved all our initial objectives and overcame major technical challenges.

To what extent did you meet your project plan and milestones?

Always—though some milestones required night shifts to meet deadlines!

What improvements would you suggest for the course organization?

- The final release should be two weeks after the alpha, allowing more time before exams.

Conclusion

This course provided an excellent opportunity to apply our skills in a structured yet flexible environment. While there were minor challenges, such as clarifying course information online and adjusting to the theme, we ultimately had a highly positive experience. We are proud of our game and appreciate the freedom given to experiment with new technologies. Overall, the course met our expectations, and we would recommend it to future students with minor adjustments to the timeline for better balance before exams.