

AXM - E0404

Designing and Creating Virtual Worlds

Zoom

- Sessions are recorded.
- Preferably use zoom on your device, and not a web browser.
- Use the “Raise hand” to speak.
- Questions and comments in chat.
- Mic muted when not speaking.



Thank you!

Introduce yourself

- About yourself, background, specialization
- Past experience with VR
- Aspects of VR that interests you
- Favorite/memorable VR/AR experience (or an installation or a game)

Online lectures

- Every Monday
- 0915 - 1200
- Zoom link in mycourses
- Session recorded

Session used for:

- Lectures
- News
- Discussions
- Presenting assignments



Immersion sessions

- Every Thursday
- 1315 - 1500
- At VR Hub and/or VR Studios

Session used for:

- Discussing ideas
- Technical assistance
- Testing VR experiences

Booking:

- VR Hub: booking.aalto.fi
- VR Studios: takeout.aalto.fi



MAGICS talk on Oct 27th at 1400

<https://www.aalto.fi/en/events/magics-2022-be-inspired-by-research>



Visuals: Veera Kemppainen

News - SyncReality



- House-size gaming using MR.
- Volumetric mapping of home environment.
- Unity and Unreal Plugin
- Would work on Meta Quests
- <https://syncreality.com/visionfilm/>

Image: SyncReality

Group divisions

Group 1:

- Antti Kokkonen
- Emilie Pederson
- Juha Koivusalo
- Risto Kirjonen

Group 2:

- Atte Haarakangas
- Erika Rustamova
- Hares Bassil
- Virpi Väinölä

Group 3:

- Carlos Perez Moreno
- Han Gao
- Inka Jerkku
- Jihae Kim

Group 4:

- Hiski Huovila
- Jackie Lin
- Karolina Nowak

Group 5:

- Janne Seppälä
- Mikael Jaakkola
- Sevde Bozkurt

Booking VR Headsets

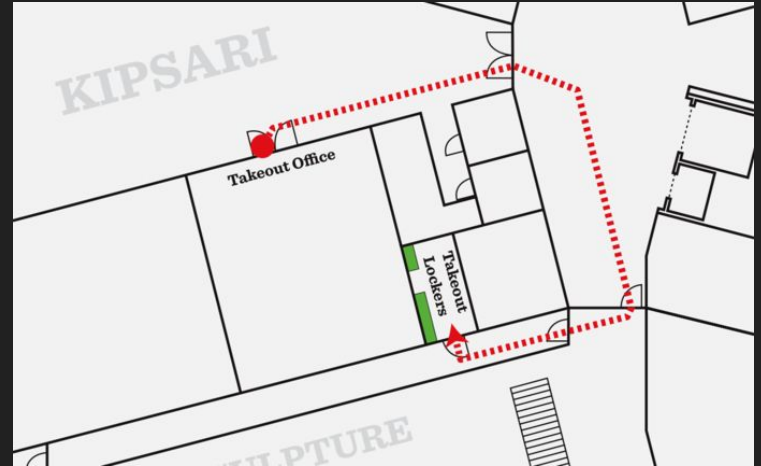
- At least 1 Meta Quest is available per group

To reserve these headsets either visit:

- Väre Takeout next to Kipsari
- Aalto Studios Takeout in Otakaari 7B

Booking done through:

- takeout.aalto.fi



Mozilla Hubs and Spoke



Designing in VR

- Affordances and potential
- Limitations

Performance Check

High	Polygon Count: 142,483 Triangles We recommend your scene use no more than 50,000 triangles for mobile devices. Learn More
Low	Materials: 14 Unique Materials We recommend using no more than 25 unique materials in your scene to reduce draw calls on mobile devices. Learn More
High	Textures: ~725 MB Video RAM, 7 Large Textures We recommend your textures use no more than 256MB of video RAM for mobile devices. We also recommend against using textures larger than 2048 x 2048. Learn More
Low	Lights: 1 Lights While dynamic lights are not enabled on mobile devices, we recommend using no more than 3 lights in your scene (excluding ambient and hemisphere lights) for your scene to run on low end PCs. Learn More
High	File Size: 63 MB We recommend a final file size of no more than 16MB for low bandwidth connections. Reducing the file size will reduce the time it takes to download your scene. Learn More

Cancel Publish Scene

Assignment for next week (Oct 31)

Create a description of a concept. It should include the title, a written abstract no longer than fifty (50) words, and a sketch that provides additional information/visualization. Each group should be ready to present this in the next class session.

Please upload the materials to MyCourses by 9:00 AM, 31 October 2022.