AXM - E0404

Designing and Creating Virtual Worlds

Agenda

-   0915 - 0935: Group 1 & 5 present the news and we all discuss

-   0935 - 1035: Lecture on spatial audio design by Sebastian Schlecht

-   1030 - 1045: BREAK

-   1045 - 1115: Information architecture assignments

-   1115 - 1145: Lecture on avatar design for VR by Gautam Vishwanath

What is an avatar?

Generally refers to a graphical representation of a user or character in a virtual environment.

"While the modern day meaning of avatar implies gaming and interaction, the original definition has a very different meaning: In Hinduism, avatars act as manifestations of deities."

Kan, Michael. "What is an Avatar? Creators Chip Morningstar and Randy Farmer Trace the Ancient Roots of the Latest Buzzword. http://heritage-key.com/blogs/michael-kan/what-avatar-creators-chip-morningstar-and-randy-farmer-trace-ancient-roots-latest-Retrieved 21 November 2021.

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What is an avatar?

"This occurs when a god has decided to come to our world by taking a human or animal form. The most well-known avatars have been associated with the god Vishnu, who often appears in our world to restore good in the world when evil threatened to corrupt it."
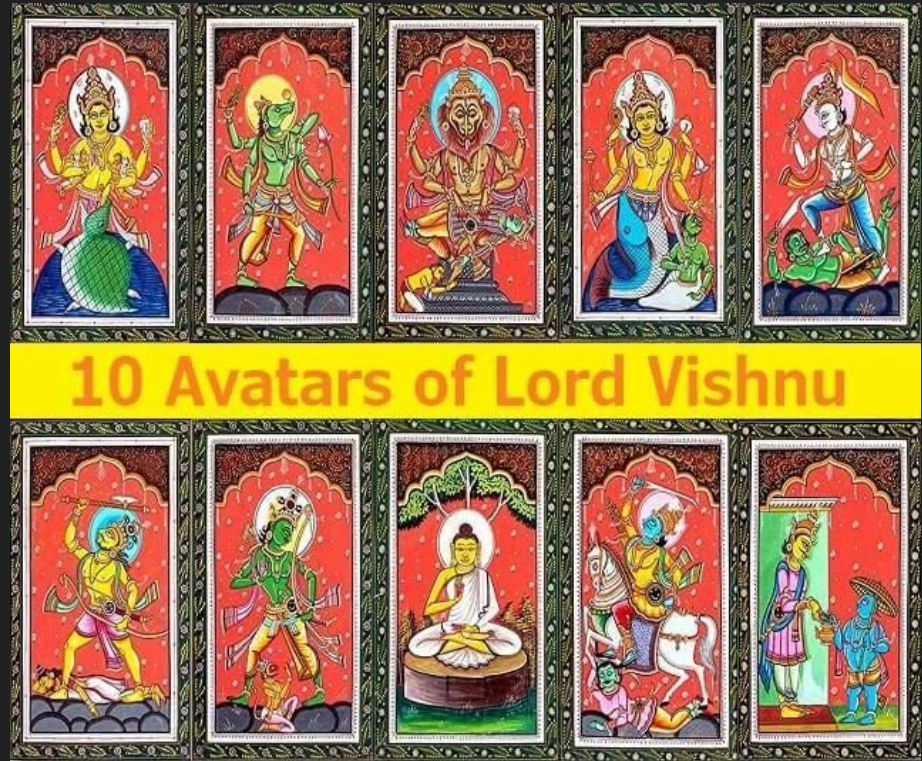

10 Avatars of Lord Vishnu

Image credit: Picasa

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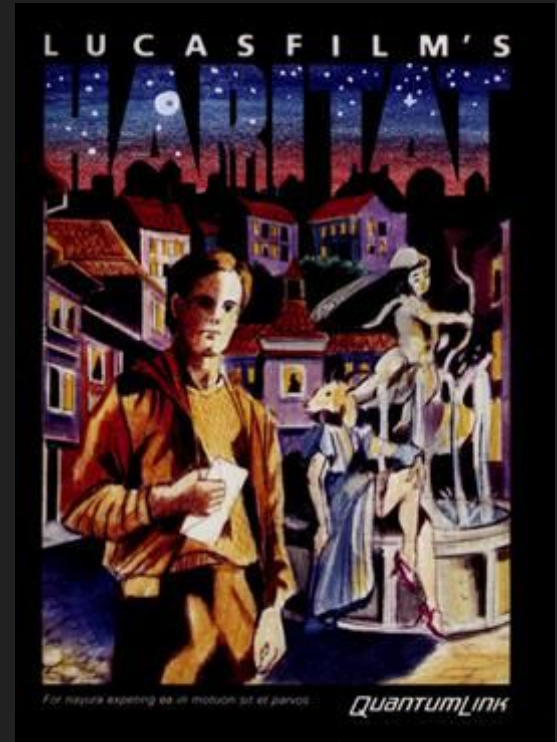
What is an avatar?

- Originally, the term avatar derived from the Sanskrit word avatāra, which means descent.

- Has been appropriated and given new meaning with the advent of video gaming.

Kan, Michael. "What is an Avatar? Creators Chip Morningstar and Randy Farmer Trace the Ancient Roots of the Latest Buzzword.
http://heritage-key.com/blogs/michael-kan/what-avatar-creators-chip-morningstar-and-randy-farmer-trace-ancient-roots-latest-
Retrieved 21 November 2021.

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Flinga exercise: https://edu.flinga.fi/s/ET65CW7

What is an avatar?

"The 1986 online role-playing game known as *Habitat* was the first instance where the word avatar was used in the modern sense. Players assumed their own persona and interacted together in a virtual community."

Kan, Michael. "What is an Avatar? Creators Chip Morningstar and Randy Farmer Trace the Ancient Roots of the Latest Buzzword.
http://heritage-key.com/blogs/michael-kan/what-avatar-creators-chip-morningstar-and-randy-farmer-trace-ancient-roots-latest-
Retrieved 21 November 2021.

Avatar representations

- 2D schematic representation of living creature.

- 3D representation including shape and volume.

- Realistic representation of someone.

- Carefully crafted creation of a personality or character made with the intention to express something (e.g. a unique identity).

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Considerations in VR

- Presence: Experiencing a sense of being in a place while being fully aware that one is not actually there.
    - Place Illusion
    - Plausibility
- Coherence: Rules within the simulation defining the validity of the experience
    - Virtual Human Behaviour,
    - Virtual body,
    - Physical interactions
    - Scenario
- Embodiment: particularly for first-person experiences

Considerations in VR

- Social aspects

Photo credit: Mozilla Hubs

Photo credit: VRChat

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Considerations in VR

- Inverse kinematics: Configurations of a character's skeleton

Photo credit: Rec Room

Photo credit: Horizon Worlds

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Out of body experience

The Metamorphosis
(2019) - Mika Johnson

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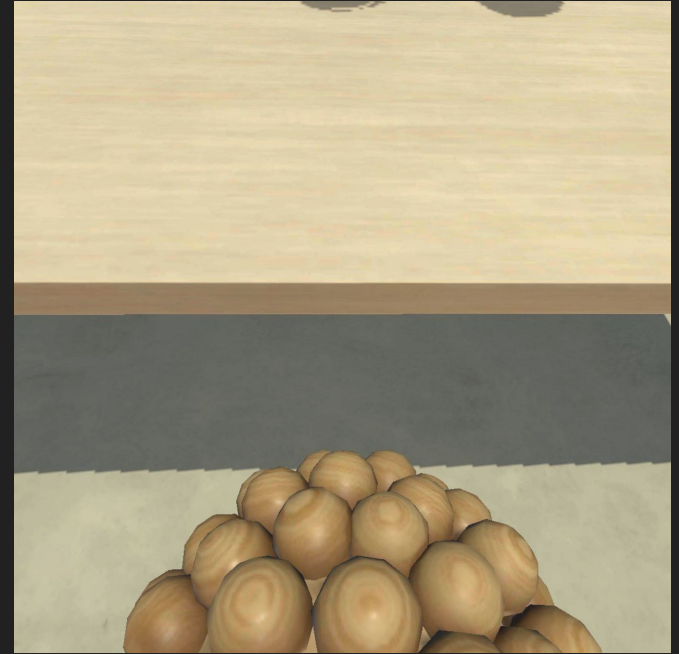
Gender and race swapping experiments

BeAnotherLab - Gender Swap experiment

Ethical considerations

- Inclusivity: Representation and customization (if possible)
- Accessibility: Color-contrast, seated experiences, and more.
- Autonomy: Opt-in or opt-out
- Empathy: Emotional impact and manipulation
- Stereotyping

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Pop-up VR Museum

Chronos - 3rd person avatar VR

The VR Book
Human-Centered Design for Virtual Reality

Jason Jerald, Ph.D.

CHARACTER DEVELOPMENT AND STORYTELLING FOR GAMES

THIRD EDITION

LEE SHELDON

CRC Press
Taylor & Francis Group

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Assignment 4 - Avatar design

Design an avatar or a set of avatars for your experience, considering characteristics that reflect your story. Also consider whether it is a first-person embodied character or a companion representing users throughout the journey.

Immersion Session 4 - Nov 16th (Thursday) - Zoom

Discussing your designs as well as assistance related to technical aspects of your prototypes:

- Group 1: 1300 - 1320
- Group 2: 1325 - 1345
- Group 3: 1350 - 1410
- Group 4: 1415 - 1435
- Group 5: 1440 - 1500