Digitization of Sacred Spaces Through Virtual Reality (DSS-VR)

Dr. Enes Yigitbas
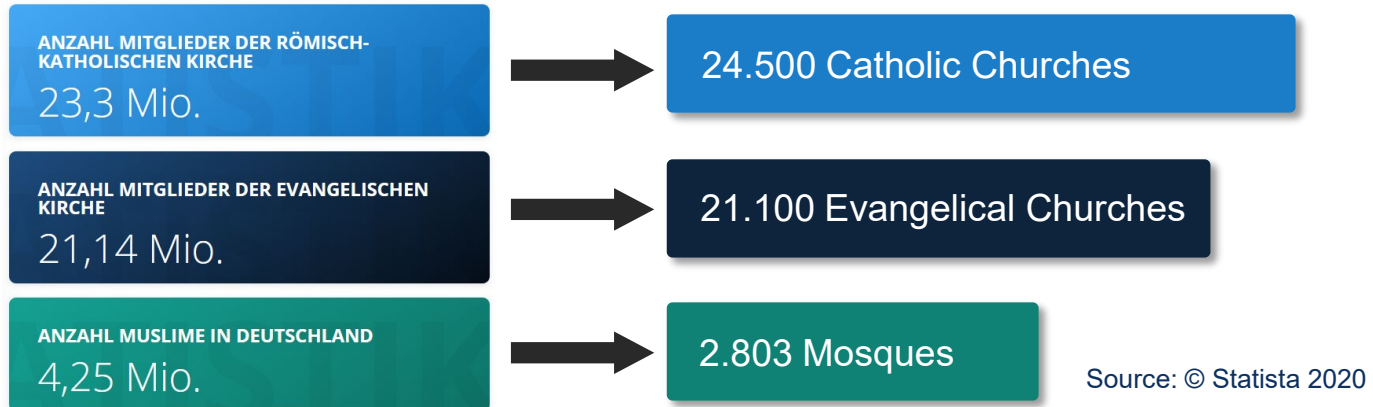
18.07.2022

Motivation

- Religion and sacred spaces play an important role in our society

ANZAHL MITGLIEDER DER RÖMISCH-KATHOLISCHEN KIRCHE 23,3 Mio.	→	24.500 Catholic Churches
ANZAHL MITGLIEDER DER EVANGELISCHEN KIRCHE 21,14 Mio.	→	21.100 Evangelical Churches
ANZAHL MUSLIME IN DEUTSCHLAND 4,25 Mio.	→	2.803 Mosques

Source: © Statista 2020

- Sacred spaces represent important reference points for religions and offer many aesthetic and spiritual dimensions

- Interreligious dialogue as an opportunity for peaceful coexistence

Distance, travel and contact restrictions make it difficult to explore and experience sacred spaces.

Existing digital media (streaming, 360° tours, etc.) offer no or only limited possibilities for making sacred spaces interactive and to explore them collaboratively.

Idea

"What if the objects in synagogues, churches, mosques could speak? - What would they tell me?"

Digitization of Sacred Spaces Through Virtual Reality

An der Vorderseite werden Porträts von Jesus, Maria und Johannes gezeigt.

Der Hauptaltar steht im sogenannten Chorraum Richtung Osten und ist der zentrale Ort der Eucharistiefeier.
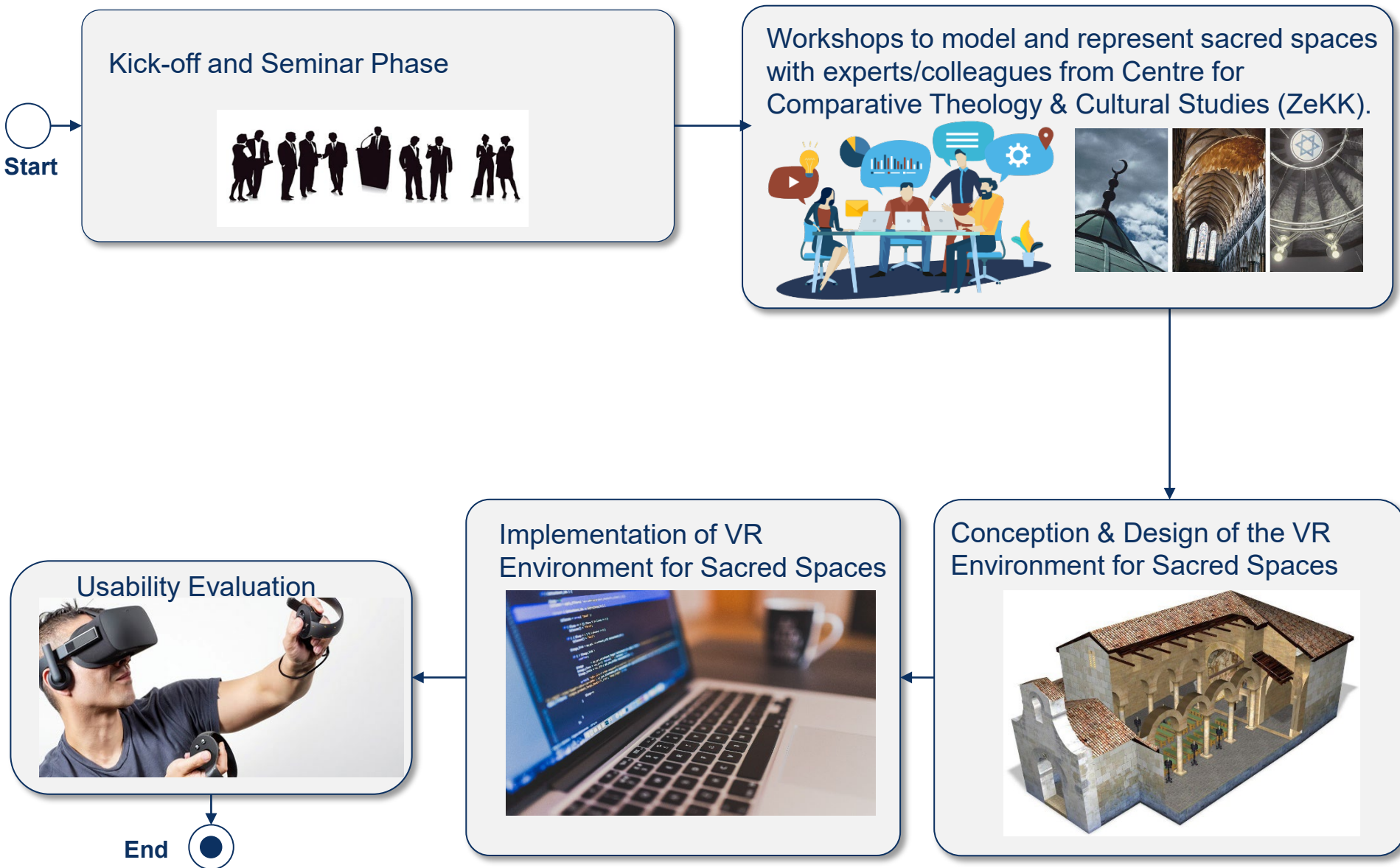
Interreligious dialogue virtually on site

• religious places become interactive, can be walked through and experienced together

• „Coming to life" of religious buildings and spaces

Goal

→ Make sacred spaces tangible and comparable as places of interreligious learning through interactive, collaborative VR applications.
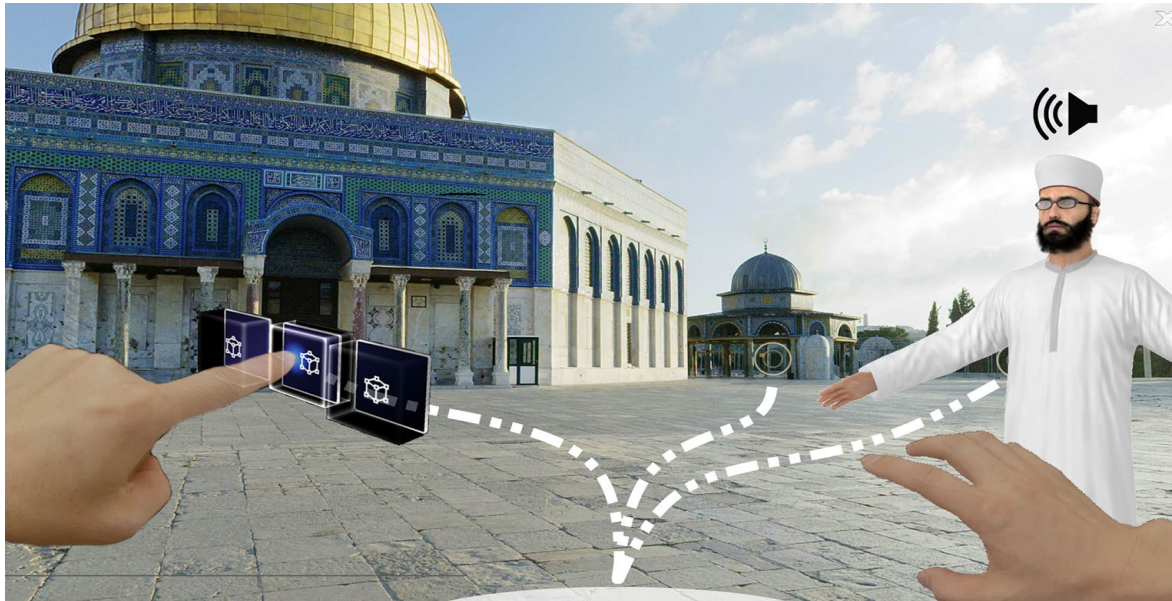
- Information shown on the object through audio, text, image, 3D objects or video
- Representation of different users through avatars
- Travel to remote/inaccessible locations or time travel is virtually possible
- Religious practices and rites can be physically experienced and made comparable

Roadmap

Kick-off and Seminar Phase

Start

Workshops to model and represent sacred spaces with experts/colleagues from Centre for Comparative Theology & Cultural Studies (ZeKK).

Usability Evaluation

End

Implementation of VR Environment for Sacred Spaces

Conception & Design of the VR Environment for Sacred Spaces

Prerequisites:

- Sound programming skills in an object-oriented language, e.g. Java, C#

- Basic knowledge about the concepts of Augmented and Virtual Reality

- Motivation to work in an agile team, self-organize yourself, and be creative

- Formal requirements to participate in a project group

Optional, but helpful:

- 3D Modeling, experience with Blender

- 3D Programming, experience with Unity Engine

Letter of Motivation

- We want to get to know you in advance!

- Describe yourself according to the following criteria...

  - Programming experience (languages, projects, …)

  - Experience with VR and 3D programming?

  - Working experience (university, industry)

  - Lectures, seminars or other courses in the area of Software Engineering that you completed successfully

  - Working artifacts (AR/VR Demo-Apps, Assets, 3D Models etc.)

  - … and last but not least: What do you expect from this project group? Why do you want to participate in this particular PG?

  - Submission via email to enes@mail.upb.de

Contact and Further Information

- Ask questions after the presentations

- Contact us via email:

  Dr. Enes Yigitbas   enes@mail.upb.de

- Visit our web page:

  https://cs.uni-paderborn.de/dbis/lehre/veranstaltungen/ws-2022-2023/project-group-digitization-of-sacred-spaces-through-virtual-reality-dss-vr

Thank you for your attention!