Virtual Mars Exploration

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cgvr.informatik.uni-bremen.de
Motivation
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Cost of Fixing

Requirements Gathering  Design and Development  Unit Testing  Functionality/System Testing  User Acceptance  Live

Point at which Bug Discovered
Background: VaMEx-Initiative
VaMEx-VTB

- Virtual Testbed
- Verification and Validation
- Modular, lightweight, software-in-the-loop
- Integration of all swarm units
- Simulation, Synthesis, Visualization
- Interaction
Features

Motivation

Project Targets

Project Tasks
Main Goal of the Project

- Create a highly immersive VaMEx-VTB Experience
Project Tasks

- Programming of the VE logic:
  - Interaction with VE
  - Visualization

- Modelling of VE:
  - 3D modelling and animation of realistic environment using tools like 3DSMax, Blender, Photoshop
  - Texturing (creating textures, uv mapping, ..)
  - UI-Design
  - Sound?
Project Infos

- **One-semester** project (with regular work in our lab)
- **Summer semester** 2020

**Prerequisites:**

- A bit of computer graphics / 3D knowledge
  - E.g., from “Computer graphics” or “Virtual Reality” course
- A bit of programming skills in C/C++ and/or modelling skills

The envisioned project team: mix of CS & DM students

Further info (Schnuppertermin):

- Place: MZH 3590, 3rd floor, CGVR lab
- Time: January 21 (Tuesday), 10:15

Great opportunities for bachelor theses subsequently
Ready to dive into another world with us?

Meet us next Tuesday at MZH 3590, 3rd floor

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