Project Pitch - Fundamentals of Webengineering

Valentin Baal, Informatik B. Sc. 5. Semester
`vabaal@student.ethz.ch`

Joanna Brodbeck, Informatik B. Sc. 5 Semester
`jbrodbec@student.ethz.ch`

Nick Troxler, Informatik B. Sc. 5 Semester
`ntroxler@student.ethz.ch`

Project Pitch

Project Idea

The project is about wanting to create a website with three different components: Earth, Mars, and Moon. Each component can be accessed to show more data about the associated celestial body. For Earth, we want to show the current asteroids and comets and where they can be found. For Mars, a weather forecast will be shown. For the Moon, its current state (phase, special phenomena) will be displayed.

Deliverables

- **Earth**

  - Interactive world map where events like wildfires, storms, etc., are displayed.

- **Near Earth Object Studies**

  - Asteroids
  - Comets
  - Fireballs
  - NHATS (Human-Accessible NEOs Data)

- **Mars**

  - Display the weather; like a weather forecast for Mars
  - Show pictures of Mars at the moment (taken from the Mars Rover)

- **Moon**

  - Super Moon
  - Blue Moon
  - Red Moon
  - New Moon
  - Eclipse

Pitch

Title

- "Hitchhiker's Guide to the Galaxy"

- "Space News"

- (Both ideas are drafts and subject to change)

What is the need or problem? For whom?

Gaining knowledge for daily activities in space. For space enthusiasts, curious people, and aliens. **What resources are (not) available (input)?**

- NASA API

- Moon API

What is your goal for the project

Being able to retrieve data from an API. Serving external NASA/Moon data in an aesthetically pleasing interface and providing a great user experience.

What would be different if the problem was solved?

Bringing (more) joy to nerds. Having all the important information in one place and not having to access different sources.

What are the approaches to solving the problem? Which ones have you already tried?

- Solving each component completely before going to the next one

  - This makes sure that we do not have a lot of unfinished projects
  - Can react fast if we notice that one component takes longer than expected

- Having a git repository to share the code and see what the others are doing

- Splitting up work and working efficiently

- So far, nothing has been done for the website

What are the limitations? What do you have to pay attention to?

- Time management (not overdoing oneself)

- Missing data from NASA (APIs in general)

What is the scope of the project?

Displaying important information about

- Earth

- Near Earth object studies

- Mars

- Moon

- (see deliverables)