Milestone 2

Deadline: November 18th, 12:00 CEST

Description

In groups of three people, you will be asked to create a website based on a database. You can start with one of the themes of your existing pages, or create something new. You must propose a single idea for the website, but each of the participants will be responsible for the implementation of one of the technical requirements:

- **Hosting** VM and server-side application. This role brings together what your team is building, being responsible that the hosting VM, nginx, gunicorn WGSI and flask work together.
    - If you want a new domain name specifically for the service, please specify it in the README file, as well as the info in which h26 student machine should it point to (for example: *mindblowingservice.inf105.org* ←→ *h26-140.inf105.org*)
- **Database** and query design. This role is responsible for the server's database and applies the database knowledge (ER modelling, normalisation, SQL) to datasets that matches the service idea.
- Pages and **Interactivity** that allows the user to interact with data within your service. This role applies the JavaScript, DOM and JSON-API material to let the user work with the data from the service.

Presenting the finished system will be the goal for the final presentation. For milestone 2, your task is to sketch out a service prototype and possible scenarios for its use. Based on the feedback from this stage, you will have time to refine and improve your project before the final presentation.

Important! Treat Milestone 2 as the initial stages of working on your final presentation. We'll evaluate your presentations keeping your Milestone 2 submissions in mind. You can make changes as the project develops, but we'll ask about the differences and the choices you made at the presentation.

Possible Data

We encourage you to find datasets that will fit your idea the best :)

- ☐ The dataset description usually contain the information on how and from where were they scraped. Use this information when describing you data.
- ☐ Check that the dataset has a license that allows reuse.

But in case if you stuck finding your own datasets, here are some ideas from us:

- Bicycle sharing in Bergen: https://bergenbysykkel.no/apne-data/historisk
- Socio-economical indicators of different countries: https://ourworldindata.org/ and https://www.gapminder.org/data/
- All bybane journeys in Feb 2024: https://www.inf105.org/trips_data_full.csv
- Many other open datasets that seem fun to you: https://www.kaggle.com/datasets

Deliverable for Milestone 2

Each of the team's members should submit a link to your team's GitLab repository. The project in which you create a repo will be created and shared with team members (we will visit your table to set that up).

Create a `README.md` in the team repository that must contain the sections below:

1. Service idea
    - [ ] The name of the service and a short description (3-5 sentences): what it does, for whom, what is the final goal and ideas for future work.
    - [ ] A draft of how your pages will look like. The main goal is to illustrate the idea behind your service and which affordances will the user have. This draft should be a freehand sketch made with a pencil or pen (or with a graphical editor) indicating main elements of the pages).
2. Team and roles
    - [ ] A table with each member's name, their role, and the domain of their personal site.
3. Data
    - [ ] What data the service works with and where it comes from (source and licence).
    - [ ] A draft ER diagram of your database.
4. Architecture and deployment
    - [ ] A simple diagram or list showing multiple different user views and interactions you have planned. This could be a sequence diagram, a request flow, etc.
    - [ ] A diagram or list that shows the different services on the VM, how they interact and where their files are stored.

The teaching team will review the version of the repository on the date of the deadline, so later changes won't affect your submission.