

DATABASE MODELLING

A.1 Description of Database Structure

- Users have a name, a unique e-mail address and an optional profile description.
- All users have an account that manages their balance on the platform. The account is clearly identifiable by the user and has a balance in addition to a secret number.
- One user can create multiple projects. Each project is created by exactly one user.
- A project has a unique identifier (for example, a sequential number), a title, a description (optional), and a funding limit.
- Users can support projects through donations. Of course, we also save the donated amount (donation amount). In order to protect the privacy of donors, it is also noted whether the donation should be anonymous or public. A donation can only be made if there is enough money in the user's account.
- The balance, the financing limit and the donation amount are floating point numbers with two decimal places each. Basically, the currency Euro is used on the platform.
- A project has a status attribute, which can only accept the values "open" and "closed". When a project is created, the default status is "open". Closed, however, means that the funding limit has been reached and no further donations can be made.

- Projects can be in a predecessor-successor relationship. A project can have several successors but not more than one predecessor; we uniquely identify both roles!

Example: The project called "Ubuntu Touch" has as its successor "Ubuntu Touch Light" and "Ubuntu Touch Pro".

- Categories have an ID, a name, and an icon. We offer the following categories: "Health & Wellness", "Art & Creative Works", "Education" and "Tech & Innovation". Each project is clearly assigned to a category.

- Users can create comments for each project. A comment consists of an ID, a text message, and the creation date. In addition, the user can specify the visibility of the comment (private or public). Private comments - unlike public ones - hide the actual username and instead display the name "Anonymous".

A.2 Description of the website to be created

This web application should include several pages. Each page to be created has its own ID, from which it can be called up. In addition, there is a graphical representation (mockup) for each page. References to other pages are indicated by blue arrows in the mockups. In any case, a link or button is required, which redirects the user to the appropriate page. It should be noted that the given design in the mockups does not have to be recreated 1 to 1.

It will only evaluate the functionality of your web application. For each required functionality that has been successfully implemented, partial points will be awarded.

For a better understanding, the functionality is specified in the name for each page to be created. We use the prefixes view, new and edit:

- view is mainly used to display data.
- new is used to create data.
- edit serves to update already existing data.

For example, the *view_project* page displays the details of a project while *new_project* allows you to create projects. With *edit_project* we can update an already existing project.