

Bounded Contexts: general descriptions of microservices

We decided to split the architecture into four components, here we define the domain of each microservice and what the service does.

Users

Domain: Manages users and user interactions to the system.

Microservice: Entrance point for users to the system. Manages user accounts and what users are able to do. Stores user account data. There are 3 types of users with different privileges: Student, Lecturer, Admin. Manages user authentication when a user logs in to the system.

Applications

Domain: Handling everything related to applications.

Microservice: Manages process of applying for a course. Stores running applications. Creates applications when a student applies for available courses, on request of User and using data from Course. Accepts applications when a lecturer hires a TA. Provides applications per course for lecturers upon request.

TA's

Domain: Turning accepted applications into TA's and managing everything TA related.

Microservice: Manages existing and past TA's. Created a new TA or updates an existing TA when an application is expected. Keeps track of logged hours per TA for current courses. Keeps track of past experience per TA. Potentially stores ratings per TA experience. Stores data to be put on contract. Creates a pdf contract for a TA when a TA is hired and forwards it to the TA and hiring lecturer.

Course

Domain: Manages and provides data on courses and grades.

Microservice: Manages data on courses and grades. Stores all courses including past editions. Stores grades students have. Lecturer can create courses and add grades for students per course. Provides this information for other microservices that need it.

Lollipop Diagram

