

Report of 1DV612

By: Dawid Kaleta | DK222JF

Server

The server (or backend) was built mainly using Google's Firebase Functions together with Express. The routes in the Express application translate into the Firebase Functions by using the Firebase module, making it easier to set up and get a server up and running with specific REST-endpoints. These endpoints can then easily be called upon from any client.

The server is built so that it listens on web hooks coming from GitHub, whenever an event regarding changes to pull requests or releases triggers. When this happens, and the specific routes get called, the data is stored, deleted or updated in the Firebase Database (NoSQL).

Client

The client (or frontend) is hosted using Google's Firebase Hosting and consists of a React application with two pages built up from smaller components. These components also use the MaterialUI styling-framework which helps it look clean (and a bit "Google-like").

The pages (and components) listen to changes in the Firebase Database in real time which kind of reminds of web sockets, where new data or changes are presented immediately for the user.

It was very easy to set up authentication using the Firebase Authentication menu, where for this application an OAuth with GitHub was chosen, as it is where we conveniently will get our organizations and events from.

Inside the application once the user logs in with their GitHub account, user details and organizations are retrieved and presented. The application also creates web hooks for the users organizations which listen to changes to pull requests and releases.