
Internet-Praktikum: Telekooperation

Project: Sechzehn

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1 Motivation

2 Overview

In this section we present the architecture we used and thereby how our components interact with each other. We then briefly describe which technologies we chose, and why we chose them.

2.1 Architecture

2.1.1 Diagram Interaction

2.1.2 ERM

2.1.3 UML Diagram

2.2 Server

To host our server we use the Heroku Cloud Application Platform[1]. Heroku provides us a PostgreSQL[5] database service and an nodejs execution environment. Furthermore it offers access to Cloudinary[2] image backend. The Cloudinary service can be used as plugin within heroku.

2.2.1 Node.js

[3]

2.2.2 AdonisJs

[4]

2.2.3 PostgreSQL

PostgreSQL[5] is an open-source relational database management system. It is possible to add new data types and functions in PostgreSQL. Amongst other things we implemented a function to compute the Great-circle distance[6]. The Great-circle distance is necessary to compute distances on spheres and therefore to compute distances on the earth.

2.2.4 JSON Web Tokens

The Authentication in our project is done with JSON Web Tokens(JWTs)[7].

2.3 Client

2.3.1 Android Data Binding

[8]

2.3.2 Retrofit

[9]

2.3.3 GSON

[10]

2.3.4 ChatKit

[11]

3 Feature Explanation

3.1 System Requirements

minSDK 23

compileSDK 25

Permissions and justification why they are necessary

3.2 Get Started

Explain how to download and install the APK

3.3 App Flow

4 Feature List

Bonus Feature: Email Verficiation, JWT, Filterable Results, Live Update, Anonymity Button

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