System Design

of

UTM Food Tracker

CSC301 Introduction to Software Engineering

2020

Contents

1 CRC Cards **3**

2 Software Architecture Diagram **6**
2.1 Description 6
2.2 Diagram 7

1 CRC Cards

Student User	
• Name • Email • Password • Daily calorie requirement • Can see their Daily Budget • Can retrieve Order History • Can see their Food Favorites	

DailyDigest	
• Date • Total Calories intake • Total money spent • Cost ratio	

Server	
• Hosting our web applications • Accessible by developers • Allowing the web apps to be accessible by users	• Users • Developers

Api Service	
• Format requests to be sent to the API • Handle responses from the API • Retry failed requests to the API • Format params into requests	• AxiosService

AxiosService	
• make requests to the API	• API Service

Menus	
• Fetch menus posted in campus restaurants. • Convert menus into text. • Make the text readable. • Make the text easily to be splitted.	

Figure 1.1: A high level description of classes

Home	
• Routes User to menu • Handlers user preferences • Displays restaurant info	

Figure 1.2: A high level description of classes

2 Software Architecture Diagram

2.1 Description

The frontend is an angular application written in TypeScript (a superset of JavaScript). The client is compiled by the Angular CLI into HTML and JavaScript which can be then deployed to browsers. The server is a Java REST API which interacts with a MongoDB database to serve menu data and user information to the frontend, it exists on a machine in the cloud. The MongoDB database is hosted by MLabs and interacts with our API. it is important to note that the frontend never interacts with the database directly, it only interacts with it VIA the JAVA REST server.

2.2 Diagram

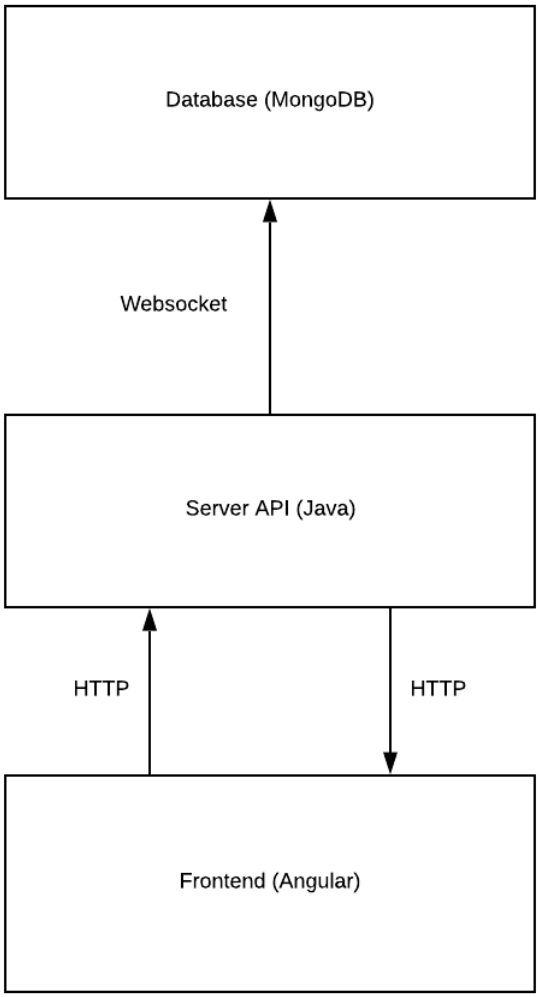

Figure 2.1: A high level architecture of FOOD TRACKER app