## System Design

# of UTM Food Tracker

CSC301 Introduction to Software Engineering

#### Contents

1 CRC Cards			3
2	Soft	ware 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				
<ul> <li>Fetch menus posted in campus restaurants.</li> <li>Convert menus into text.</li> <li>Make the text readable.</li> <li>Make the text easily to be splitted.</li> </ul>				

Figure 1.1: A high level description of classes



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

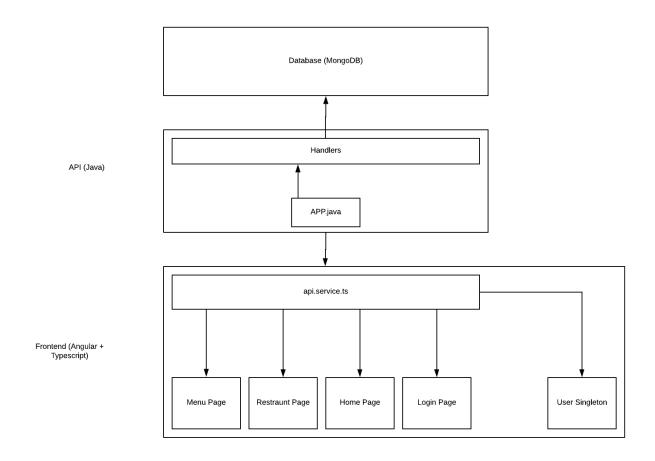


Figure 2.1: A high level architecture of FOOD TRACKER app