NUTRITIUM

Batch : 17th June 2019 Onboarding – FSD

TEAM MEMBERS

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System Requirements Specification Document V 1.0

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INTRODUCTION

SCOPE :

The document describes the scope of requirements to create a web-based food delivery application in order to provide healthy food suggestions based on user's preference and personal information.

The project would be a webpage application that deals with stakeholders such as admin, customers and restaurants where the end user can sign up and create his personalized profile for receiving customized food suggestions. The application provides appropriate food recommendations and dynamic graphs generated based on the periodic progress of a user.

ASSUMPTIONS :

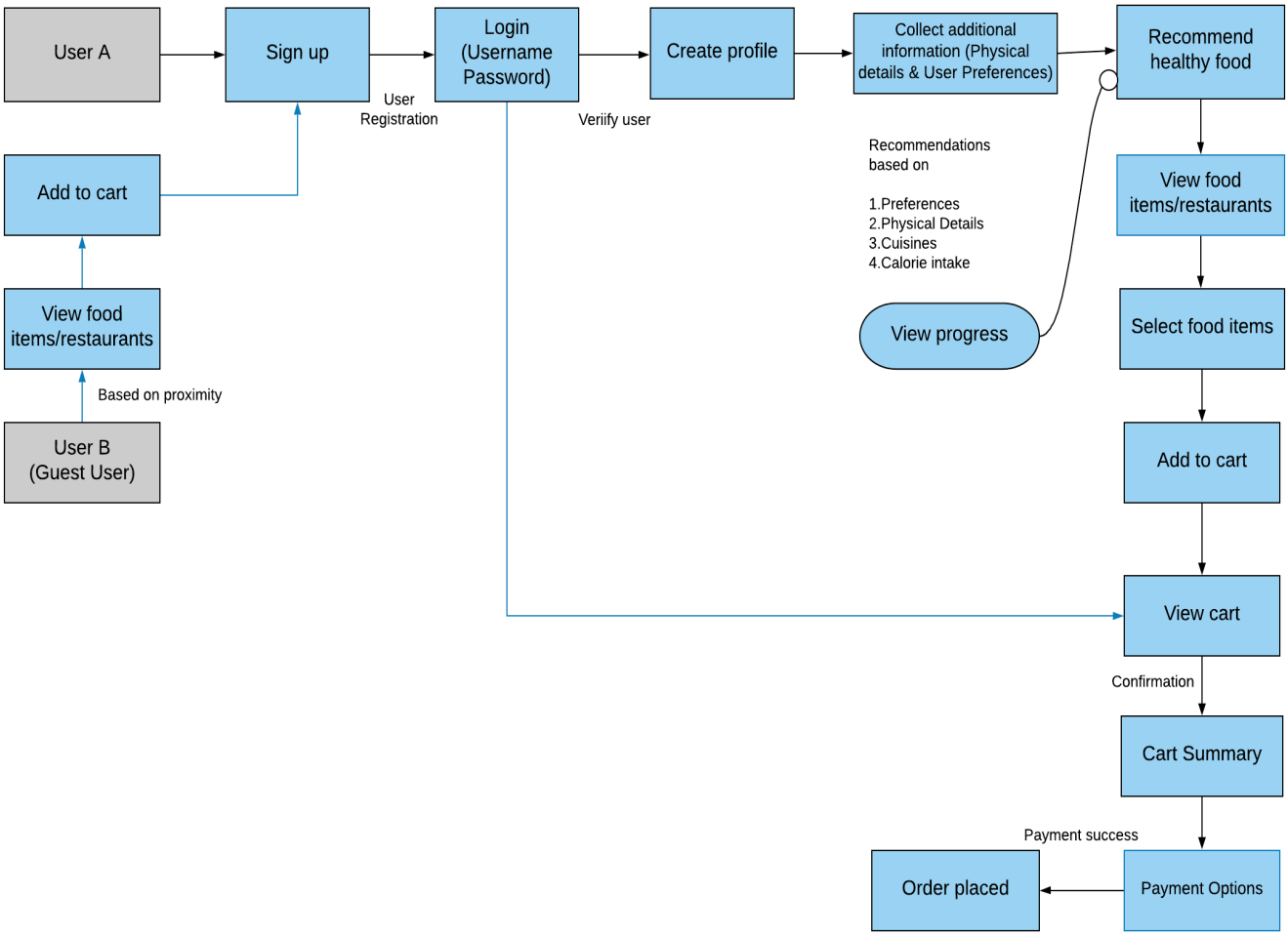
It is assumed that the user visits the website to not only order foods but also receive healthy food suggestions based on personal information such as gender, height, weight and his/her preferences such as cuisines, current weight, target weight, desired start date and end date to lose or gain weight.

SUMMARY :

The user signs up using his email id. On login, he/she enters provide additional information, by creating a profile using his/her personal information such as name, age, gender, height, weight along with his/her preferences to gain or lose weight. The suggestions of food to the user will be based on the calories, price and other criteria mentioned in the algorithm.

SYSTEM OVERVIEW

PROPOSED SYSTEM :

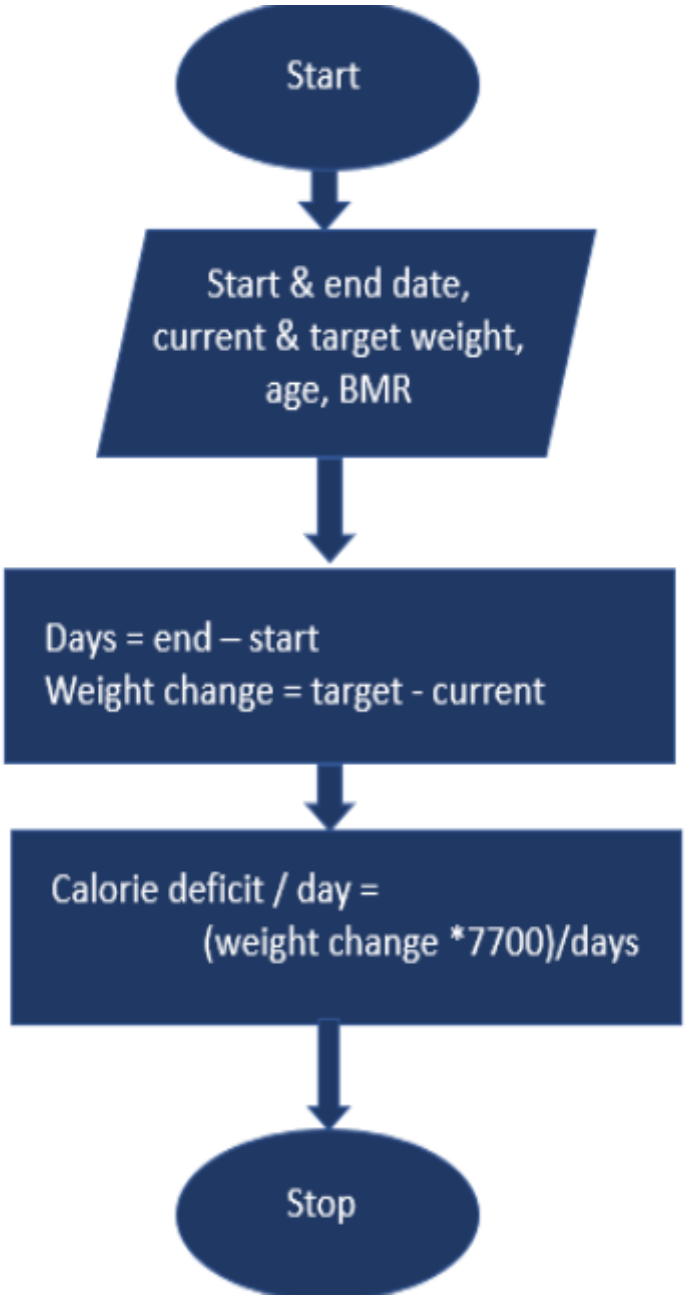


INITIAL REQUIREMENTS :

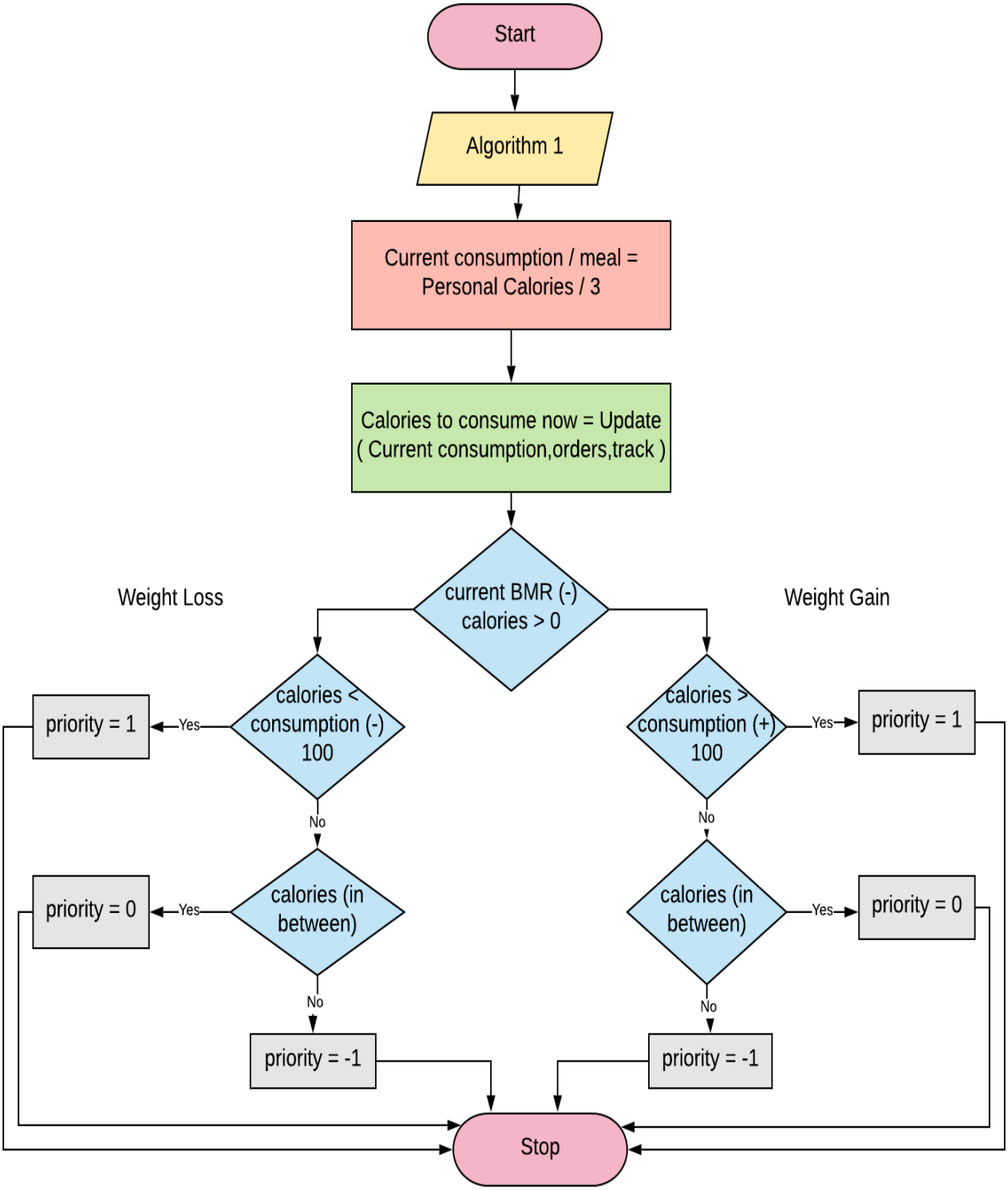
Initial Requirements.docx

ALGORITHMS DEVELOPED :

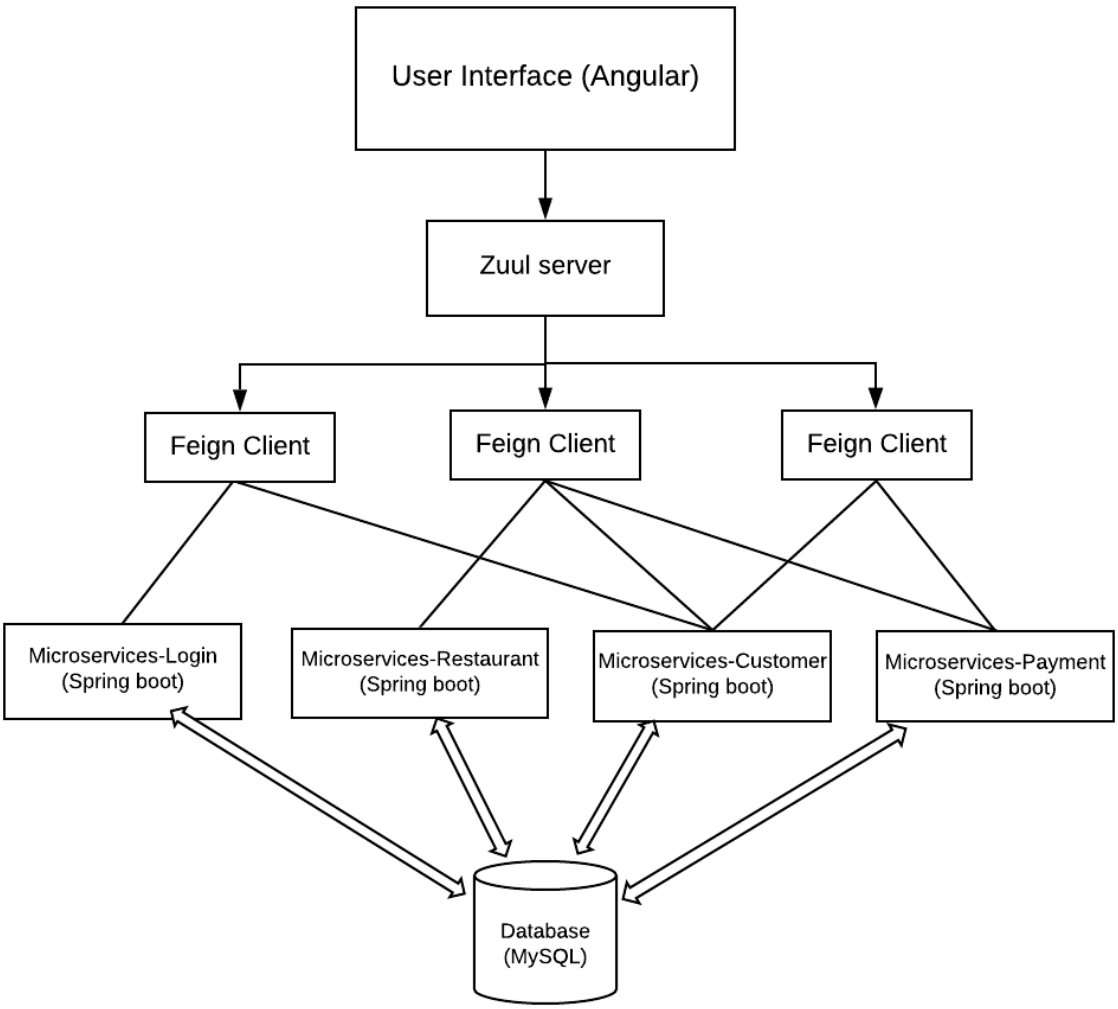
ALGORITHM 1 :



ALGORITHM 2


Start
Algorithm 1
Current consumption / meal = Personal Calories / 3
Calories to consume now = Update (Current consumption,orders,track)
current BMR (-) calories > 0
Weight Loss
Weight Gain
calories < consumption (-) 100
calories > consumption (+) 100
Yes
priority = 1
No
calories (in between)
priority = 0
priority = -1
Stop

SYSTEM ARCHITECTURE



COMMON REQUIREMENTS

User Requirements :

- The user must be a registered user to order foods using the application.
- The user must enter basic information to sign up for the first time.
- The user must enter valid email id and password to login / order foods using the web application.
- The user must enter his physical information and personal preferences in order to create a separate account for opting the diet plan and suggestion of foods using various options such as calories, price, etc.

Restaurant Requirements :

- The restaurant must list the food items along with their prices and calorie intake.

FUNCTIONAL REQUIREMENTS

Workflow:

User	**Flow**
User who opts to follow diet plan	• The user signs up with his/her basic information. • The user enters his physical information and personal preferences. • The BMR and BMI will be calculated in accordance with the information thus entered. • If any records of the user ordering from the application, or external tracking information exists, they are taken into consideration. • The foods will be recommended or not recommended based on his everyday limit computed using the above data. • The user gets to achieve his target within the time limit set at the beginning of the plan.

Guest user	• The user has to sign up and log in to order foods via the web application. • The foods will be listed based on the rating of restaurants. • The user can order foods and add them to the cart followed by payment gateway and delivery status.

SYSTEM ENVIRONMENT

Eclipse IDE

Eclipse IDE (Integrated Development Environment) is composed of plug-ins and is designed to be extensible using additional plug-ins. Developed using Java, the Eclipse platform enables us to develop rich client applications.

Spring Boot

Spring Boot is an open source Java-based framework used to develop micro services providing Rapid Application Development (RAD). Stand-alone and production ready spring applications can be developed using Spring Boot's comprehensive infrastructure.

MySQL

MySQL, the freely available open source Relational Database Management System (RDBMS) uses Structured Query Language, the most popular language for adding, accessing and managing content in a database noted for its quick processing, proven reliability, ease and flexibility of use.

GitHub

GitHub is a web-based version-control and collaboration platform for software developers. Git is used to store the source code for a project and track the complete history of all changes to that code. It allows developers to collaborate on a project more effectively by providing tools for managing possibly conflicting changes from multiple developers.

Angular JS

Angular JS is a structural framework for dynamic web applications that uses HTML as template language and extends HTML's syntax to express application components clearly. Its data binding and dependency injection eliminate much of the code. It happens within the browser, making it an ideal partner with any server technology.

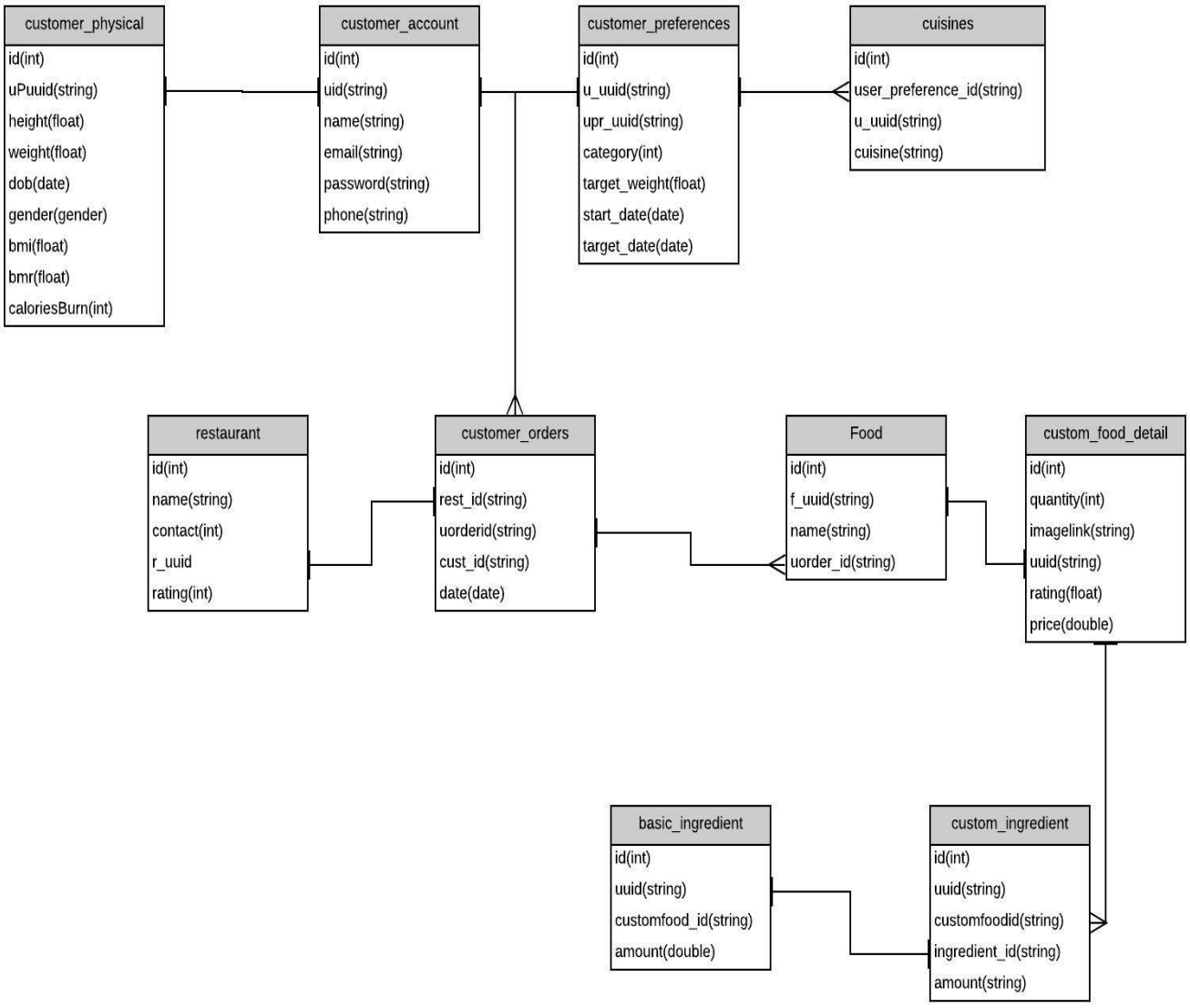
Jenkins

Jenkins is an open source automation server, Jenkins provides hundreds of plugins to support building, deploying and automating any project. Jenkins supports the complete development lifecycle of software from building, testing, documenting the software, deploying and other stages of a software development lifecycle.

Amazon Web Services (AWS)

Amazon Web Services(AWS),the comprehensive, evolving cloud computing platform provided by Amazon provides a mix of infrastructure as a service (IaaS), platform as a service (PaaS) and packaged software as a service (SaaS) offerings.

DATABASE SCHEMA :



PRODUCTS USED:

Scenario	Product	Description
Usecase Generation	Lucidchart	The standard UML diagrams were designed using Lucidchart.
Development	Eclipse	The standard Java development is carried out in Eclipse IDE.
Database	MySQL	The team uses centralized MySQL for db requirements.
Repository	GitHub	The team members backup and share the code between them via GitHub repository.
Deployment	Amazon Web Services	The team deploys solution for testing / deployment using AWS.

RESOURCES AND REFERENCES

- Physical Activity and Controlling Weight
  https://www.k-state.edu/paccats/Contents/PA/PDF/Physical%20Activity%20and%20Controlling%20Weight.pdf

- ICMR – National Institute of Nutrition
  https://www.nin.res.in/

- Division of calories

  https://food.ndtv.com/food-drinks/how-to-divide-calories-in-each-meal-we-help-deconstruct-it-for-you-1750305

- Spring Framework 5 Reference

  https://docs.spring.io/spring/docs/current/spring-framework-reference/pdf/core.pdf

- Spring Boot Reference Documentation
  https://docs.spring.io/spring-boot/docs/2.2.0.RC1/reference/html/

- AWS Elastic Beanstalk Documentation
  https://docs.aws.amazon.com/elastic-beanstalk/?id=docs_gateway