



# DATABASE MANAGEMENT SYSTEM

PROJECT REPORT

## FIT.IO

A better Health and Fitness platform  
that integrates into your daily life and  
rewards a healthy lifestyle

by **Team Butter Naan** (Group 53):

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# Abstract

The health and fitness industry is one of great importance in our lives, and promoting a healthy lifestyle is essential in current times where unhealthy foods are so glorified and popularised in the world. We aimed to make a platform that integrates and keeps record of your daily lifestyle habits and motivates you to be more active and healthy.

With the combination of a well-designed RDBMS, a user friendly interface, and advanced ML techniques, the platform is able to assist users in their daily lives by motivating them to achieve their daily fitness goals, recommending healthy dishes for meals, along with the option of ordering from nearby healthy restaurants. The user can also share their details with trusted medical centres and doctors through the app for better medical assessments when the user requires it. Moreover, the user will also be provided with verified dieticians to connect with and hire to look over their lifestyle habits and advise them accordingly.

# Week 1

Ideation and finalisation of  
the application, and  
identifying stakeholders

## **Work Division:**

All work was done together  
and everyone contributed  
equally.

# Project Description

A platform which constantly keeps track of user calorie intake and appropriately suggests various meals, while incentivising a healthy lifestyle by providing coupon discounts for various fitness products and by various insurance companies.

1. Keeping track of the user's daily calorie intake
2. Keeping track of the user's daily physical activity and workouts using your mobile sensors, or by synchronising with your fitness band/smartwatch.
3. Suggest food recommendations based on the user's daily calorie intake
4. Suggest workout regimens based on daily user physical activity
5. Link user account, and share daily lifestyle statistics with your dietician's account to directly receive feedback about your current calorie intake, and suggestions regarding your workout regimen.
6. Link daily activities and intake trends to medical record
7. Closely monitor at-risk patients and direct feedback their data to a hospital approved by the user, where the hospital will deploy emergency services in case of unprecedented irregularities.

A very well designed database management system would be required to deploy a web app of the scope aforementioned.

# Stakeholders for the Platform

- Users
- Hospitals
- Restaurants
- Healthcare Industry
  - 1. Dieticians
  - 2. Product Manufacturers
- Insurance Companies

# Week 2

Roles of each stakeholder  
and the purposes fulfilled  
by using the DB

## Work Division:

All work was done together  
and everyone contributed  
equally.

# Stakeholder Roles

## Users

- To keep a detailed track of health and fitness, along with food intake and burnt calories.
- Get food recommended based on their daily regimen
- Suggestions for workout
- Recommend Restaurants based on location
- Targeted Users
  1. Fitness Buffs and Calorie Conscious Users
  2. Patients whose ailments require constant monitoring of food intake

## Hospitals

- Maintain Updated Records
- Access user data only when visiting the doctor.
- Patients get more attention from this system.
- Red Alert Users
  1. Constant updating and monitoring of data.
  2. Revert to normal users when out of risk

## Healthcare Industry

- Dieticians
  1. Dietician Account.
  2. Approved Dieticians regularly keep track of client schedules
  3. Easily Recommend suggestions
  4. Active role in client's lives.

- Product Manufacturers
  1. Provide free advertising for their products
  2. Get discount codes for products to supply to users.

## Insurance

- Analyze and predict whether the person is profitable or not.
- Advertise insurance to users.
- Users can recommend an insurance company to other users too.

## Restaurants

- Food suggestions
- More demands for healthy restaurants
  1. Become a motivation for other restaurants to prepare healthy food.
- Become a popular choice amongst our users
- Suggest restaurants to add certain types of foods popular amongst users
- Generate better sales

## User:

**1:** How many calories have I burnt today?

**2:** What foods can I eat which are healthy for me based on the calories?

**3:** How many customers satisfactorily left the dietician (above 3 star)?

**4:** What is the average fee for dieticians available?

**5:** What all restaurants are most popular for breakfast?

## **Hospitals:**

**1:** How many users have verified us as their hospitals?

**2:** How many users under us are at-risk?

**3:** What is a user n's daily exercise regime?

**4:** How many hospitals have a higher rating than hospital - n?

**5:** How many users live nearby?

## **Product Manufacturers:**

**1:** How many coupons are we providing?

**2:** How many coupons have been distributed amongst users?

**3:** What is the most popular coupon distributed?

**4:** Which user has the maximum number no of our coupons?

**5:** What is the average number of coupons a user has?

**Restaurants:**

- 1:** How much money is made from orders placed after midnight before closing time?
- 2:** How many users have ordered more than once from us?
- 3:** What is our most popular item?
- 4:** How much money have we made the past year?
- 5:** What is the average revenue generated per day?

**Insurance Companies:**

- 1:** How many users are insured by us?
- 2:** How insurance companies can generate better sales?
- 3:** Potential users to be insured?
- 4:** How many users have more than one insurance?
- 5:** How many potential users have been serviced by us?

# Week 3

## Designing the Database Schema

### Work Division:

All work was done together  
and everyone contributed  
equally.

Note: The following schema is only a tentative schema which can be revised and updated in following weeks

# DATABASE SCHEMA

## USER DB

### users -

User_ID	int NotNull
Name	varchar(30) NotNull
Age	int NotNull
at_risk	bit
Dietician_ID	int
No_of_steps	int
Current_calorie	int
Health_History	MEDIUMTEXT
Avg_Calorie_Intake	int
Diseases	TEXT
Location	TEXT NotNull

Primary Key - User\_ID

Foreign Key - Dietician\_ID

### **daily\_record\_n**

Here n is the uid of a user.(EG daily\_record\_5 is the daily record of user with UID 5)

date	int NotNull
steps	int
cal_intake	int
avg_heart_rate	float
sleep	int

Primary Key - date

### **at\_risk-**

U_ID	int NotNull
disease	Varchar NotNull
at_risk	TINYINT NotNull

Primary Key - U\_ID

Foreign Key - U\_ID

### **HOSPITAL -**

Name	varchar(40) NotNull
Location	TEXT
at_risk	bit

Specialities	TEXT
Hospital_ID	int NotNull

Primary Key - Hospital\_ID

Foreign Key - NONE

## RESTAURANTS-

Name	varchar(30) NotNull
Location	TEXT
Rating	int
Cuisines	varchar(40) NotNull
Restaurant_ID	int NotNull
Menu	MEDIUMTEXT

Primary Key - Restaurant\_ID

Foreign Key - NONE

## PRODUCT MANUFACTURERS-

Product_ID	int NotNull
Name	varchar(30) NotNull

typeofProduct	varchar(70) NotNull
Coupons	int NotNull

Primary Key - Product\_ID

Foreign Key - NONE

### DIETICIANS-

Dietician_ID	int NotNull
Name	varchar(30) NotNull
Qualification	TEXT
Rating	int NotNull

Primary Key - Dietician\_ID

Foreign Key - NONE

### HEALTH INSURANCE-

Insurance_ID	int NotNull
Name	varchar(30) NotNull
Clients	MEDIUMTEXT
Possible_Clients	MEDIUMTEXT

Primary Key - Insurance\_ID

Foreign Key - NONE

## COUPONS-

Coupon_ID	int NotNull
Valid_date	date NotNull
Type	varchar(70) NotNull
Details	varchar(30)
Product_ID	int NotNull

Primary Key - Coupon\_ID

Foreign Key - Product\_ID

## FOOD-

Name	varchar(30) NotNull
Calorie	int NotNull
Cuisine	varchar(20) NotNull
Recipe	varchar(100)

Primary Key - Name

Foreign Key - NONE

## MANAGES (User-Dietician)

User_ID	int NotNull
Dietician_ID	int NotNull

Primary Key - User\_ID

Foreign Key - Dietician\_ID

# Week 4&5

## Populating tables with data

### **Work Division:**

Udhvarg: Populating Coupons and product\_manufacturers,  
Document updation

Archit: Populating User and daily\_record\_n

Hamzah: Populating Restaurants and Menu

Shaney: Populating Dieticians and Health\_Insurance

Gavish: Populating Hospital and food

All the tables have been populated with at least 50 entries for now.

The data has been collected manually where required, and generated and updated using scripts where deemed appropriate. A few examples of populated tables are given below:

Dietician_ID	Name	Qualification	Area_of_Interest	Experience	Rating
1	Dr. Sugeets Mutreja	Master's Degree in Dietetics	Nutrition expert for healthyats.com.	NULL	4
2	Ms. Rakhi Khurana	PostGraduate Diploma in Dietetics	Writer & Spreading the word that healthy eating can taste great	28	3
3	Ms. Divya Gandhi	Bachelors in Dietetics	Certified in Adult Weight Management & Welcoaches health coach training program	8	5
4	Ms. Reema Madhan	PostGraduate Diploma in Dietetics	President & Weltech Solutions & Technology.	25	NULL
5	Ms. Shweta Madhan	Master's Degree in Dietetics	Diabetes Educator; Medical Nutrition Consultant; Disease & Counseling; Researcher	NULL	8
6	Ms. Rupali Mittal	Master's Degree in Dietetics	Certified Personal Trainer; Group Fitness Instructor	9	4
7	Dr. Lochan Arora	Master's Degree in Dietetics	Certified Diabetes Educator; Certified Nutrition Support Clinician; Speaker.	3	5
8	Ms. Priya Mittal	PostGraduate Diploma in Dietetics	Nutrition Consultant; Writer; Specialties include General Nutrition.	9	2
9	Ms. Vidhi Chawla	Master's Degree in Dietetics	Writer; Media Expert; Lifestyle Dietitian; Wellness Consultant	7	3
10	Ms. Monisha Ashokan	Master's Degree in Dietetics	Nutrition & One-on-one consultation for Diabetes.	NULL	5
11	Dr. Shalini Singhal	Bachelors in Dietetics	Writer; Presentations & Outreach of Energy to Burn.	9	4
12	Ms. Arvita	PostGraduate Diploma in Dietetics	Writer; Published Author	16	2
13	Ms. Mansi Choudhary	Master's Degree in Dietetics	Regional Registered Dietitian for Western Athletic Clubst	22	NULL
14	Dr. Renuet Ratnagi	Master's Degree in Dietetics	Working on spreading my passion for nutrition nationwide.	22	4
15	Ms. Lovneet Batra	PostGraduate Diploma in Dietetics	Pediatric nutrition & in person.	NULL	5
16	Dr. Deepiti Somani	Bachelors in Dietetics	Author & Nurturing with Nutrition; Certified Diabetes Educator.	12	2
17	Ms. Neha Agarwal	Master's Degree in Dietetics	Co-owner Knowledge Connection & LLC; Geriatric Nutrition.	14	3
18	Ms. Neha Agarwal	PostGraduate Diploma in Dietetics	Medical Nutritionist	5	3
19	Ms. Ekta Jain	Master's Degree in Dietetics	Clinician; Blogger; Loves Cooking; Member of the Food and Culinary Professionals	NULL	NULL
20	Ms. Shilpa Chawla	Bachelors in Dietetics	My passion is helping others achieve their personal best.	12	5
21	Ms. P. Singh	PostGraduate Diploma in Dietetics	Founder & Nutritional Lifestyle Designs; Nutrition Coach.	16	2
22	Ms. Avni Kalia	Bachelors in Dietetics	Private Practice; Featured Nutrition Expert in DietitianCentral.com.	7	4
23	Ms. Raminder Kaur Deshmukh	Master's Degree in Dietetics	Specialized Pediatric Nutrition. Develops healthcare blogs.	17	3
24	Ms. Vaibhav Garg	PostGraduate Diploma in Dietetics	Postgraduate Diploma in Dietetics	29	4
25	Ms. Shweta Arora	Bachelors in Dietetics	Certified Diabetes Educator & Author & Speaker	5	4
26	Ms. Shalini Ahuja	Master's Degree in Dietetics	Nutrition Communicator; Blogger; Writer	12	NULL
27	Ms. Nidhi Bhalla	Master's Degree in Dietetics	manage your diabetes & or eat right for pregnancy.	4	3
28	Ms. Anjali R Gaur	PostGraduate Diploma in Dietetics	«Blogger & Writer & Health & Imagination to Burn?; Consultant.»	11	4
29	Ms. Nidhi Dawan	Master's Degree in Dietetics	Celiac & Gluten-free Expert	35	4
30	Ms. Lata Sharma	Bachelors in Dietetics	Registered Dietitian & Patriot & Veteran.	22	3
31	Ms. Neelamkumar Vasudeva	PostGraduate Diploma in Dietetics	Author & Nutrition Consultant & Writer & Speaker	6	2
32	Ms. Rita Arora	Master's Degree in Dietetics	Author & IBS-Free & Tasty!; Speaker.	5	3
33	Ms. Rashmi Srivastava	Bachelors in Dietetics	Nutrition Coach; Specializes in Weight Control.	NULL	3
34	Ms. Dietician Nisha Malhotra	PostGraduate Diploma in Dietetics	Owner/Founder.	4	5
35	Ms. Deepiti Dheer	Bachelors in Dietetics	Counseling & Consulting & Pre/Postnatal Programs	22	5
36	Dr. Kavita Arora	Bachelors in Dietetics	Educator & SafeStaff® Foodhandler Certificate Program.	36	4
37	Ms. Neha Sharma	Master's Degree in Dietetics	Writer & Researcher; A Woman's Worth Weekly	37	3
38	Ms. Neha Sharma	Bachelors in Dietetics	Education, Research to increase productivity.	15	2
39	Ms. Priyanka Saxena	Bachelors in Dietetics	Founder/President to Nutrition Care for Children & LLC.	18	2
40	Ms. Megha Gupta	PostGraduate Diploma in Dietetics	Private Practice; Specializes in Mindful	NULL	3
41	Ms. Swarn Shikha Sharma	Master's Degree in Dietetics	Experience in counseling.	10	5
42	Dr. Nidhi Malhotra Kalra	Bachelors in Dietetics	Private Practice; Specialist & Diabetes.	12	4
43	Ms. Pragati Bansal	PostGraduate Diploma in Dietetics	Nutrition Consultant; Certified Diabetes Educator	13	5
44	Ms. Ishita Arora	Bachelors in Dietetics	Author & Nutrition Consultant; Health Management Areas of interest: Corporate Health/Nutrition.	NULL	3
45	Ms. Mona Gool	Master's Degree in Dietetics	Specialized in Motivational Interviewing.	13	5
46	Ms. Seema Singh	Bachelors in Dietetics	Associates & Improving nutrition care for older adults through publications.	12	NULL
47	Ms. Anju Arora	PostGraduate Diploma in Dietetics	Speaker on Food & Nutrition & Wellness.	26	5
48	Ms. Anshita Kataria	Bachelors in Dietetics	Food Label Expert; Publisher & Food Label News	NULL	5
49	Dr. Mehak Bawja	Master's Degree in Dietetics	Correspondent & Speaker.	9	4
50	Ms. Varuni Upadhyay	PostGraduate Diploma in Dietetics	Assistant Director of Nutrition for the Rite Site.	28	4

50 rows in set (0.68 sec)

Product_ID	Name	Type	Coupons
1	Nike	sportswear, sports equipment	5
2	Reebok	sportswear, sports equipment	6
3	Adidas	sportswear, sports equipment, toiletries, clothing accessories	4
4	Under Armour	sportswear, sports equipment	4
5	Puma	sportswear, sports equipment, accessories	5
6	SGICS	sportswear, sports equipment	9
7	FILA	Athletic shoes,	
		clothing & accessories, sportswear, sports equipment	10
8	Skechers	Athletic shoes, Lifestyle	6
9	New Balance	Athletic shoes,	
		sportswear, sports equipment	3
10	Allbirds	Athletic Footwear	3
11	Jordans	Athletic Footwear	3
12	Spalding	sportswear, sports equipment	2
13	The North Face	sportswear, sports equipment, outdoor equipment	5
14	Woodland	footwear, sportswear, sports equipment	5
15	Footlock	sportswear, sports equipment, outdoor equipment	5
16	Kappa	clothing, sportswear, footwear	5
17	Converse	footwear	5
18	Champion	Clothing, sportswear, footwear	10
19	Lotto	sportswear, sports equipment, accessories	5
20	Umbro	sportswear, sports equipment	5
21	FilaFit	fitness equipment	2
22	Wysport	nutritional supplements	5
23	Jawbone	fitness bands	2
24	GNC	nutritional supplements	10
25	Sunrai	fitness equipment	5
26	Nortus	fitness equipment	2
27	Hammer Strength	fitness equipment	3
28	Reebok	fitness equipment	4
29	Precor	fitness equipment	5
30	Technogym	fitness equipment	3
31	evitamins	nutritional supplements	4
32	Luckyvitamin	nutritional supplements	3
33	Healthy Goods	nutritional supplements	2
34	Publix	nutritional supplements	4
35	Extreme Nutrition	nutritional supplements	5
36	Vitamart	nutritional supplements	7
37	Humi	fitness bands	2
38	Jaybird	sports earphones	3
39	Classpass	health and wellness service	5
40	Fave	fitness ecommerce platform	5
41	Mytop	tops	2
42	Speedo	swimwear, accessories	5
43	Yonex	sportswear, sports equipment	4
44	Dunlop	sportswear, sports equipment	4
45	Wilson	sportswear, sports equipment	3
46	Rawlings	sports equipment	5
47	Rawley	sports equipment	4
48	Carlton	sportswear, sports equipment	3
49	DHS	sports equipment	4
50	Garmin	sports technology	3

# Week 6

## Creating Indexes and Forming Queries

### **Work Division:**

Udhvarg: Creating Indexes,  
Document Updation  
Gavish: Forming Queries

# Indexes

- CREATE UNIQUE INDEX `user\_index\_0` ON `user` (`id`);
- CREATE INDEX `exer\_entry` ON `userexercise` (`uid`, `datetime\_e`);
- CREATE INDEX `nutri\_entry` ON `usernutrition` (`uid`, `datetime\_c`);
- CREATE UNIQUE INDEX `restaurants\_index\_3` ON `restaurants` (`id`);
- CREATE INDEX `order\_entry` ON `userorder` (`uid`, `datetime\_c`);
- CREATE UNIQUE INDEX `userorder\_index\_5` ON `userorder` (`oid`);
- CREATE UNIQUE INDEX `coupons\_index\_6` ON `coupons` (`code`);
- CREATE UNIQUE INDEX `productmanufacturers\_index\_7` ON `productmanufacturers` (`id`);
- CREATE UNIQUE INDEX `dietician\_index\_8` ON `dietician` (`id`);
- CREATE UNIQUE INDEX `hospitals\_index\_9` ON `hospitals` (`id`);
- CREATE UNIQUE INDEX `food\_index\_10` ON `food` (`id`);

# Queries

1: How much money is made from orders placed after midnight before closing time on 26th april?

**Select SUM(price) from user order where datetime\_c BETWEEN '2020-04-25 11:59:01' AND '2020-04-26 02:00:00' ;**

$F_{SUM(price)} \sigma_{(2020-04-25 11:59:01 < datetime_c < 2020-04-26 02:00:00)}(userorder)$

2: How many users have ordered more than once from us?

**select count(counttable.uid) as multiple\_orders from (select uid, count(uid) as u from userorder group by uid) as counttable where counttable.u > 1;**

$Q_{multiple\_orders}(F_{count(counttable.uid)} \sigma_{counttable.u > 1}(counttable) Q_{counttable}(\Pi_{uid,u}(G) Q_u(F_{count(uid)}(G)) Q_G(\gamma_{uid}(userorder)))$

3: How many coupons is company with id 12 providing?

**Select count(\*) from coupons where cid = 12;**

$F_{COUNT(*)} \sigma_{cid = 12}(\text{coupons})$

4: What all restaurants are most popular for breakfast?

**Select distinct r.name from restaurants as r, usernutrition as u , userorder as o where u.uid = o.uid and o.rid = r.id and u.foodtype = 0;**

$$\Pi_{r.name, F_{count(*)}} \sigma_{u.uid = o.uid \wedge r.rid = o.rid \wedge u.foodtype = 0} (u \times o \times r) \varrho_r(restaurants) \varrho_o(userorder) \varrho_u(usernutrition)$$

5: How many users have verified us as their hospitals

**select count(\*) from trustedhospitals;**

$$F_{COUNT(*)} \varrho_{trustedhospitals}$$

6: How many users under us are at-risk

**select count(\*) from at\_risk\_users;**

$$F_{Count(*)} \varrho_{at\_risk\_users}$$

7: Which is the most popular dietician having the highest rating?

**Select MAX(no\_of\_reviews),rating from Dietician Order By no\_of\_reviews DESC, rating DESC;**

$$\Pi_{(F_{MAX(no\_of\_reviews)}, rating)} (d) F_{MAX(no\_of\_reviews)} \sigma (d) \varrho_d (\tau_{(no\_of\_reviews DESC, rating DESC)} (dietician))$$

8: What is the average cost for a meal preferably breakfast?

**Select Avg(p.price) from usernutrition as u, userorder as p where u.uid = p.uid and u.foodtype =0;**

$$F_{AVG(p.cost)} \sigma_{u.id = p.id \wedge u.foodtype = 0} (u \times p) \varrho_u(\text{usernutrition}) \varrho_p(\text{userorder})$$

9: Which is the best dietitian available below the average price?

**Select \* from dietician where rating in (select Max(rating) from dietician where price > (select AVG(price) from dietician));**

$$\sigma_{rating \in E} \varrho_E(\sigma_{price > F_{AVG(price)}}(\text{dietician}) F_{AVG(price)}(\text{dietician}))$$

10: what is the average calorie intake for all the users in breakfast dinner and lunch.

**Select foodtype, count(\*) from usernutrition group by foodtype;**

$$\Pi_{foodtype, F_{count(*)}(E)} (E) F_{count(*)}(E) \varrho_E(\gamma_{foodtype}(\text{usernutrition}))$$

# Week 7

## Embedded SQL Queries

### **Work Division:**

Hamzah, Archit : Embedded SQL Queries  
Udhvarg: Document Updation

## 1) Updating user data from edit-profile tab

```

import mysql.connector
from mysql.connector import Error

connection = mysql.connector.connect(
    host="bbmxoe6jlcdae5p5cusv-mysql.services.clever-cloud.com",
    user="u7iilamfbupfinv2",
    passwd="fg4Kd6aJ7aGcD5kQYxUa",
    database="bbmxoe6jlcdae5p5cusv"
)
cursor = connection.cursor(buffered=True)

# Get user updation data using ajax call from javascript

def updateData(name, dob, address, contact, uid):
    createCommand = '''UPDATE user
                      SET name=%s , dob=%s, address=%s, contact=%s
                      WHERE U_ID = %s'''
    value = (name, dob, address, contact, uid)
    cursor.execute(createCommand, value)
    connection.commit()

```

## 2) Extracting food data

```

for dish in final_list:
    dish_info = 'SELECT * from Food where dish_id = ' + str(dish[0])
    dish_info = executeQuery(dish_info)[0]
    dishes.append({
        'name': dish_info[1],
        'cal': dish_info[2],
        'recipe': dish_info[4],
        'cuisine': dish_info[3]
    })

```

## 3) Dietician data extraction

```

dieticianCommand = ''' select * from dietician where id = %s'''
healthcaredb.healthCareCursor.execute(dieticianCommand, (dieticianID,))
dieticianData = healthcaredb.healthCareCursor.fetchall()
dieticianData = list(dieticianData[0])
name = dieticianData[1].split()[1]
dataDict = {}
email = name+"@iiitd.ac.in"
dataDict['did'] = dieticianData[0]
dataDict['id'] = dieticianData[0]
dataDict['name'] = dieticianData[1]
dataDict['qualification'] = dieticianData[2]
dataDict['rating'] = dieticianData[3]

```

## 4) Get user's hired dieticians

```
def getMyDieticianData():
    dieticianCommand = ''' select * from User_Dieticians where User_ID = %s'''

    cursor.execute(dieticianCommand, (session['id'],))
    dieticianData = cursor.fetchall()
    myDieticianID = dieticianData[0][1]

    dieticianCommand = ''' select * from Dieticians where Dietician_ID = %s'''
    healthcaredb.healthCareCursor.execute(dieticianCommand, (myDieticianID,))
    dieticianData = cursor.fetchall()
```

## 5) Updating dietician data

```
def updateDietician():
    global userData
    if request.method == 'POST':
        dieticianID = request.form['did']
        uid = userData[0]
        updateCommand = '''UPDATE User_Dieticians
                           SET Dietician_ID = %s
                           WHERE User_ID = %s'''
        values = (dieticianID, uid)
        cursor.execute(updateCommand, values)
        connection.commit()
```

## 6) Hospital data fetching

```
def hospital():
    hospitalCommand = ''' select * from Hospital '''
    cursor.execute(hospitalCommand)
    hospitalData = cursor.fetchall()
```

## 7)Validate login attempt

```
def login():
    message = None
    if request.method == 'POST':
        emailID = request.form['user']
        password = request.form['pass']

        userDataCommand = """select * from users where email = %s"""
        userCursor.execute(userDataCommand, (emailID,))
        userData = userCursor.fetchall()
        print(password)
        if len(userData) == 0 or password != 'temp':
            return jsonify(listData = userData)

        userData = list(userData[0])
        session['logged_in'] = True
        session['id'] = userData[0]
        session['name'] = userData[1] + " " + userData[2]
```

## 8)Get dishes that user likes

```
def get_user_liking_dish(user_id):
    get_user_dishes = "select dish_id from user_dishes where U_ID = " + str(user_id)
    get_user_dishes = executeQuery(get_user_dishes)
```

# Week 8

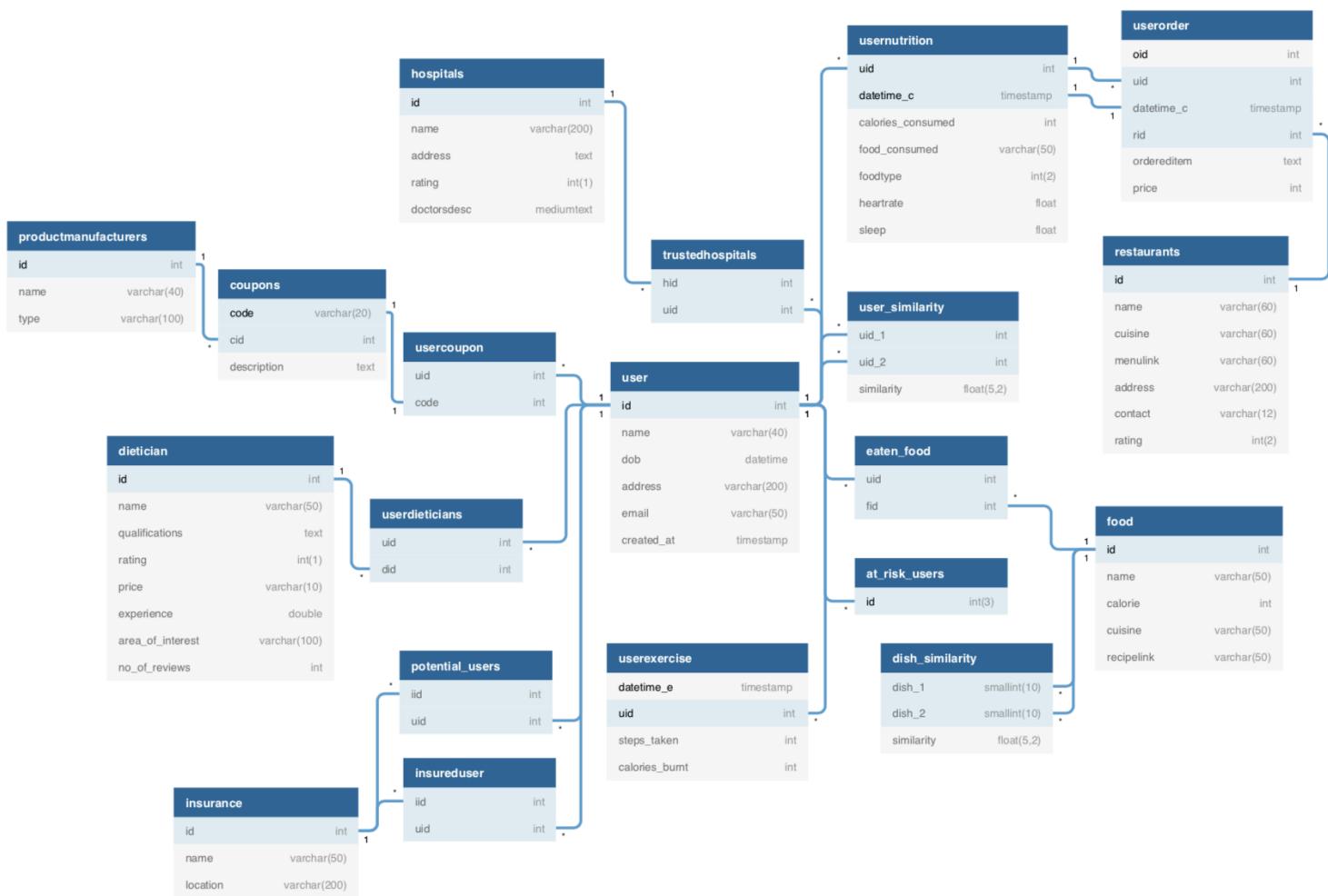
## ER Model

### Work Division:

**Udhvarg:** Normalisation, ER Model and Diagram w. Revisions, Document Updation, Refactoring population scripts and populating according to the new schema.

**Archit, Hamzah, Shaney, Gavish:** Refactoring population scripts and populating according to the new schema.

As we progressed with the development of our platform, we realised that the previous schema needed to be updated with additional tables, and normalised as well. The following is the updated ER diagram post-normalisation.



# Week 9-12

## Web App Development

### Work Division:

Archit : Back-end, Collaborative Filter and  
Platform Deployment

Hamzah: Back-End, Linking Back-end and  
Front-end

Shaney: Front-end of the Platform

Udhvarg: Team Management and Document  
Updation

## Bonus/Innovative Feature:

Fully Deployed Web-App built from scratch, implementing features like:

- 1) Easy to use interface to access data.
- 2) Implemented collaborative filters (Machine Learning) for getting personalised meal recommendations.
- 3) Hosted web-app provides easy user-accessibility on all devices.
- 4) User data provided to trusted hospitals for monitoring at-risk patients.
- 5) Incentivising a healthy lifestyle by providing coupons upon certain milestones.
- 6) Ordering food from verified healthy restaurants through our platform.

## Technologies used to deploy the Web-App

Front-End : HTML, CSS, JS, Bootstrap 4, JQuery

Back-End : Flask, JS, Ajax Calls, MySQL Connector

butternaan.herokuapp.com

Vineet Joshi

**Main**

**Dashboard**

**Dietician**

**Hospital**

**Food Recommendation**

**Nearby Restaurant**

**Enter your meal**

**My Coupons**

**Planout My Schedule**

**20** Weight

**5232** Today's Steps Count

**32** Calories

**54.17208** Heart rate

**Total Steps**

● No. of Steps

Date	Steps
30 Apr	5500
29 Apr	3000
28 Apr	7500
27 Apr	1000
26 Apr	8500

**Calories**

● Calories Consumed ● Calories Burnt

Date	Calories Consumed	Calories Burnt
30 Apr	4000	2500
29 Apr	3000	2000
28 Apr	3500	3000
27 Apr	2800	2000
26 Apr	4500	4000

**Suggested Workouts for You**

#	Workouts
1	Walking
2	Push-ups
3	Lunges

Vineet Joshi

**Main**

**Dashboard**

**Dietician**

**Hospital**

**Food Recommendation**

**Nearby Restaurant**

**Enter your meal**

**My Coupons**

**Planout My Schedule**

**Dietician Profile**

**Ms. Reema Madhian**

Public health nutrition

Employee ID : 4

Choose me as your Dietician

Phone: 9876543210

Email: Reema@iitd.ac.in

Birthday: 20th April

Address: A512 Barakhamba Road Delhi-11325

Gender: Male

**Education Informations**

- PostGraduate Diploma in Dietetics  
MBBS  
2010 - 2015
- AIIMS Rank  
1056  
2009 - 2010

**Experience**

- President & Welltech Solutions & Technology.  
May 2016 - Sept 2018
- Diet Consultant at Fitso  
Jan 2015 - May 2016

Health is Wealth

Vineet Joshi

Main

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Food Recommendations

Food name	Calories	When?	Cuisine	Recepie (You may cook)
Paneer Parantha	228.0	Morning	Indian	<a href="https://iitd.ac.in/paneer_parantha">https://iitd.ac.in/paneer_parantha</a>
Pyaaz Parantha	200.0	Morning	Indian	<a href="https://iitd.ac.in/pyaaz_parantha">https://iitd.ac.in/pyaaz_parantha</a>
"Mix Parantha" (Something New)*	250.0	Morning	Indian	<a href="https://iitd.ac.in/mix_parantha">https://iitd.ac.in/mix_parantha</a>
Keema Paratha Recipe-Stuffed keema paratha	310.0	Lunch	Indian	<a href="https://iitd.ac.in/keema">https://iitd.ac.in/keema</a>
Lasagna	310.0	Lunch	Italian	<a href="https://iitd.ac.in/lasagna">https://iitd.ac.in/lasagna</a>
Malpua -Sweet Indian Pancakes (Something New)*	310.0	Lunch	Indian	<a href="https://iitd.ac.in/malpua">https://iitd.ac.in/malpua</a>
"Mix Parantha"	250.0	Snacks	Indian	<a href="https://iitd.ac.in/mix_parantha">https://iitd.ac.in/mix_parantha</a>
Butter Chicken/ Murgh Makhani	277.0	Snacks	Indian	<a href="https://iitd.ac.in/murgh">https://iitd.ac.in/murgh</a>
"Matar Paneer" (Something New)*	280.0	Snacks	Indian	<a href="https://iitd.ac.in/matar_paneer">https://iitd.ac.in/matar_paneer</a>
Butter Chicken/ Murgh Makhani	277.0	Dinner	Indian	<a href="https://iitd.ac.in/murgh">https://iitd.ac.in/murgh</a>
Mc aloo Tikki	280.0	Dinner	Indian	<a href="https://iitd.ac.in/tikki">https://iitd.ac.in/tikki</a>
Butter Chicken/ Murgh Makhani (Something New)*	277.0	Dinner	Indian	<a href="https://iitd.ac.in/murgh">https://iitd.ac.in/murgh</a>

Health is Wealth

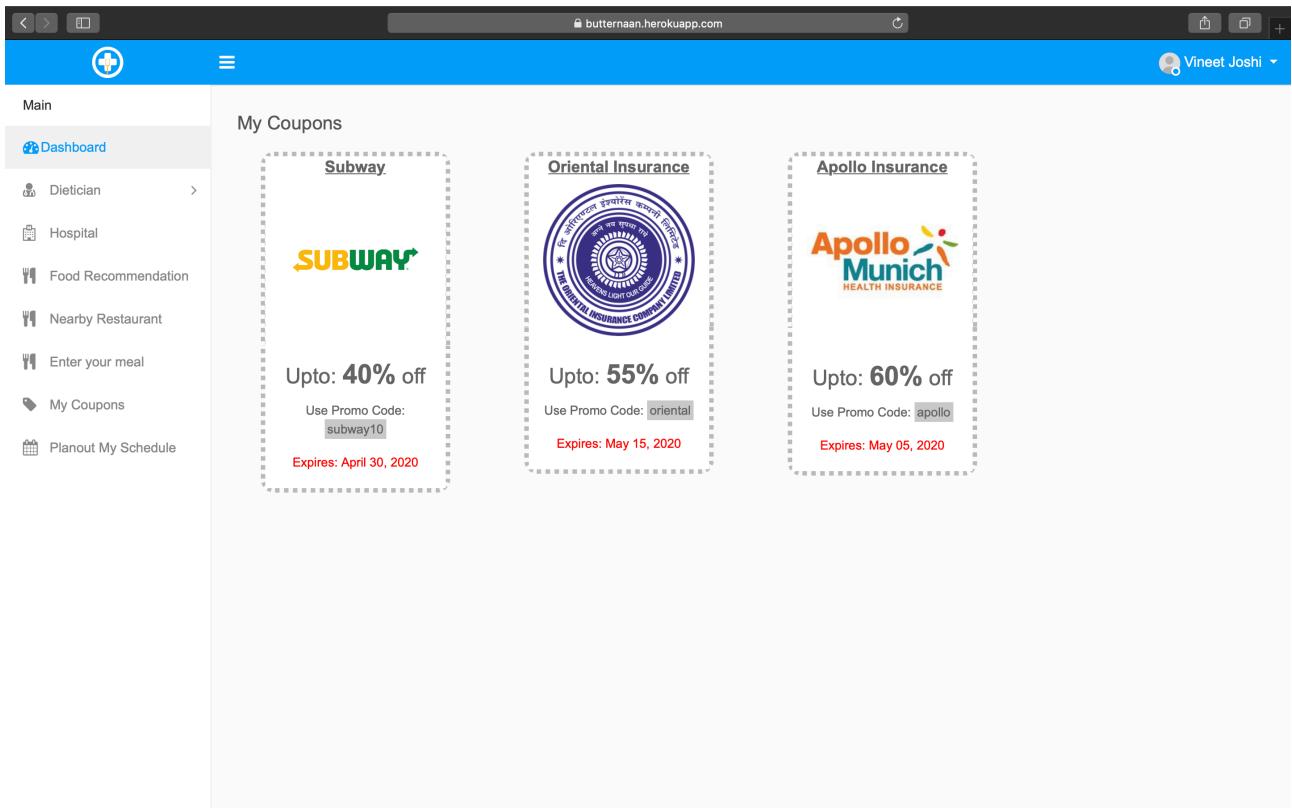
Vineet Joshi

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Nearby Restaurants

Rating	Name	Address	Timing
3 star	Big Chill	Saket	8:00 AM - 10:00 PM
1 star	Brown Sugar	Mount Kailash	8:00 AM - 10:00 PM
3 star	BukharaCult Fit	GK2	8:00 AM - 10:00 PM
4 star	Carnatic Cafe	Chirag Delhi	8:00 AM - 10:00 PM
2 star	All American Diner	Moti Nagar	8:00 AM - 10:00 PM



Find the hosted web-app over at: <https://butternaan.herokuapp.com/login>

Find the related resources over at [https://github.com/nahimilega/Butter\\_Naan](https://github.com/nahimilega/Butter_Naan)