DIET SMART

A SMART DIET CONSULTANT

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GROUP 8
MIS 6308.002
Systems Analysis and Project Management
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EXECUTIVE SUMMARY

Health is the most important aspect of a person's life. Diet is an entity which plays a major role in maintaining good health. Current online diet planners are only capable of organising the diet but never tells the quality or quantity of diet and has no proper tracking mechanism for diet. The intended customer for this platform is the weight watchers. This online platform focuses to bring together dieticians and customers under one roof. The customers will have the opportunity to evaluate the quality and quantity of their current diet from their home computer or their phone. The platform also helps in reorganising the existing diet eliminating the need for choosing a new diet plan which most people find hard to adapt.

The platform aims at using three different class of data. Firstly, the existing diet plan of the customer. Secondly, the suggested diet formats and plans from diet experts. Finally, weight, height and real-time measures like heart rate and calories burnt per day of the customer. Using the data collected, the system will calculate a diet coefficient (value indicating quality of diet) for the customer. Based on the diet coefficient measure, the customers can follow the diet suggested by the system or consult the diet expert through the platform. Another feature is to control the quantity of the daily diet through the data collected in real-time, the system will daily notify the customers to increase or decrease the quantity of diet.

The platform is intended to operate across desktop and mobile platforms offering M-health across IOS and Android Platforms. After a thorough Research it was identified that market of M-Health Platforms is rapidly increasing all over US as well as globally.

The platform intends to give an accurate diet plan to customers at a minimal cost, speed and convenience. The signup process is free of cost for this platform. New signed up users have the opportunity to evaluate the quality of their existing diet free of cost. The process involves inputting their current diet details into the system. The users have the opportunity to avail more services through annual or monthly subscriptions. The customers with the annual subscription will get a smart watch at 50% off and first consultation with dietician free of cost.

PROBLEM STATEMENT

Problem

The existing systems mostly only concentrate on the category of generic diets and is not focused on exact diet need of customer

Current systems provide a brand-new diet plan to customers which they find difficult to adapt to. These systems fail to control quantity of diet in real time.

Existing Diet platforms fail to keep their users motivated or remain in their system.

Objectives and Solution

The Diet SMART application provides a unified platform to three categories that people fall under.

- Weight Gain
- Weight Loss
- Maintain existing weight

The application provide an option to modify the existing diet plan or customization. We do provide a feature to consult a qualified dietician for the customers who fall under medical diet category. This also includes an awareness creation function, by prompting diet tips and health quotes. Providing the nutrition facts for each food consumed by the customer. Some high listed features are given below.

1) Diet Coefficient, Quantity Control Feature

The diet coefficient value will determine the quantity & quality of diet taken by the individual.
This feature will make use of real time data collected from smart watches along with periodic question & answer data (What is the current weight?, What is the current waist length? Etc.) collected from user to re-calculate the diet coefficient and notify the customer on further steps.
We are calculating the Basal Metabolic Rate (BMR) and calories, we will categorize the diet plans for the customer and list all the plans suitable for the customer. The platform offers customisation where he/she can choose his diet options. Based on diet coefficient value the platform suggests a consultation with the dietician and the customer has option to choose or deny.
Additionally the customer can manually choose to schedule their respective appointments.

2) Chabot Feature

The customer has the opportunity to get clarify his diet related query, Schedule or View appointments.

- Substitute for the current diet e.g. – customer asking for substitute for his current diet meal
- When can I get/reschedule an appointment?
- Periodic diet tracker to view the current state and how many days left to complete subscription
- Customer support
- Activity Tips
- If the chat-bot is not able to handle certain questions, it will be redirected to a representative.

3) Rewards Feature

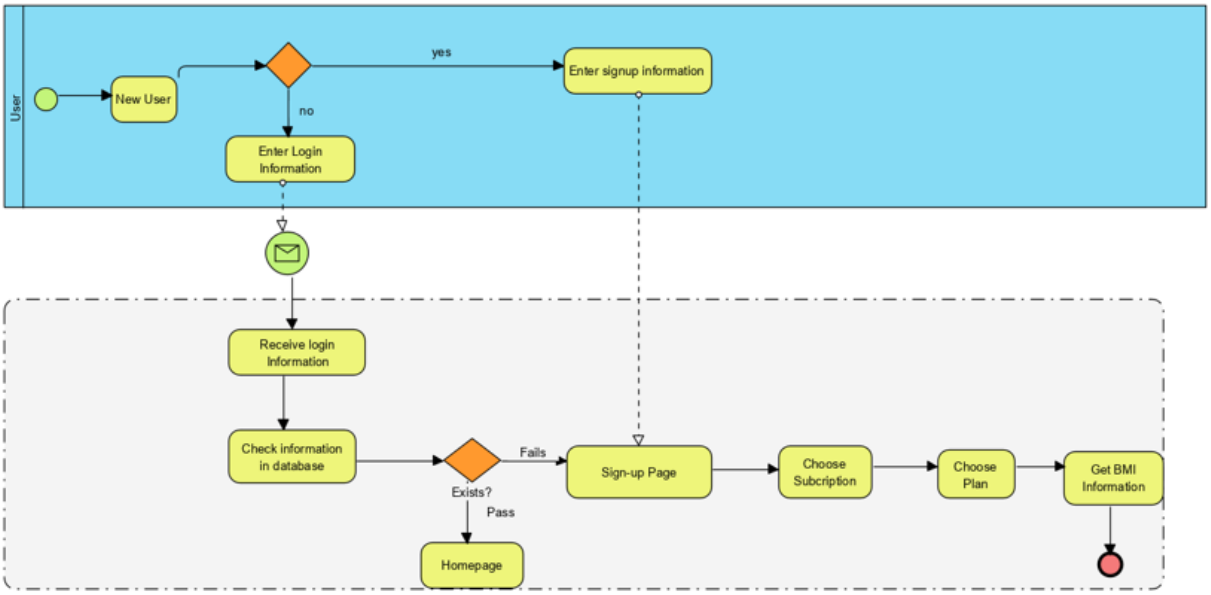
The existing customers have an opportunity to join the smart diet campaign and will earn rewards. The rewards program encourages the customer to stick to the diet plan and give periodic updates on their diet status.The customer has option to refer other through referral codes and earn additional rewards. Also the customers who choses gold level subscriptions are entitled to more reward points based on subscription time period. These reward points can be redeemed to get cash backs, discounts and gifts.

Scope

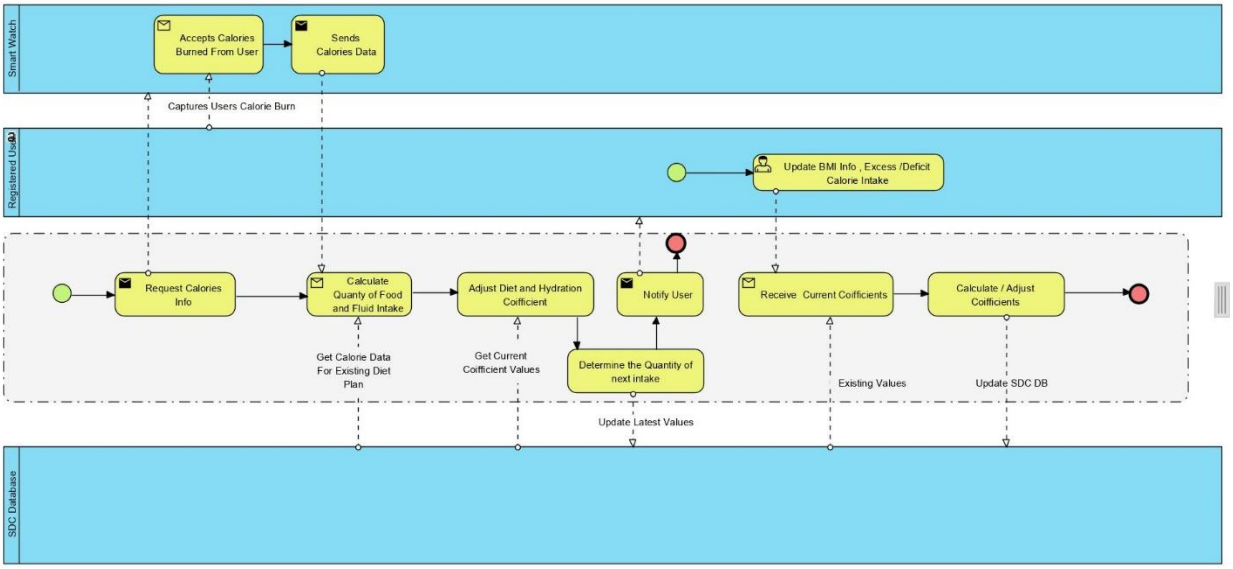
Estimated Cost for Entire System including hosting Infrastructure – 1M
Estimated Time of Implementation – 5 Months
The Application and its associated data will be hosted in Cloud (Microsoft Azure)

BUSINESS PROCESS MODEL

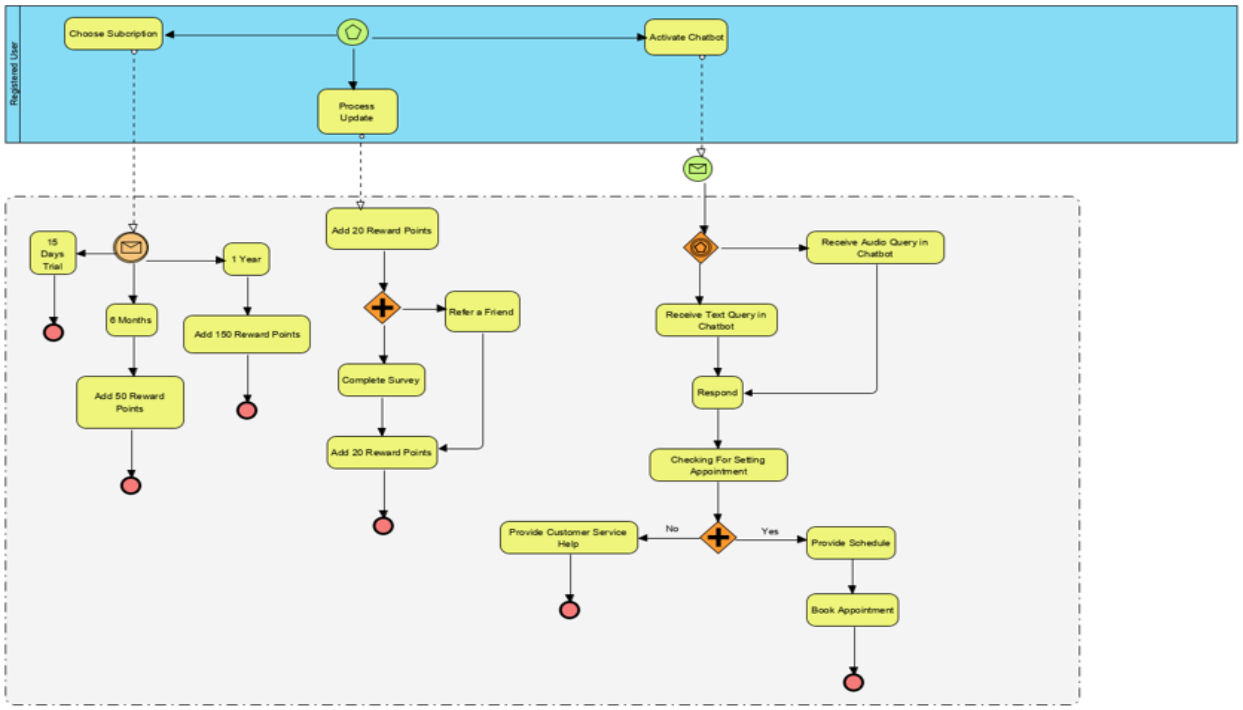
BPMN for Users' Signup/registration & Sign in



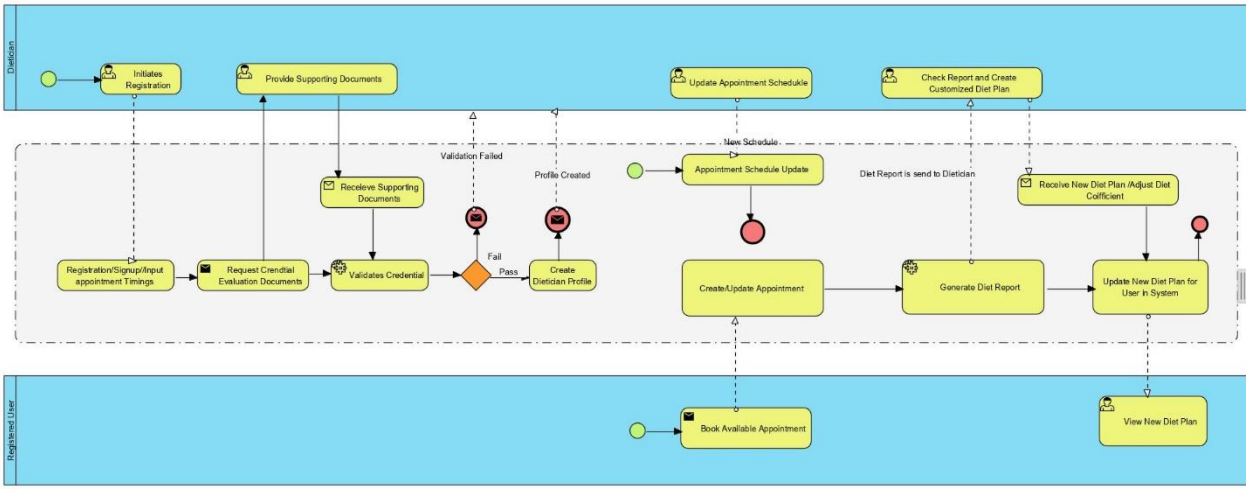
BPMN – Calorie Intake - Quantity Control - Coefficients Calculation



BPMN For Rewards & Chatbot

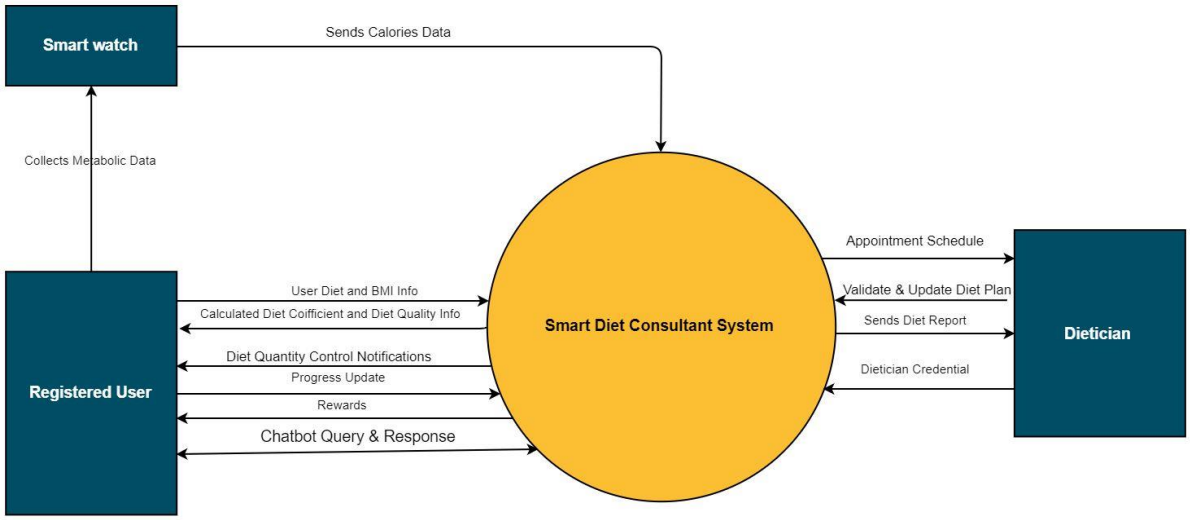


BPMN for Dietician Tasks and Appointments



CONTEXT DIAGRAM

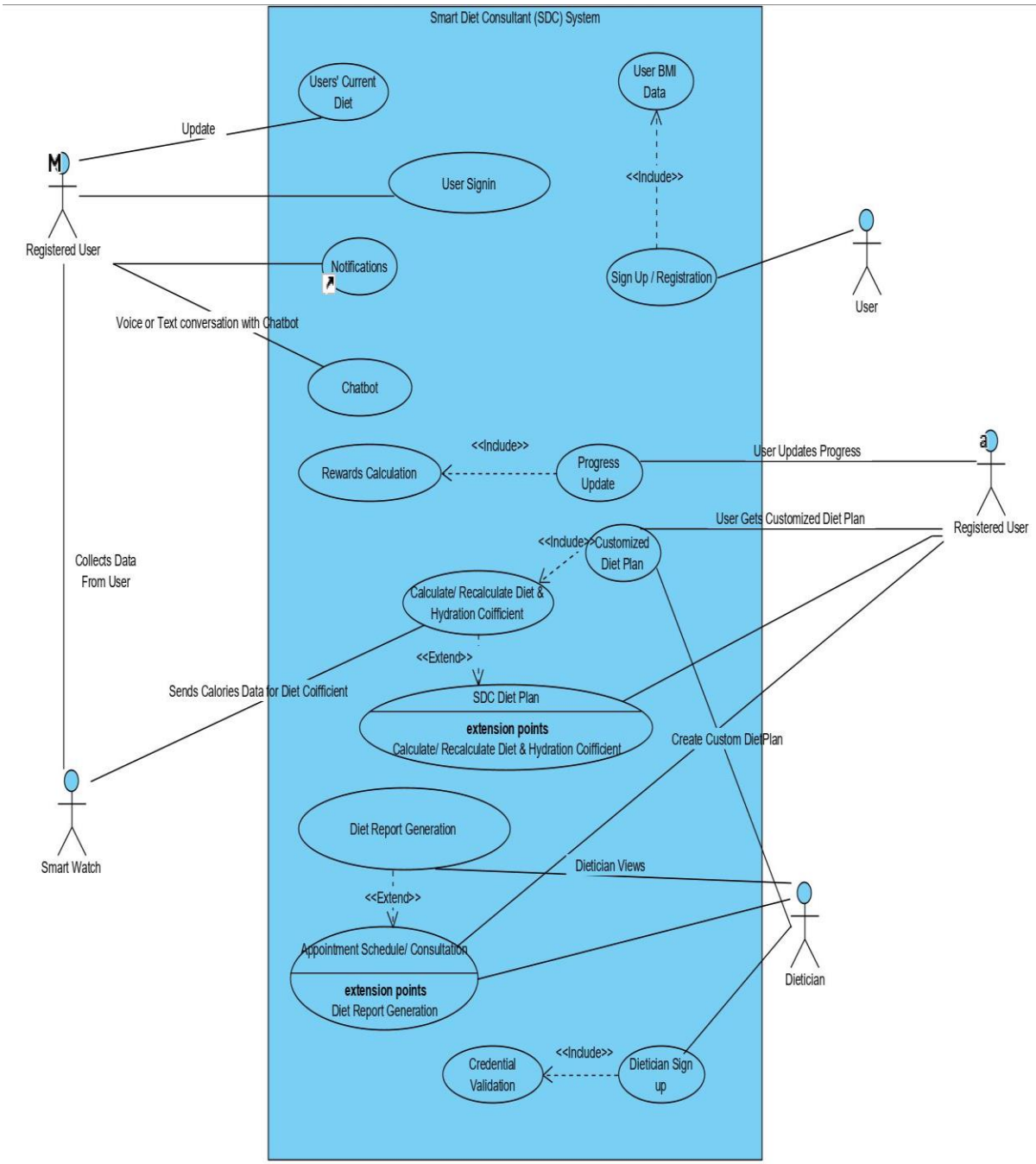
The below diagram illustrates the context diagram which gives an overall functionality of the proposed system:



USE CASE DIAGRAM

The below diagram represents the use case for the proposed system. The actors of the system are Registered User, User, Smart watch, Dietician
The use cases involved are

- Signup/Registration
- Notifications
- Chat-bot
- Rewards
- Customized Diet Plan
- Progress Update
- Diet Report
- Application Schedule/Consultation
- Dietician Signup


Smart Diet Consultant (SDC) System
Users' Current Diet
User BMI Data
Update
User Signin
<<Include>>
Registered User
Notifications
Sign Up / Registration
User
Voice or Text conversation with Chatbot
Chatbot
<<Include>>
Rewards Calculation
Progress Update
User Updates Progress
User Gets Customized Diet Plan
Registered User
<<Include>>
Customized Diet Plan
Collects Data From User
Calculate/ Recalculate Diet & Hydration Coifficient
<<Extend>>
Sends Calories Data for Diet Coifficient
SDC Diet Plan
extension points
Calculate/ Recalculate Diet & Hydration Coifficient
Create Custom Diet Plan
Smart Watch
Diet Report Generation
Dietician Views
<<Extend>>
Appointment Schedule/ Consultation
extension points
Diet Report Generation
Dietician
Credential Validation
<<Include>>
Dietician Sign up

USE CASE DESCRIPTIONS

Use Case Name: Signup
Primary Actor: User

Stakeholders: User

Description: When a user wants to become a member

Trigger: Click on the signup button

Relationships:

Includes: User BMI Data
Extends:

Normal flow of events:

1. User launches app
2. User inputs First Name, Last Name, Phone number, Email Address and password
3. User clicks on 'Create Account'
4. User continues navigating through the app

Exceptional Flow:

1. If the user enters invalid data, then 'Create Account' fails

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Use Case Name: User BMI Data
Primary Actor: System

Stakeholders: Member

Description: Enter the current BMI Data

Trigger: User signs up

Relationships:

Includes:
Extends:

Normal flow of events:

1. Execute the User Signup use case
2. Accept the BMI values

Exceptional Flow:

Use Case Name: Current Diet
Primary Actor: Member

Stakeholders: Member

Description: Chatbot functions as an assistant

Trigger: Member can update the current diet

Relationships:
Includes:
Extends:

Normal flow of events:
1. Member clicks on update current diet
2. All data entered is saved

Exceptional Flow:

Use Case Name: Sign-in
Primary Actor: Member

Stakeholders: Member

Description: To navigate through the app

Trigger: Member logs-in with user ID and password

Relationships:
Includes:
Extends:

Normal flow of events:
1. Member keys in the registered ID and password
2. The system authenticates the ID and password
3. Member can access and update any information through the app

Exceptional Flow:

1. **If the authentication fails, an error message pops up**

Use Case Name: Chatbot
Primary Actor: System

Stakeholders: Registered User

Description: Chatbot functions as an assistant

Trigger: When user wishes to communicate

Relationships:
Includes:

Extends:

Normal flow of events:

4. User clicks on the chatbot present at the bottom of the screen
5. User can either communicate via text or voice

Exceptional Flow:

Use Case Name: Notifications
Primary Actor: System

Stakeholders: Registered User

Description: User is sent a reminder and health tips using notifications

Trigger: Timely reminder from the system. When the diet coefficient changes, the user is notified to adjust calorie intake.

Relationships:

Includes:
Extends:

Normal flow of events:

1. User If the calorie intake is not optimum, the user is notified to correct the calorie intake

Exceptional Flow:

Use Case Name: Surveys/Progress Update
Primary Actor: System

Stakeholders: Member

Description: User can make note of the diet progress, can log in the changes through carefully formulated questions by the system

Trigger: When the user wants to update the progress

Relationships:

Includes: Rewards Calculation
Extends:

Normal flow of events:

1. **User clicks on 'Update Progress' option from the app**
2. **App navigates to the questionnaire**
3. **User answers all the questions.**
4. **Rewards are earned for updating progress, System calculates reward points**

Exceptional Flow:

Use Case Name: Dietician Signup and validation
Primary Actor: System

Stakeholders: Dietician

Description: A dietician can sign up using the app

Trigger: When the dietician wants to join the platform

Relationships:

Includes: Validation

Extends:

Normal flow of events:

1. Dietician launches app
2. He/she inputs First Name, Last Name, Phone number, Email Address and password
3. He/she clicks on 'Create Account'
4. He/she will update the required documents for the validation to occur

Exceptional Flow:

1. **When the documents updated don't meet the required criteria, account is not created.**

Use Case Name: Display Customized Diet Plan
Primary Actor: Dietician

Stakeholders: Member

Description: The dietician provides customized diet plan

Trigger:

Relationships:

Includes: Calculate/Recalculate Diet and hydration co-efficient

Extends:

Normal flow of events:

1. Execute sign-in use case
2. Execute Calculate/Recalculate Diet and hydration co-efficient use case
3. Display the customized diet plan

Exceptional Flow:

Use Case Name: Calculate/Recalculate Diet and hydration co-efficient
Primary Actor: System

Stakeholders: Smart Watch

Description: Calculation of diet co-efficient through values provided from smart watch

Trigger: When the member consumes a meal or exercises

Relationships:

Includes:
Extends: SDC Diet Plan

Normal flow of events:

1. The data is collected from the smartwatch as and when the member eats or exercises
2. The co-efficient is calculated based on the algorithm using the customized diet plan

Exceptional Flow:

3. If the user does not want to follow the Customized diet plan, then execute SDC Diet Plan use case.

Use Case Name: Diet Report Generation
Primary Actor: Dietician

Stakeholders: System

Description: The dietician views the diet report

Trigger: System sets up an appointment if the co-efficient is not up to the mark

Relationships:

Includes:

Extends: Schedule Consultation

Normal flow of events:

1. Execute Calculate/Recalculate Diet and hydration co-efficient use case
2. A report is generated based on the diet followed by member.

Exceptional Flow:

1. If the diet coefficient varies slightly than normal, execute Schedule consultation use case

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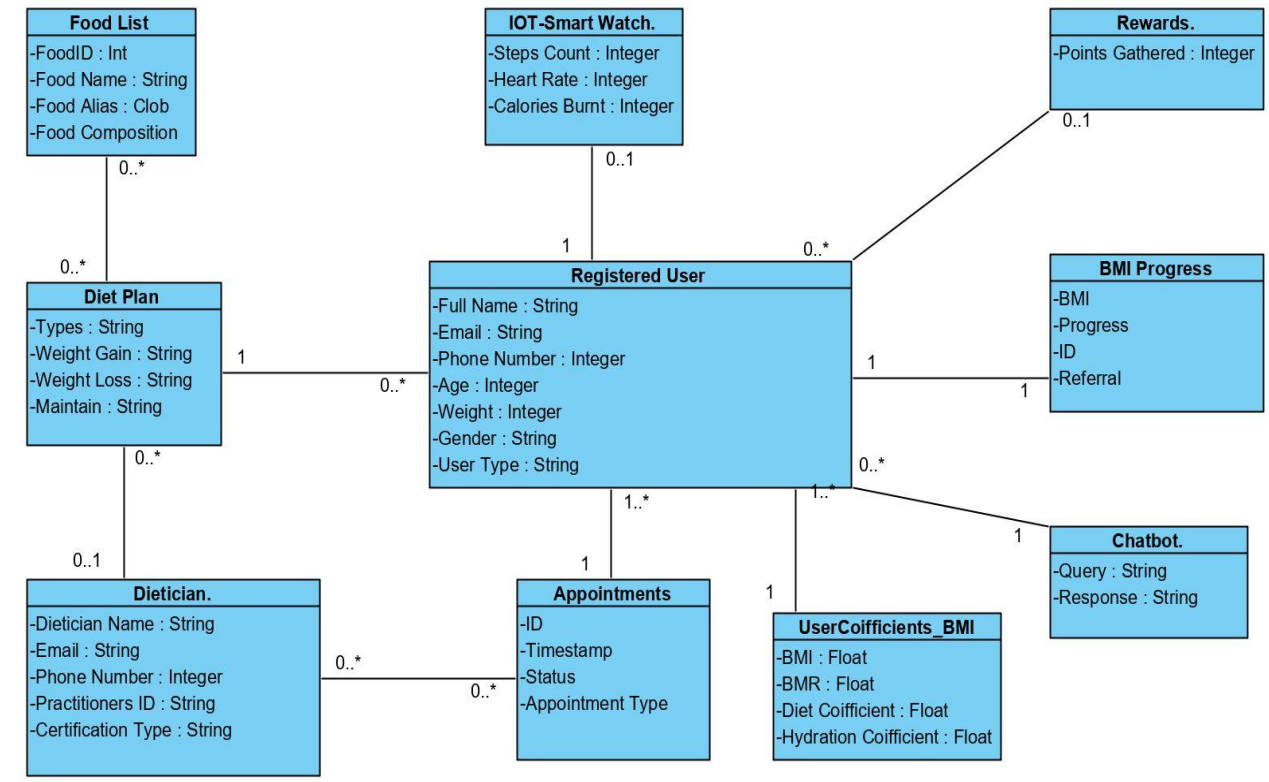
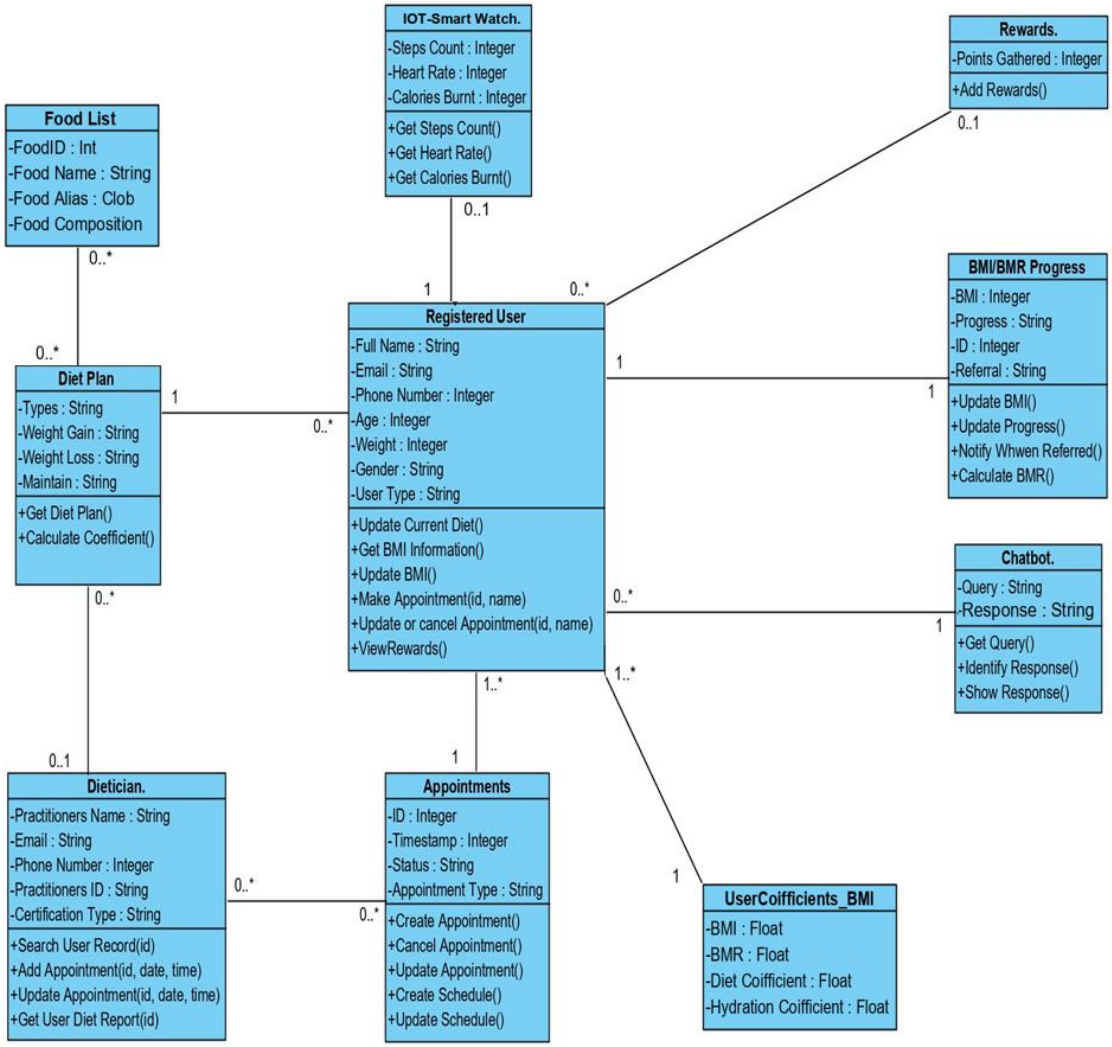
DATA DICTIONARY & CLASS DIAGRAM WITHOUT METHODS

Signin = Username+password
Registered User = Name + BMI + Age + Gender + chatbot + UserType + Appointments+User Coifficients
BMI Progress = BMI + Progress + Referral
BMI = Weight + Height
DietPlan = Types+WeightGain+WeightLoss+Maintain
Types = [Generic | Custom]
Reward = Points Gathered
Chatbots = Query
Query = [Appointment Schedule | BookAppointment | Customer Support]
Appointment Schedule = DieticianName + Appointments
BookAppointment = DieticianName + Appointments
Dietician = Name+Email+Phone Number+CBR ID + Certification Type + Schedule
Appointments = {Datetime +Status+Appointment Type}
Food List = 0{FoodID+FoodName+Food Alias+Food Composition}*
Food Composition = {Calorie+Protein+Vitamin_Mineral+Fat+Other Content}

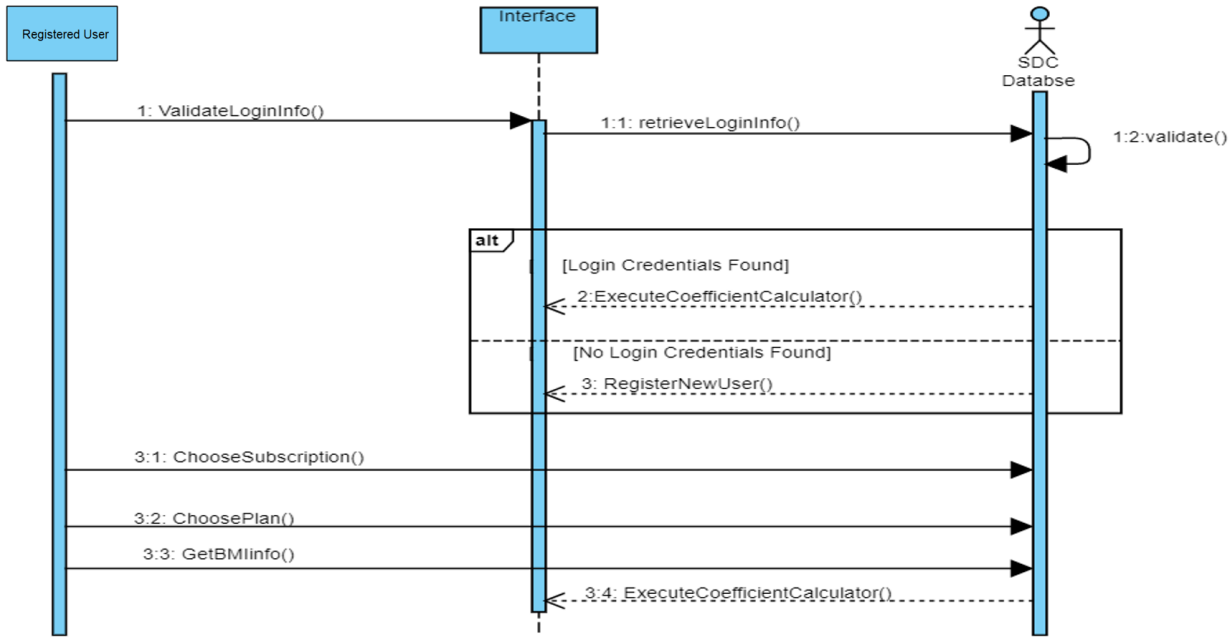


CLASS DIAGRAM WITH METHODS

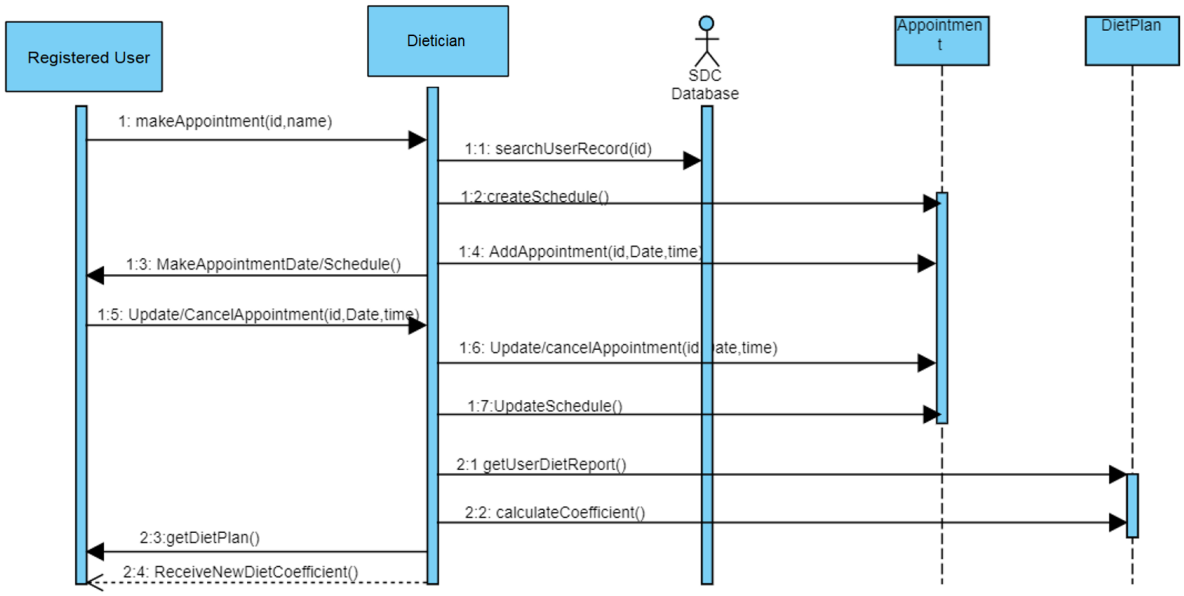


SEQUENCE DIAGRAM

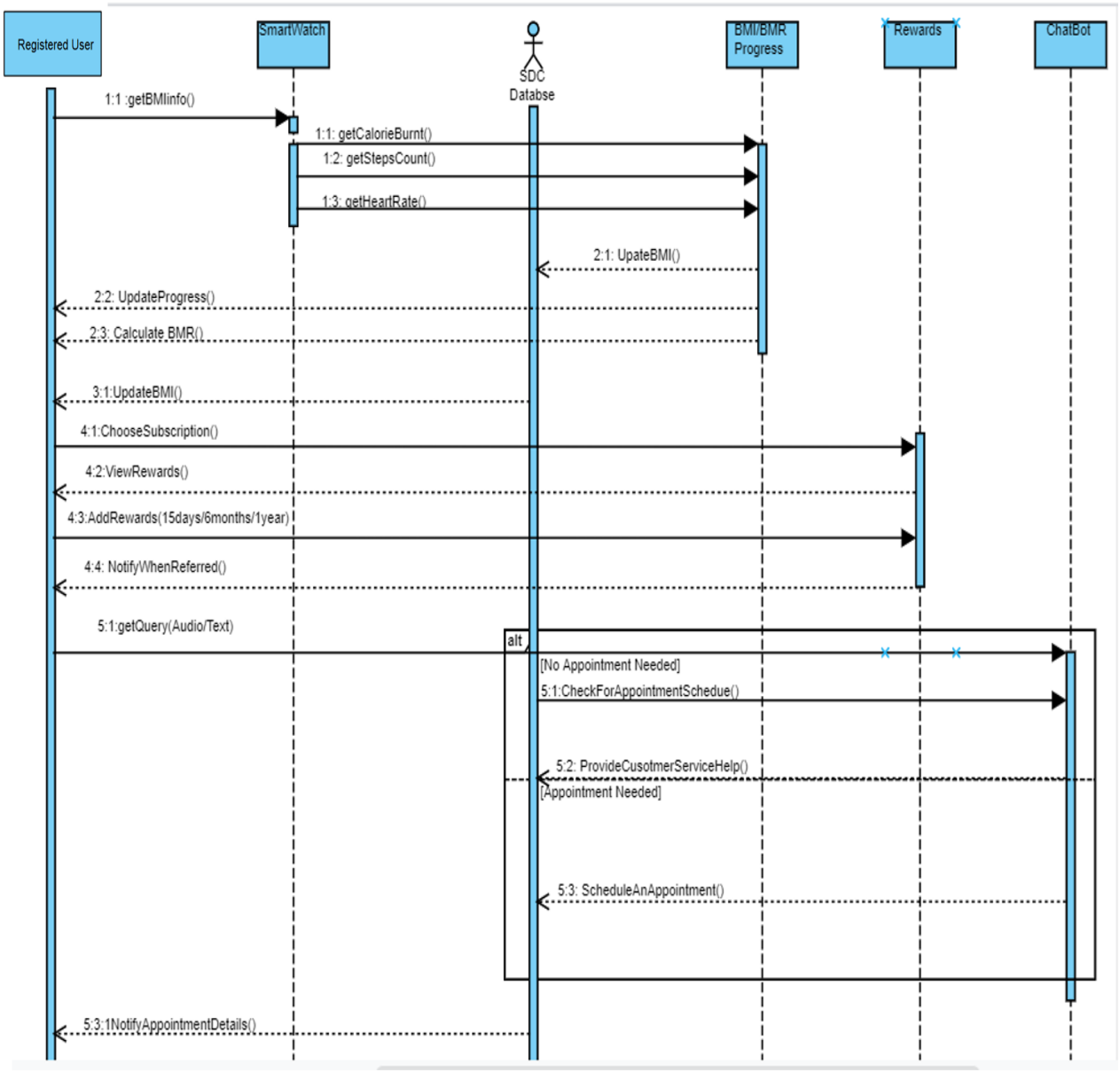
Sequence diagram for user



Sequence Diagram Dietician



Sequence Diagram for diet plan, rewards, chat-bot



FUNCTIONAL SPECIFICATION

Customized Diet Plan Option and Dietician Consultation

- The SDC System Gives an Option to the user to make appointments with dietician.
- The dietician has the opportunity to View the Diet Report for the user and base on the report, the dietician can enter a customized diet plan to the system.

Chat-bot Functionality

The system gives an option to the user to interact with the in-built chat-bot (Virtual Assistant). The chat-bot offers following functionalities.

- View dietician appointment schedule.
- Schedule appointment.
- Customer support 24x7

Rewards Functionality

User is able to view and redeem available rewards.

User is able to recommend a new person into SDC to earn rewards using Signup code

Update Progress Functionality

User has the option to update progress on following.

- Update BMI Values – Height and Weight
- User has option to update on any deviation from diet plan.
- Periodic Progress Update will earn user rewards

Diet Report View Option

Dietician has option to View Diet Report of the user.

Standard Diet Plan options

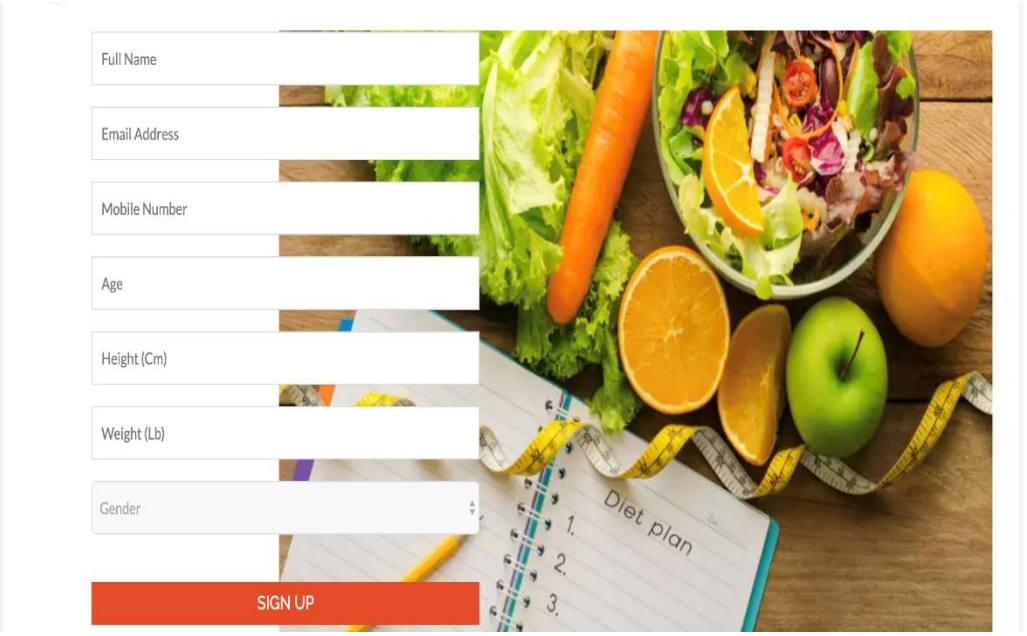
User has option to select standard diet plans for weight loss, weight gain, balanced and keto.

Diet Intake Adjustment – (Quantity Control)

The Platform takes the latest value of calories burned after the previous food intake to identify excess or deficit in the allowed limit. The Platform displays an adjusted meal plan for next intake from the calculated values

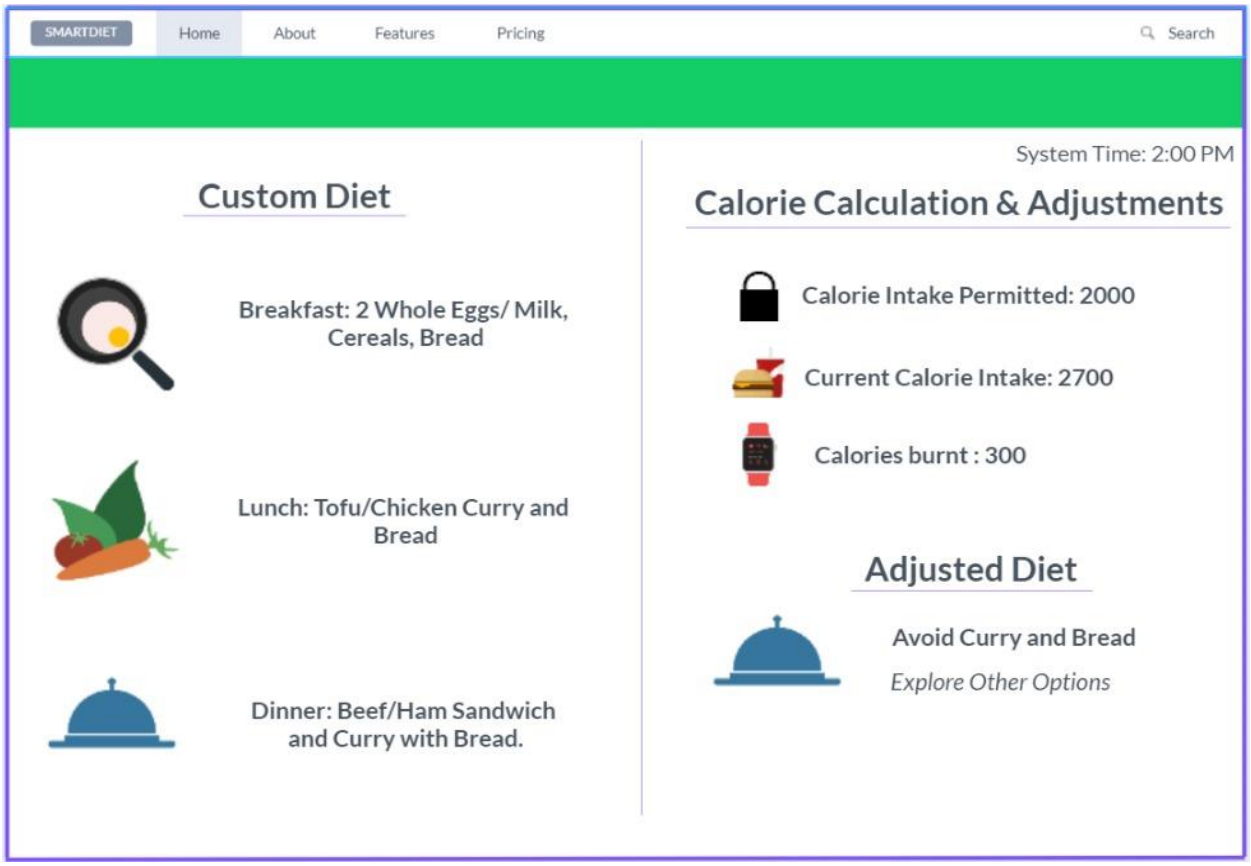
INTERFACE DESIGN

User Signup Page



Dietician Signup Page

Diet Plan and Quantity Control Interface



This UI has 3 major modules.

Left Pane

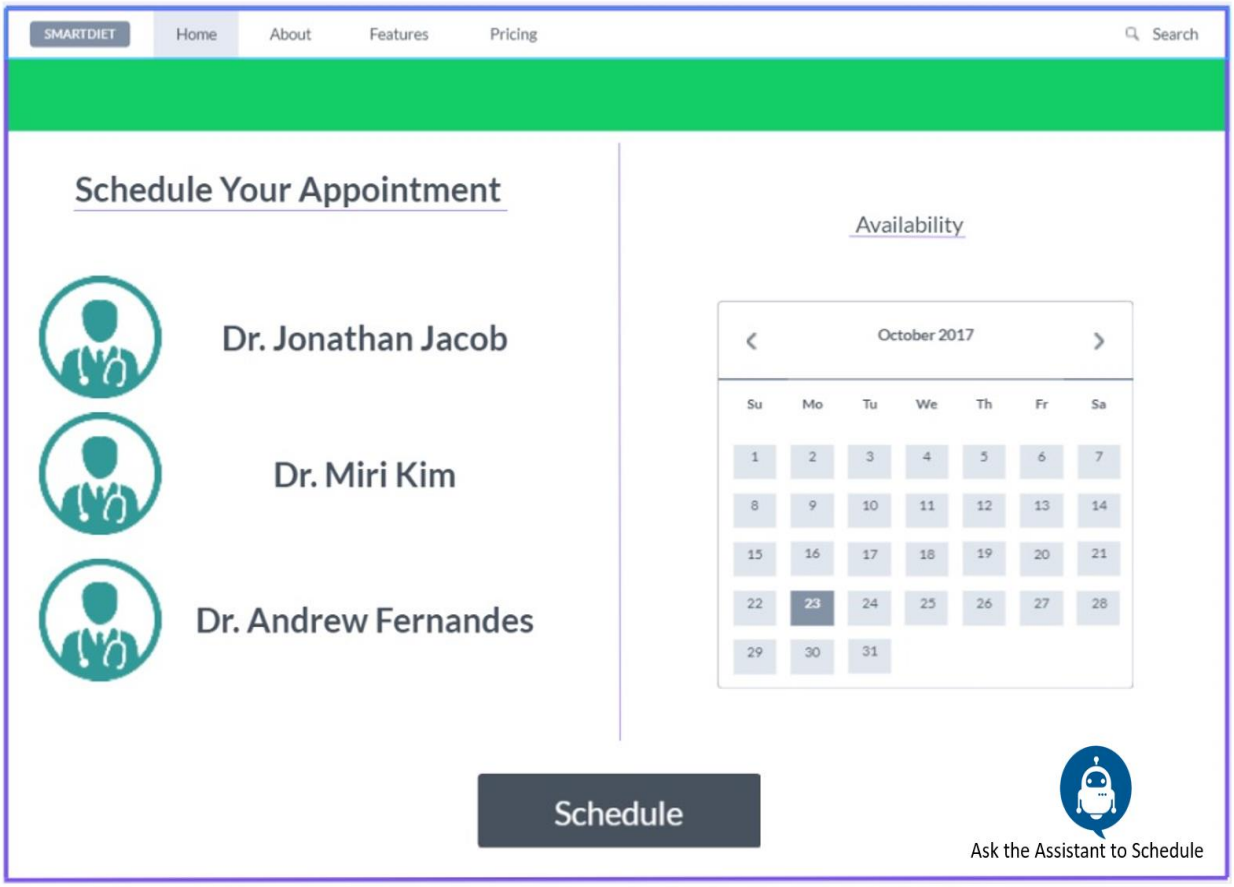
Custom Diet of the User for Breakfast , Lunch and Dinner

Right Pane

Calorie Calculation and Adjustment – Contains Permitted Calorie Intake for next meal. Current Calorie Intake and the Latest Calorie burn reading from Smart watch.

Adjusted Diet – This shows the quantity control feature.

Dietician Appointment and Schedule Interface



This UI has 3 major modules.

Left Pane

List of dieticians available for appointment schedule.

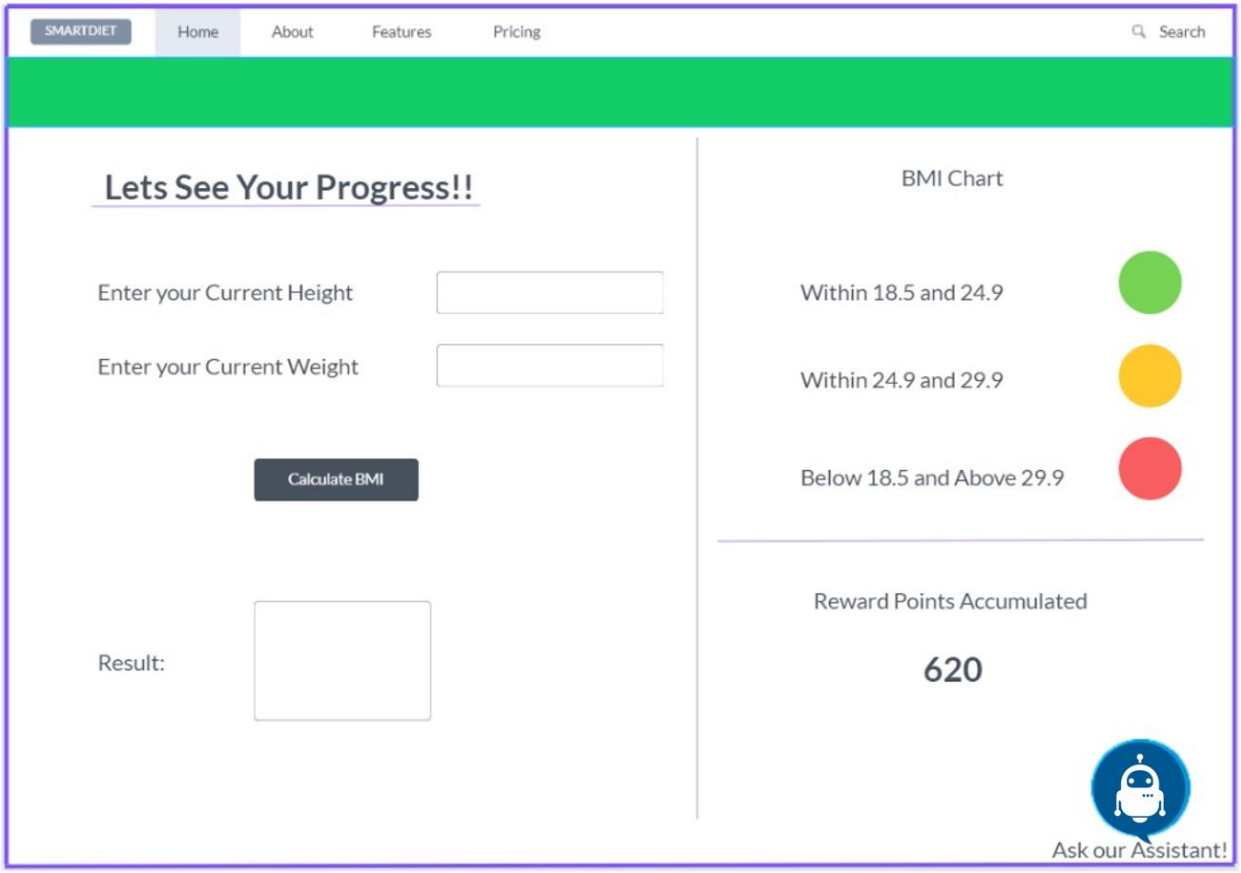
Right Pane

Availability of a dietician

Bottom Right

Assistant – Takes voice or Text input. Major functionality to display or schedule appointment , Customer Queries and Support.

User Progress Update , Rewards & Chat-bot Interface



This UI has 4 major modules.

Left Pane

Progress Update Feature

Right Pane

BMI Chart

Rewards Points Accumulated in Total

Bottom Right

Assistant – Takes voice or Text input. Major functionality to display or schedule appointment, Customer Queries and Support.

DATABASE DESIGN

Database Table List & Attributes

DATABASE DESIGN				
#	**Table Name**	**Column Name**	**Data Type**	**Keys & Constraints**
1	User_Profile	User_ID	INT	Primary Key
		User_Name	VARCHAR	Not Null
		Age	INT	Not Null
		Gender	VARCHAR	Not Null
		EmailID	VARCHAR	Not Null
		PhoneNumber	NUMBER	Not Null
		User_rewards_id	INT	Foreign Key (User_Rewards)
		diet_plan_id	INT	Foreign Key (Diet_Plan)
		Query_ID	INT	Foreign Key (User_Catbot_Query)
		Coifficients_key	INT	Foreign Key (User_Coifficients)
		appointment_id	INT	Foreign Key (User_appointments)
		User_IOT_ID	INT	Foreign Key (User_IOT_Smartwatch)
		Diet_type	VARCHAR	
		Created_Timestamp	DATETIME	Not Null
2	User_BMI	User_BMI_ID	INT	Primary Key
		User_ID	INT	Foreign Key (User_Profile)
		Height	FLOAT	Not Null
		Weight	FLOAT	Not Null
		BMI	FLOAT	Not Null
		Referral	VARCHAR	
		Created_Timestamp	DATETIME	Not Null
		Last_Updated_Timestamp	DATETIME	Not Null
3	User_IOT_Smartwatch	User_IOT_ID	INT	Primary Key
		Steps_count	FLOAT	Not Null
		Heart_Rate	FLOAT	Not Null
		Latest_Calorie_Value	FLOAT	Not Null
		Previous_Calorie_Value	FLOAT	Not Null
		Created_Timestamp	DATETIME	Not Null
		Last_Updated_Timestamp	DATETIME	Not Null
4	User_Rewards	User_rewards_id	INT	Primary Key
		Reward_points	INT	Not Null
		Created_Timestamp	DATETIME	Not Null
		Last_Updated_Timestamp	DATETIME	Not Null

5	User_appointments	appointment_id	INT	Primary Key
		Appointment_date_stamp	DATETIME	Not Null
		Request_Created_timestamp	DATETIME	Not Null
		Record_added_time_stamp	DATETIME	Not Null
		Appointment_Status	VARCHAR	Not Null
		Appointment_type	VARCHAR	Not Null
		User_comments	VARCHAR	Not Null
6	User_Coifficients	Coifficients_key	INT	Primary Key
		diet_coifficient	FLOAT	Not Null
		hydration_coifficient	FLOAT	Not Null
		BMA	FLOAT	Not Null
		Last_Updated_Timestamp	DATETIME	Not Null
7	User_Chatbot_Query	Query_ID	INT	Primary Key
		Query	CLOB	Not Null
		Response	CLOB	Not Null
		Created_Timestamp	DATETIME	Not Null
8	Dietician_profile	dietician_id	INT	Primary Key
		Dietician_name	VARCHAR	Not Null
		Dietician_email	VARCHAR	Not Null
		Dietician_phone_number	NUMBER	Not Null
		Credential_status	VARCHAR	Not Null
		Practitioner_CBR_ID	VARCHAR	Not Null
		Certification_Type	VARCHAR	Not Null
		Created_Timestamp	DATETIME	Not Null
		Last_Modified_Timestamp	DATETIME	Not Null
9	Dietician_appointment_schedule	schedule_id	INT	Primary Key
		appointment_id	INT	Foreign Key (User_appointments)
		Dietician_ID	INT	Foreign Key (Dietician_Profile)
		Month	VARCHAR	
		week	INT	
		year	INT	
		Sunday	VARCHAR	
		Monday	VARCHAR	
		Tuesday	VARCHAR	
		Wednesday	VARCHAR	
		Thursday	VARCHAR	
		Friday	VARCHAR	
		Saturday	VARCHAR	
		Created_timestamp	DATETIME	Not Null
		Last_Modified_Timestamp	DATETIME	Not Null

10	Food_list	food_id	INT	Primary Key
		Food_name	VARCHAR	Not Null
		food_alias_name	VARCHAR	
		Minimum_unit	FLOAT	
		Quantity	INT	
		Calorie	FLOAT	
		Protein	FLOAT	
		Vitamin	VARCHAR	
		Mineral	FLOAT	
		Fat	FLOAT	
		other_content	VARCHAR	
		created_timestamp	DATETIME	Not Null
		last_updated_timestamp	DATETIME	Not Null
11	Diet_plan	diet_plan_id	INT	Primary Key
		Dietician_id	INT	Foreign Key (Dietician_Profile)
		Diet_type	VARCHAR	Not Null
		User_choice_diet	VARCHAR	Not Null
		food_quantity	INT	Not Null
		Food_intake_time	CLOB	Not Null
		Last_Updated_Timestamp	DATETIME	Not Null
12	Diet_Plan_food_list_Reference	Record_key	INT	PrimaryKey
		diet_plan_id	INT	Foreign Key (Diet_Plan)
		food_id	INT	Foreign Key (Food_List)
		created_timestamp	DATETIME	Not Null
		last_updated_timestamp	DATETIME	Not Null

Notations

Keys & Constraints Column

Foreign Key is represented as Foreign Key (Reference Table Name)

Data type Column

Datatype Name	Description	Sample Value
INT	Holds Integer Values	4
FLOAT	Holds floating point values	4.115
VARCHAR	Holds String values upto 4000	Sample String'
DATETIME	Holds Date with timestamp	8/12/2019 15:23
CLOB	Holds very large String Values	

Table Creation Scripts Snapshot (Implementation)

```
-- ************************************ [User_Profile]

CREATE TABLE [User_Profile]
(
 [User_ID]           int NOT NULL ,
 [User_name]         varchar(50) NOT NULL ,
 [Age]               int NOT NULL ,
 [Gender]            varchar(50) NOT NULL ,
 [Email_Id]          varchar(50) NOT NULL ,
 [Phone_number]      bigint NOT NULL ,
 [Diet_Type]         varchar(50) NULL ,
 [Created_timestamp] datetime2(7) NOT NULL ,
 [Coifficients_key]       int NOT NULL ,
 [User_Rewards_ID]       int NOT NULL ,
 [User_IOT_ID]   int NOT NULL ,
 [Query_ID]           NOT NULL ,
 [appointment_id]            int NOT NULL ,
 [diet_plan_id]           int NOT NULL ,


 CONSTRAINT [PK_User_Profile] PRIMARY KEY CLUSTERED ([User_ID] ASC)
 CONSTRAINT [FK_511] FOREIGN KEY ([Coifficients_key])  REFERENCES [User_coifficients]([Coifficients_key])
 CONSTRAINT [FK_521] FOREIGN KEY ([User_Rewards_ID])  REFERENCES [User_rewards]([User_Rewards_ID])
 CONSTRAINT [FK_121] FOREIGN KEY ([User_IOT_ID])  REFERENCES [User_IOT_Smartwatch]([User_IOT_ID])
 CONSTRAINT [FK_421] FOREIGN KEY ([Query_ID])  REFERENCES [User_Chatbot_Query]([Query_ID])
 CONSTRAINT [FK_411] FOREIGN KEY ([diet_plan_id])  REFERENCES [Diet_plan]([diet_plan_id])
 CONSTRAINT [FK_621] FOREIGN KEY ([appointment_id])  REFERENCES [User_Appointments]([appointment_id])
);
GO

-- ************************************ [User_Coifficients]

CREATE TABLE [User_Coifficients]
(
 [Coifficients_key]        int NOT NULL ,
 [Diet_coifficient]       float NOT NULL ,
 [Hydaration_coifficient] float NOT NULL ,
 [BMA]                    float NOT NULL ,
 [Last_Updated_Timestamp] datetime NOT NULL ,
 [User_ID]                int NOT NULL ,


 CONSTRAINT [PK_User_Coifficients] PRIMARY KEY CLUSTERED ([Record_key] ASC),
);
GO
```

```
-- ************************************** [User_Chatbot_Query]

CREATE TABLE [User_Chatbot_Query]
(
 [Query_ID]           NOT NULL ,
 [Query]             clob NOT NULL ,
 [response]          clob NOT NULL ,
 [Created_timestamp] datetime2(7) NOT NULL ,


 CONSTRAINT [PK_User_Chatbot_Query] PRIMARY KEY CLUSTERED ([Query_ID] ASC),
 CONSTRAINT [FK_80] FOREIGN KEY ([User_ID])  REFERENCES [User_Profile]([User_ID])
);
GO

-- ************************************** [User_Calorie_IOT]

CREATE TABLE [User_IOT_Smartwatch]
(
 [User_IOT_ID]   int NOT NULL ,
 [Steps_Count] float NOT NULL ,
 [Heart_Rate] float NOT NULL ,
 [Latest_Calorie_Value]    float NOT NULL ,
 [Previous_Calories_Value] float NOT NULL ,
 [Created_Timestamp]       datetime2(7) NOT NULL ,
 [Last_Updated_Timestamp]  datetime2(7) NOT NULL ,


 CONSTRAINT [PK_User_IOT_Smartwatch] PRIMARY KEY CLUSTERED ([User__IOT_ID] ASC),
);
GO
-- ************************************** [User_Profile]
```

```
-- ************************************** [User_Rewards]

CREATE TABLE [User_Rewards]
(
 [User_Rewards_ID]       int NOT NULL ,
 [Reward_points]         float NOT NULL ,
 [Created_Timestamp]     datetime2(7) NOT NULL ,
 [Lat_Updated_Timestamp] datetime2(7) NOT NULL ,
 [User_ID]               int NOT NULL ,

 CONSTRAINT [PK_User_Rewards] PRIMARY KEY CLUSTERED ([User_Rewards_ID] ASC),
);
GO

-- ************************************** [Dietplan_foodlist_refrence]

CREATE TABLE [Dietplan_foodlist_refrence]
(
 [Record_key]       int NOT NULL ,
 [Created_Timestamp]     datetime2(7) NOT NULL ,
 [Lat_Updated_Timestamp] datetime2(7) NOT NULL ,
 [diet_plan_id]           int NOT NULL ,
 [food_id]                int NOT NULL ,

 CONSTRAINT [PK_Dietplan_foodlist_refrence] PRIMARY KEY CLUSTERED ([Record_key] ASC),
 CONSTRAINT [FK_711] FOREIGN KEY ([diet_plan_id])  REFERENCES [Diet_plan]([diet_plan_id])
 CONSTRAINT [FK_721] FOREIGN KEY ([food_id])  REFERENCES [food_list]([food_id])
);
GO
```

```
-- ************************************** [User_BMI]

CREATE TABLE [User_BMI]
(
 [User_BMI_ID]            int NOT NULL ,
 [Height]                 int NOT NULL ,
 [Weight]                 int NOT NULL ,
 [BMI]                    float NOT NULL ,
 [Referral]               varchar(50) ,
 [Created_timestamp]      datetime2(7) NOT NULL ,
 [Last_updated_timestamp] datetime2(7) NOT NULL ,
 [User_ID]                int NOT NULL ,


 CONSTRAINT [PK_User_BMI] PRIMARY KEY CLUSTERED ([User_BMI_ID] ASC),
 CONSTRAINT [FK_47] FOREIGN KEY ([User_ID])  REFERENCES [User_Profile]([User_ID])
);
GO


GO

-- ************************************** [User_Appointments]

CREATE TABLE [User_Appointments]
(
 [appointment_id]            int NOT NULL ,
 [appointment_date_stamp]    datetime2(7) NOT NULL ,
 [Request_Created_timestamp] datetime2(7) NOT NULL ,
 [Record_added_timestamp]    datetime2(7) NOT NULL ,
 [Appointment_Status]        varchar(50) NOT NULL ,
 [Appointment_type]          varchar(50) NOT NULL ,
 [User_comments]             clob NOT NULL ,


 CONSTRAINT [PK_User_Appointments] PRIMARY KEY CLUSTERED ([appointment_id] ASC),
);
GO

GO

CREATE NONCLUSTERED INDEX [fkIdx_94] ON [User_Appointments]
 (
  [Dietician_ID] ASC
 )

GO
```

```
-- ************************************ [Dietician_Appointment_Schedule]
CREATE TABLE [Dietician_Appointment_Schedule]
(
 [Schedule_ID]             int NOT NULL ,
 [appointment_id]          int NOT NULL ,
 [Dietician_ID]            int NOT NULL ,
 [Month]                   varchar(50) NOT NULL ,
 [Week]                    varchar(50) NOT NULL ,
 [Year]                    numeric(18,0) NOT NULL ,
 [Sunday]                  varchar(50) NOT NULL ,
 [Monday]                  varchar(50) NOT NULL ,
 [Tuesday]                 varchar(50) NOT NULL ,
 [Wednesday]               varchar(50) NOT NULL ,
 [Thursday]                varchar(50) NOT NULL ,
 [Friday]                  varchar(50) NOT NULL ,
 [Created_timestamp]       datetime NOT NULL ,
 [Last_Modified_Timestamp] datetime NOT NULL ,
 CONSTRAINT [PK_Dietician_Appointment_Schedule] PRIMARY KEY CLUSTERED ([Schedule_ID] ASC),
 CONSTRAINT [FK_111] FOREIGN KEY ([Dietician_ID])  REFERENCES [Dietician_profile]([Dietician_ID])
 CONSTRAINT [FK_321] FOREIGN KEY ([appointment_id])  REFERENCES [User_Appointments]([appointment_id])
);
GO
CREATE NONCLUSTERED INDEX [fkIdx_111] ON [Dietician_Appointment_Schedule]
 (
  [Dietician_ID] ASC
 )
GO
-- ************************************ [Diet_plan]
CREATE TABLE [Diet_plan]
(
 [diet_plan_id]           int NOT NULL ,
 [diet_type]              varchar(50) NOT NULL ,
 [user_choice_diet]       varchar(50) NOT NULL ,
 [food_quantity]          int NOT NULL ,
 [food_intake_time]       clob NOT NULL ,
 [Last_updated_Timestamp] datetime2(7) NOT NULL ,
 [Created_timestamp]      datetime2(7) NOT NULL ,
 [Dietician_ID]           int NOT NULL ,
 CONSTRAINT [PK_Diet_plan] PRIMARY KEY CLUSTERED ([diet_plan_id] ASC),
 CONSTRAINT [FK_141] FOREIGN KEY ([Dietician_ID])  REFERENCES [Dietician_profile]([Dietician_ID]),
);
GO
CREATE NONCLUSTERED INDEX [fkIdx_141] ON [Diet_plan]
 (
  [Dietician_ID] ASC
 )
GO
```

```
-- ************************************ [Food_list]

CREATE TABLE [Food_list]
(
 [food_id]                int NOT NULL ,
 [food_name]              varchar(4000) NOT NULL ,
 [food_alias_name]        varchar(4000) NOT NULL ,
 [minimum_unit]           float NOT NULL ,
 [quantity]               float NOT NULL ,
 [calorie]                float NOT NULL ,
 [vitamin]                varchar(4000) NOT NULL ,
 [mineral]                varchar(50) NOT NULL ,
 [protein]                float NOT NULL ,
 [fat]                    float NOT NULL ,
 [other_content]          varchar(4000) NOT NULL ,
 [Created_timestamp]      datetime2(7) NOT NULL ,
 [Last_updated_timestamp] datetime2(7) NOT NULL ,


 CONSTRAINT [PK_Food_list] PRIMARY KEY CLUSTERED ([food_id] ASC)
);
GO


-- ************************************ [Dietician_profile]

CREATE TABLE [Dietician_profile]
(
 [Dietician_ID]            int NOT NULL ,
 [Dietician_name]          varchar(50) NOT NULL ,
 [Dietician_email]         varchar(50) NOT NULL ,
 [dietician_phone_number]  bigint NOT NULL ,
 [Credential_Status]       varchar(50) NOT NULL ,
 [Practitioner_CBR_ID]     varchar(50) NOT NULL ,
 [Certification_Type]      varchar(50) NOT NULL ,
 [Created_Timestamp]       datetime2(7) NOT NULL ,
 [Last_Modified_Timestamp] datetime2(7) NOT NULL ,


 CONSTRAINT [PK_Dietician_profile] PRIMARY KEY CLUSTERED ([Dietician_ID] ASC)
);
GO
```

SOFTWARE DESIGN

Calculating User Rewards:

1) Check whether weight has changed in User_BMI table , I
2) If the Updated Weight is equal to mile stone weight then Calculate Rewards = Rewards + 50
3) If user choses 6 month subscription calculate Rewards = Rewards + 50
4) If user choses 1 year subscription calculate Rewards = Rewards + 150
5) Update Reward Points in User_Rewards Table

Calculating BMI

1) The Input from the user will be fed to the function CalcBMI() (Calculate BMI) which will let the user the BMI category he belongs to.
2) BMI Range:
3) Below 18.5 – you're in the underweight range.
4) Between 18.5 and 24.9 – you're in the healthy weight range.
5) Between 25 and 29.9 – you're in the overweight range
6) On the basis of the BMI, the application would figure out if there is need for Weight Loss/ Weight Gain and accordingly the algorithm would proceed to the heart of application “Harris Benedict Equation” to calculate BMR (Basal Metabolic Rate).

Calculating BMR (Harris Benedict Equation)

1) Our algorithm calculates the BMR for men and women differently as defined by Harris Benedict. So the function CalcBMR() uses the sex to check for Male/Female and run the specific equation to calculate the BMR.
2) We take the Natural log of the BMR value to set it in the range of 6.5 to 8.
3) If BMI shows Overweight and if BMR is less than 6.5, the metabolic rate is low and thus the fat retention rate is high causing obesity.
4) If BMI shows Overweight and if BMR is more than 7, the metabolic rate is good and still there is weight gain which may indicate a different reason for weight gain. Our app suggests going to a general physician/dietician.

WeightLoss

1) if x > 24.9 and x <= 29.9: print("You are overweight, you need to lose weight")
2) if BMR < 6.9: print("Your Metabolic Rate is low which reduces fat burning activity")
3) else: print("Consult a physician")

WeightGain

1) if x < 24.9: print("You are underweight, you need to gain weight")
2) if bmrlog > 7.5: print("Your Metabolic Rate is high which increases fat burning activity")
3) else: print("Consult a physician")

Quantity Control and Adjust meal intake

1) The Current time is obtained and the next food intake is identified
2) Get the Permitted Calorie intake of next meal and calorie intake of previous meal
3) Get the current value of calories burned from smart watch.
4) Calculate the current BMR ,Diet Coefficient and Hydration coefficient
5) If Diet Coefficient is in permissible range. Print Follow the next meal plan
6) Else Calculate how much deficit or excess of calorie is obtained
7) If calorie deficit or excess is seen adjust the next meal intake and display the adjusted meal.

Code Snapshot and Results (Implementation)

Code:

```
#Implementation of Harris Benedicts Equations
import math
#Input from User
ht = int(input("Enter Ht in cms: "))
type(ht)
wt = int(input("Enter Wt in kgs: "))
type(wt)
age = int(input("Enter Age in years: "))
type(age)
sex = input("M/F")

#Calculate BMI using the Input
def calcBMI():

    x = round(wt/(ht**2)*10000,2)
    print('Your BMI is {} as of today'.format(x))
    return x

#Check for Sex and determine the BMR
def calcBMR():
    if sex == 'M':
```

```
        bmr = round((10 * wt + 6.25 * ht - 5 * age + 5),2)
        bmrlog = round(math.log(10 * wt + 6.25 * ht - 5 * age + 5),2)
    else:
        bmr = round((10 * wt + 6.25 * ht - 5 * age - 161),2)
        bmrlog = round(math.log(10 * wt + 6.25 * ht - 5 * age - 161),2)
    print("Your BMR is {}".format(bmrlog))
    return bmrlog

def weight_loss():
    if x > 24.9 and x <= 29.9:
        print("You are overweight, you need to lose weight")
        if bmrlog < 6.9:
            print("Your Metabolic Rate is low which reduces fat burning activity")
        else:
            print("Consult a physician")

def weight_gain():
    if x < 24.9:
        print("You are underweight, you need to gain weight")
        if bmrlog > 7.5:
            print("Your Metabolic Rate is high which increases fat burning activity")
        else:
            print("Consult a physician")
calcBMR()

calcBMI()
```

```
weight_loss()

weight_gain()
```

Results:

1) Overweight

Input:

```
        if bmrlog > 7.5:
            print("Your Metabolic Rate is high which decreases fat burning activity")
        else:
            print("Consult a physician")
calcBMR()

calcBMI()

weight_loss()

weight_gain()
```

```
Enter Ht in cms: 180
Enter Wt in kgs: 90
Enter Age in years: 20

M/F M
```

Output:

```
        if bmrlog > 7.5:
            print("Your Metabolic Rate is high which decreases fat burning activity")
        else:
            print("Consult a physician")
calcBMR()

calcBMI()

weight_loss()

weight_gain()
```

```
Enter Ht in cms: 180
Enter Wt in kgs: 90
Enter Age in years: 20
M/FM
Your BMR is 7.57
Your BMI is 27.78 as of today
You are overweight, you need to lose weight
Consult a physician
```

2) Underweight

Input:

```
        if bmrlog > 7.5:
            print("Your Metabolic Rate is high which decreases fat burning activity")
        else:
            print("Consult a physician")
calcBMR()

calcBMI()

weight_loss()

weight_gain()
```

```
Enter Ht in cms: 180
Enter Wt in kgs: 40
Enter Age in years: 25
M/FM
```

Output:

```
        if bmrlog > 7.5:
            print("Your Metabolic Rate is high which decreases fat burning activity")
        else:
            print("Consult a physician")
calcBMR()

calcBMI()

weight_loss()

weight_gain()
```

```
Enter Ht in cms: 180
Enter Wt in kgs: 40
Enter Age in years: 25
M/FM
Your BMR is 7.25
Your BMI is 12.35 as of today
You are underweight, you need to gain weight
Consult a physician
```

PROJECT PRESENTATION

Presentation Video

Click the Link to watch the presentation Video – https://youtu.be/QSjnPkO0MiE

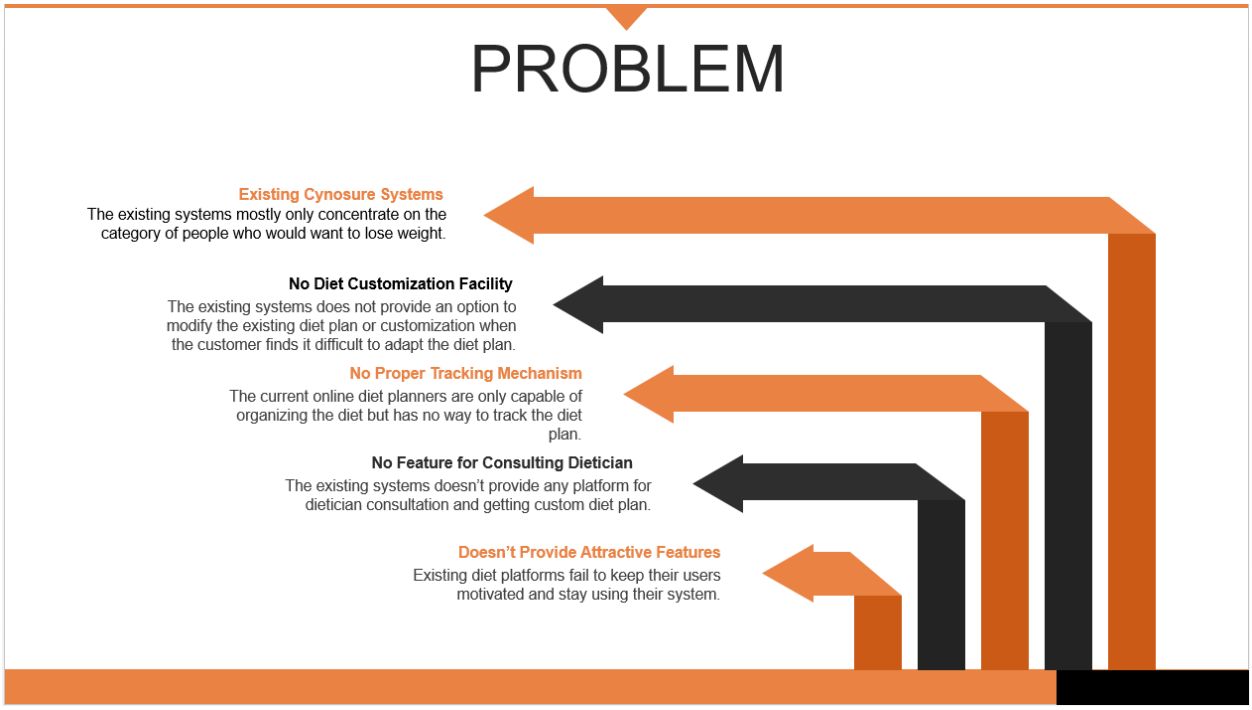
Slide Transitions while presentation

Slides 1, 2, 12, 13: Wilson
Slides 3, 4: Monisha
Slides 5, 6, 7: Srividya
Slides 8, 9: Shraddha
Slides 10, 11: Sourabh

Slide Snapshots

Attaching the snapshots of Presentation for Pitching the Idea to Investor


What we
OFFER!!
"Tired of changing diets and finding No Results. Or You find it hard to keep up with result due to lack of motivation. Or You are not Sure whether the diet you chose is right for you? Well here we are with The solution to all your diet issues."
✓ A Personal Dietician
✓ Choose Custom Diet / Generic Diet
✓ Efficient Diet Quantity Control
✓ A 24x7 Virtual Assistant
✓ Hassle Free Dietician Appointments
✓ Exciting Rewards
✓ Leveraging The Data
Introducing 'Diet SMART'
CHANGE YOUR LIFE...


PROBLEM
Existing Cynosure Systems
The existing systems mostly only concentrate on the category of people who would want to lose weight.
No Diet Customization Facility
The existing systems does not provide an option to modify the existing diet plan or customization when the customer finds it difficult to adapt the diet plan.
No Proper Tracking Mechanism
The current online diet planners are only capable of organizing the diet but has no way to track the diet plan.
No Feature for Consulting Dietician
The existing systems doesn't provide any platform for dietician consultation and getting custom diet plan.
Doesn't Provide Attractive Features
Existing diet platforms fail to keep their users motivated and stay using their system.

SOLUTION

Rewards to fuel your motivation and diet discipline
Introduces reward feature where the user has option to update their progress which will earn them reward points and can be redeemed as cashbacks for free consultation.

Personal Dietician ,Hassle free appointments and Custom Diet Plan
provides a feature to consult a qualified dietician for the customers who fall under medical diet category.

An efficient way to control food Quantity
control the quantity of the daily diet through the data collected in real-time, the system will daily notify the customers to increase or decrease the quantity of diet.

Multiple Features of Diet
Provides a unified platform for Weight Loss, Weight Gain and Maintain Existing Weight.

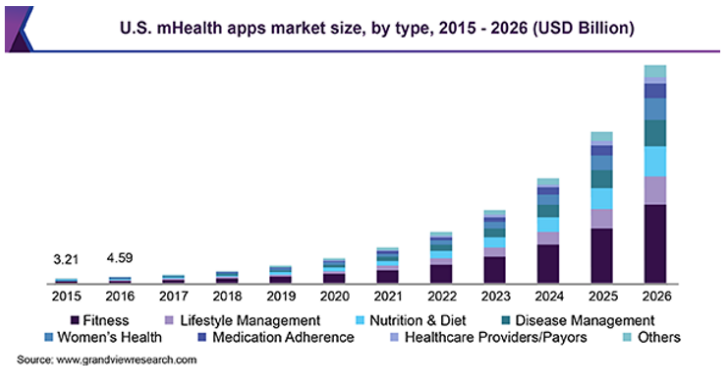
MARKET ANALYSIS

The mHealth apps market Mobile applications offer a broad category of services that help a user manage and track different conditions. The women's health segment is expected to grow at the fastest rate in the forecast period. With the replacement of traditional healthcare delivery models, growth in adoption of mHealth platforms is expected as an increasing number of physicians recommend using health-related apps. Moreover, the growing penetration of smartphones is supporting growth. It is anticipated that by 2020, smartphone subscriptions would have reached 6.1 billion. In addition, introduction of wearable devices from Fitbit, Apple, and Xiaomi is influencing the market positively. Growth of the market appears positive with increasing investments in wearable tech startups.

Market Potential Within US

Insights

The Global mHealth apps market size was valued at USD 12.4 billion in 2018 and is projected to expand at a CAGR of 44.7% over the forecast period



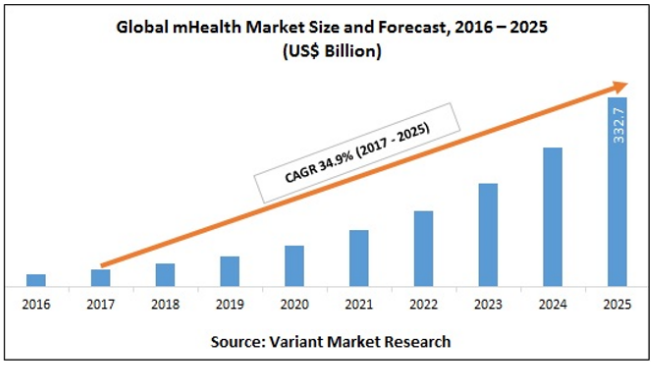
MARKET ANALYSIS

Global mHealth Market is estimated to reach $332.7 Billion by 2025; growing at a CAGR of 34.9% from 2017 to 2025.mHealth is defined as the medical and public health practice supported by mobile devices, such as mobile phones, personal digital assistances, patient monitoring devices, and other wireless devices. Tracking personal health data on smartphones, connected care between doctor's office visits & mobile healthcare management for caregivers are some of the benefits of mHealth to drive the market. The market is segmented by devices as pulse oximetry, apnea & sleep monitors neurological monitoring devices, wearable fitness sensor device & heart rate meters, blood glucose meters, BP monitors, and other devices. Moreover, increasing incidence of lifestyle disorders, growing adoption of mHealth solutions in other mobile platforms might provide with several growth opportunities in the forecasted year.

Market Potential Globally

Insights

The Global mHealth Market is estimated to reach $332.7 Billion by 2025; growing at a CAGR of 34.9% from 2017 to 2025



MARKET ANALYSIS

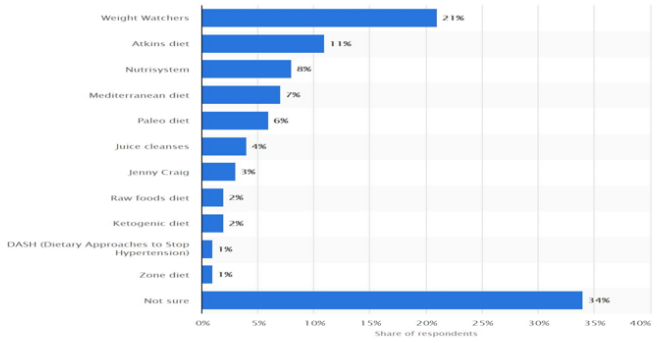
Statista provides details on the most popular diets according to receive feedback on a survey based on the Level of awareness regarding selected diet trends in the United States as of March 2017. To be top-rated, a diet had to be relatively easy to follow, nutritious, safe, effective for weight loss and protective against diabetes and heart disease.

About 34% percent of the respondents were not aware of any diet plans to balance nutrition based on their health conditions.

Potential Customers

Insights

During a survey in March 2017 in US, 21 percent of respondents stated they were most familiar with the Weight Watchers program.

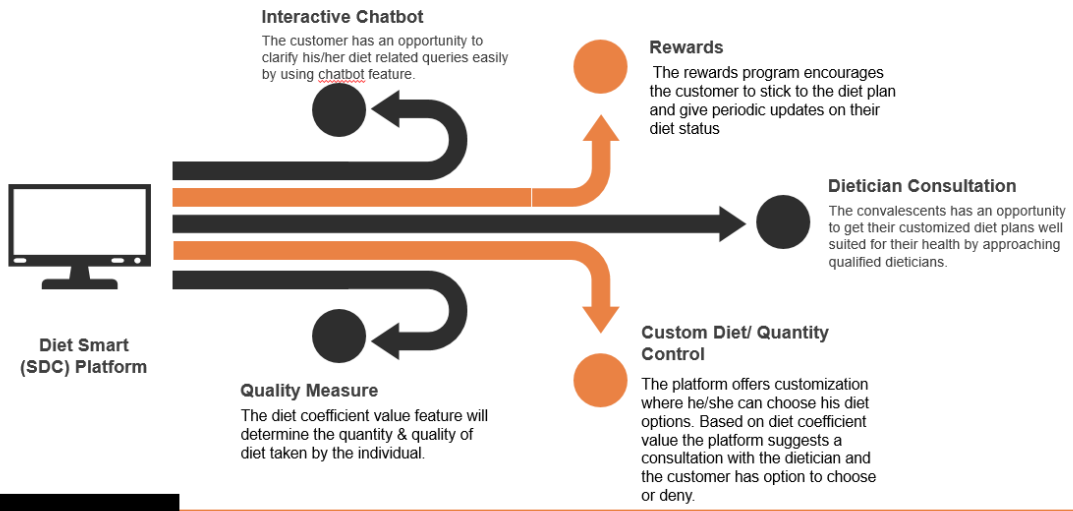


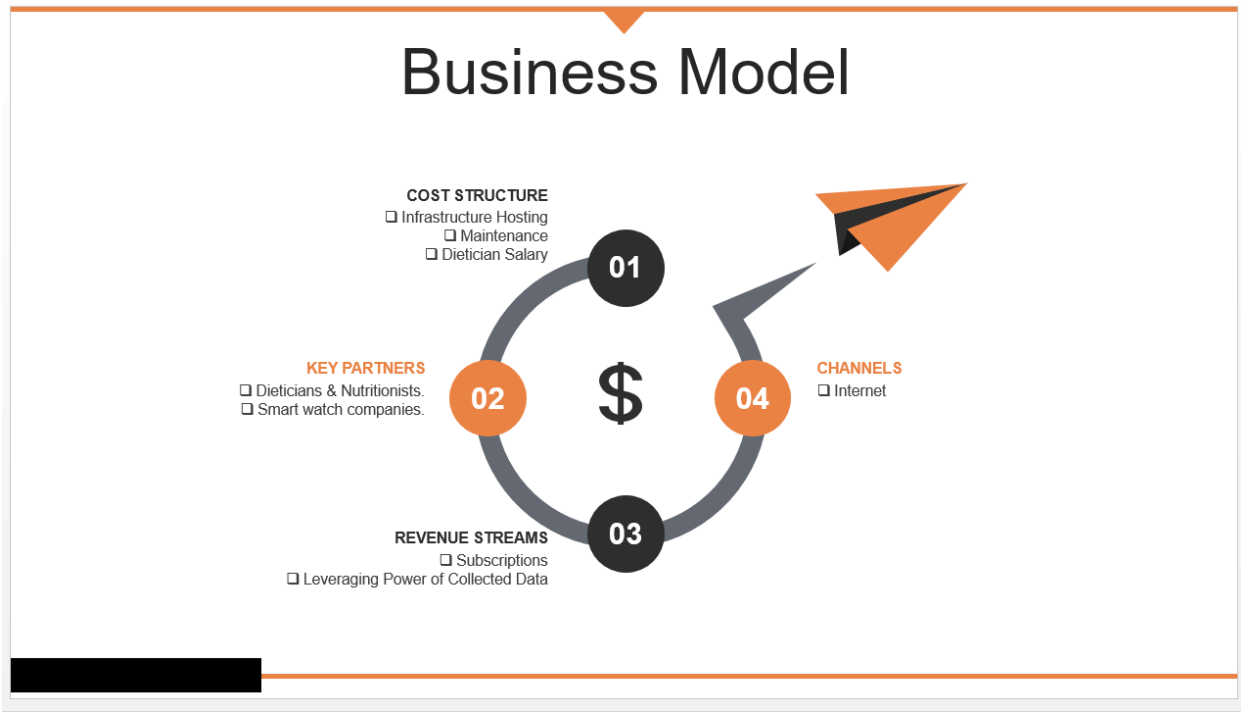
Source: https://www.statista.com/statistics/715767/awareness-diet-trends-usa/

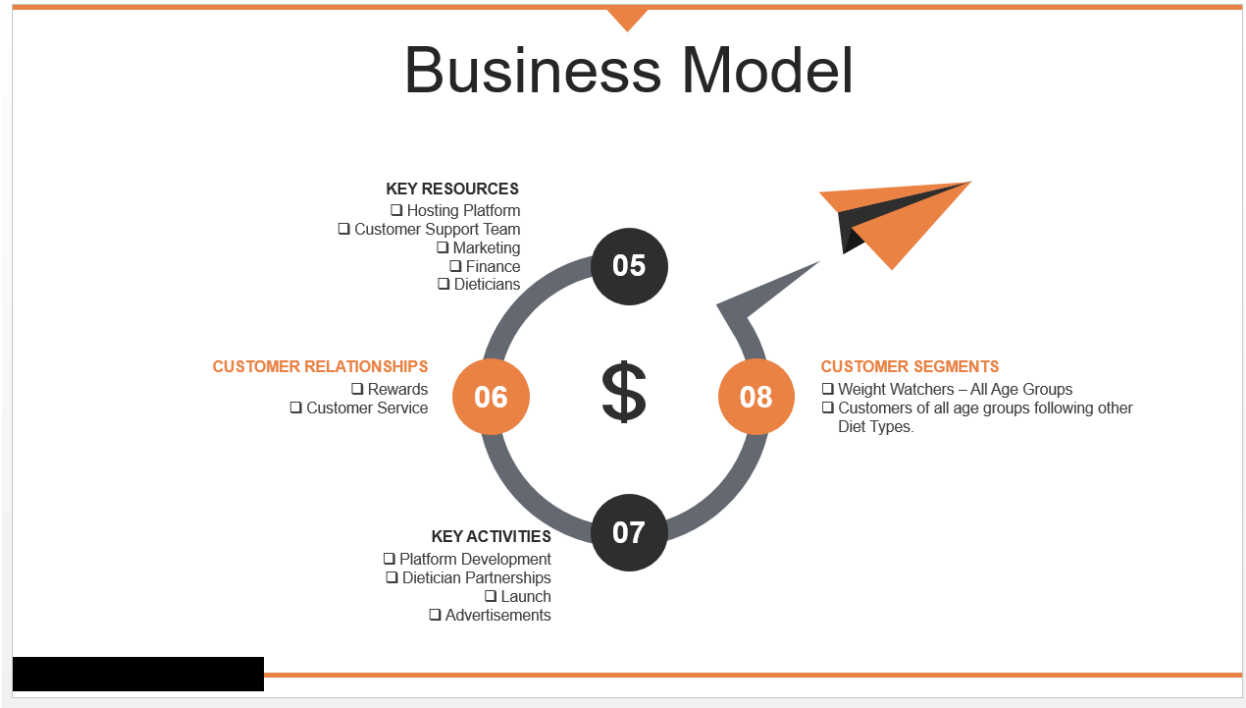
Competitive Analysis

	Diet SMART	MyFitnessPal	FatSecret	Lose It	Fooducate	My Net Diary
Rewards	✓					
Dietician Consultation	✓					✓
Custom Diet / Quantity control	✓	✓	✓	✓	✓	✓
Virtual ASSISTANT	✓	✓				
Quality Measure	✓	✓		✓	✓	✓

UNIQUE VALUE PROPOSITION




Business Model
COST STRUCTURE
❑ Infrastructure Hosting
❑ Maintenance
❑ Dietician Salary
01
KEY PARTNERS
❑ Dieticians & Nutritionists.
❑ Smart watch companies.
02
$
04
CHANNELS
❑ Internet
03
REVENUE STREAMS
❑ Subscriptions
❑ Leveraging Power of Collected Data


Business Model
KEY RESOURCES
❑ Hosting Platform
❑ Customer Support Team
❑ Marketing
❑ Finance
❑ Dieticians
05
CUSTOMER RELATIONSHIPS
❑ Rewards
❑ Customer Service
06
$
08
CUSTOMER SEGMENTS
❑ Weight Watchers – All Age Groups
❑ Customers of all age groups following other Diet Types.
07
KEY ACTIVITIES
❑ Platform Development
❑ Dietician Partnerships
❑ Launch
❑ Advertisements

Marketing Plan & Pricing

Marketing Plan

Advertisements

- Digital Marketing Ads
- Word Of Mouth
- Webinars
- Workshops
- Flyers

Premium Customers (Gold Subscription)

- Smart Watch at 50% off.
- Monthly Diet Supplements to be sent to the user's address for free (Based on Prescription).
- Other Exiting Features.

Pricing Model

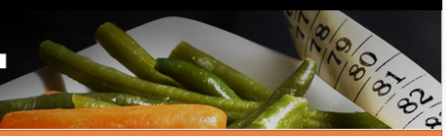
Subscription	Fixed Price	Variable Price
Gold	$300 One Time (Refundable)	1. $79.99/month for 6 months Subscription 2. $65.99/month for 1 Year Subscription
No Subscription	N/A	N/A

Unsubscribed Customers will be getting a trial period of 30 Days and One Consultation. But will be Ineligible for Rewards , Custom Diet and Quantity Control Features

THANK YOU

A Personal Smart Diet Consultant

Diet SMART



Project Group 8 :JESLIN WILSON GEOTOM AROUJE| SHRADDHA HEMANT KADAM | SRIVIDYA VENKATARAMAN | MONISHA PRAKASH | SOURABH BODKHE

MIS 6308.002 Systems Analysis and Project Management
By Srinivasan Raghunathan

PROJECT MANAGEMENT

Team Details

Name	Preferred Name	Role	UTD Email ID
Jeslin Wilson Geotom Arouje	Wilson	Project Manager/Team member	jxa180016@utdallas.edu
Srividya Venkataraman	Srividya	Team member	sxv190022@utdallas.edu
Sourabh Murlidhar Bodkhe	Sourabh	Team member	smb180009@utdallas.edu
Shraddha Hemant Kadam	Shraddha	Team member	sxk190069@utdallas.edu
Monisha Prakash	Monisha	Team member	mxp170026@utdallas.edu

Project Activities

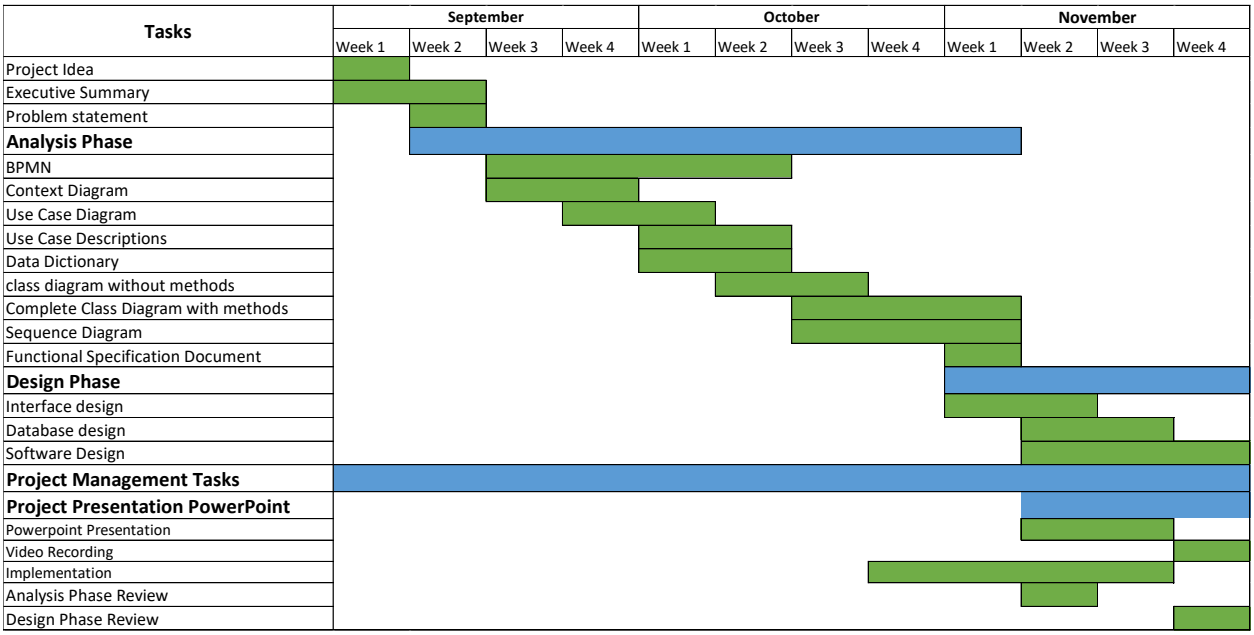
#	Activities	Type	Weightag
1	Project Idea	Smart Diet Consultant	10
2	Mobility/IOT/Web 2.0 Feature	Smartwatch Integration (covers mobility and IOT)	5
3	Project Report	Executive Summary	5
4	Project Report	A problem statement (Systems Proposal)	5
5	Project Report	BPMN	10
6	Project Report	Context Diagram	2
7	Project Report	Use Case Diagram	3
8	Project Report	Use Case Descriptions	5
9	Project Report	Data Dictionary	2.5
10	Project Report	class diagram without methods	2.5
11	Project Report	Complete Class Diagram with methods	5
12	Project Report	Sequence Diagram	5
13	Project Report	Functional Specification Document for the proposed system	5
14	Project Report	Interface design	5
15	Project Report	Database design	10
16	Project Report	Software Design	10
17	Project Management Deliverable	Project Activities	1
18	Project Management Deliverable	Allocation of activities to team members	1
19	Project Management Deliverable	Planned timeline	1
20	Project Management Deliverable	Execution timeline	1
21	Project Management Deliverable	Minutes of project meetings	1
22	Project Presentation PowerPoint	Pitching The Idea	5
		Overall Weightage	100
23	Implementation	Extra Credit	5
24	Analysis Phase Review	N/A	-
25	Design Phase Review	N/A	-

Minutes of Meeting

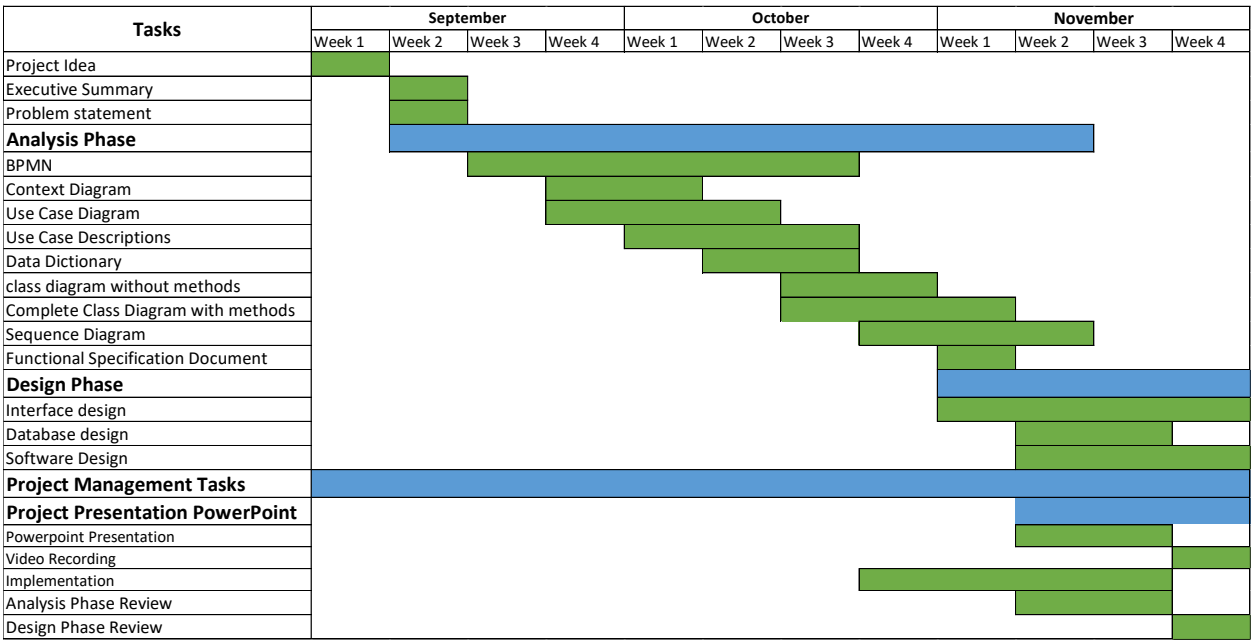
Minutes of Meeting			
Meeting 1			
Date/Time	**Attendees**	**Minutes**	**Meeting Type/Venue**
9/5/2019 [11 30am-12pm]	Wilson,Srividya,Monisha, Sourabh,Shraddha	Provide team availability in excel sheet which will be provided by Wilson	Face to Face Venue : Graduate Lounge JSOM
		Standup meeting via skype/webex for updates weekly once	
		Deadline to decide project by Monday	
		Please stick to the timings incase of not available please update the team	
		Decide scope and identify the milestone	
		Mention the blockers if any.	
		Create Sharepoint folder with Group Link - Action Item Wilson	
Meeting 2			
Date/Time	**Attendees**	**Minutes**	**Meeting Type/Venue**
9/10/2019 [4 30pm-5 30pm]	Wilson,Srividya,Monisha, Sourabh,Shraddha	Finalized Smart Diet Consultant,Wilson to Manage Project	Face to Face Venue : Graduate Lounge
		Assigned tasks to each members	
Meeting 3			
Date/Time	**Attendees**	**Minutes**	**Meeting Type/Venue**
9/21/2019 [11am-12pm]	Wilson,Srividya,Monisha, Sourabh,Shraddha	Discussed Algorithm	Skype
		Frame work for webpage, android applications need to be clear	
		food lists needs to be created (Wilson to create excel)	
Meeting 4			
Date/Time	**Attendees**	**Minutes**	**Meeting Type/Venue**
9/22/2019 [11am-12pm]	Wilson,Srividya,Monisha, Sourabh,Shraddha	New Tasks assigned	Skype
		Create a chart for team availability	
		create Use case diagram based on design and executive summary	
		Srividya to continue working on features	
Meeting 5			
Date/Time	**Attendees**	**Minutes**	**Meeting Type/Venue**
10/05/2019 [4pm-6pm]	Wilson,Sraddha,Srividya, Monisha,Sourabh	Sourabh Updated the Algorithm for Diet Coifficient	Face to Face Venue : Graduate Lounge JSOM
		Wilson and Srividya worked on Executive Summary	
		Shraddha and Monisha worked on Problem Statement	
		Identifying the deliverables before next sync up	

Meeting 6			
Date/Time	**Attendees**	**Minutes**	**Meeting Type/Venue**
10/19/2019 [4pm-6pm]	Wilson,Sraddha,Srividya, Monisha,Sourabh	Wilson to create Project report Template and Move the Deliverables to the new report	Face to Face Venue : Graduate Lounge JSOM
		Srividya to coordinate with Shraddha to work on BPMN	
		Wilson To work on Context Diagram and Use Case Diagrams	
		Monisha to work on Use Case Descriptions	
Meeting 7			
Date/Time	**Attendees**	**Minutes**	**Meeting Type/Venue**
10/30/2019 [2pm-5pm]	Wilson,Sraddha,Srividya, Monisha,Sourabh	Coordinated with monisha in reviewing the Use Case Diagram	Face to Face Venue : Graduate Lounge JSOM
		Monisha to Complete Use Case Description	
		Shraddha to complete BPMN	
		Sourabh to send the complete algorithm and kick start the implementation	
		Wilson To Formulate the project delivery timeline,update the minutes,Create Presentation Template	
Meeting 8			
Date/Time	**Attendees**	**Minutes**	**Meeting Type/Venue**
11/03/2019 [11am-1130am]	Wilson,Sraddha,Srividya, Monisha,Sourabh	Progress Sync Up	Skype
		Milestone Timeline Update - Estimated Completion 22nd November 2019	
		Assigning Tasks for upcoming week	
		Implementation to be shifted - Prioritize project report	
		Milestone for upcoming week - Complete Analysis Phase till Functional Specification	
Meeting 9			
Date/Time	**Attendees**	**Minutes**	**Meeting Type/Venue**
11/16/2019 [4 30pm-7 00pm]	Wilson,Srividya,Monisha, Sourabh,Shraddha	Analysis Phase Review	Face to Face Venue : Graduate Lounge JSOM
		Identified the tweaks	
		November 22nd to be the deadline	
		Shraddha and Monisha worked on Presentation	
		Souabh to complete the software design , Wilson to complete database and Interface Design	
		Srividya to update Sequence Diagram	
Meeting 10			
Date/Time	**Attendees**	**Minutes**	**Meeting Type/Venue**
11/23/2019 [1pm-4pm]	Wilson,Srividya,Monisha, Sourabh,Shraddha	Review Design Phase	Face to Face Venue :UTD Library
		Record Presentation	
		Review Completed Project Report	

Planned Timeline



Execution Timeline



Project Deliverables – Task Assignments

Status	Assigned to	Type	Activity Name
Completed	Wilson	Project Idea	Smart Diet Consultant
Completed	Wilson,Srividya	Project Report	Executive Summary
Completed	Monisha, Shraddha	Project Report	A problem statement (Systems Proposal)
Completed	Shraddha, Wilson ,Srividya	Project Report	BPMN
Completed	Wilson,Srividya	Project Report	Context Diagram
Completed	Wilson,Monisha	Project Report	Use Case Diagram
Completed	Monisha	Project Report	Use Case Descriptions
Completed	Sourabh,Shraddha	Project Report	Data Dictionary
Completed	Shraddha,Monisha	Project Report	class diagram without methods
Completed	Shraddha,Monisha	Project Report	Class diagram
Completed	Srividya	Project Report	Sequence Diagram
Completed	Wilson	Project Report	Functional Specification Document for the proposed system
Completed	Sourabh,Wilson	Project Report	Interface design
Completed	Wilson	Project Report	Database design
Completed	Sourabh	Project Report	Software Design
Completed	Wilson	Project Management Deliverable	Project Activities
Completed	Wilson	Project Management Deliverable	Allocation of activities to team members
Completed	Wilson	Project Management Deliverable	Planned timeline
Completed	Wilson	Project Management Deliverable	Execution timeline
Completed	Wilson	Project Management Deliverable	Minutes of project meetings
Completed	Wilson,Srividya,Sourabh,Shraddha,Monisha	Project Presentation PowerPoint	Pitching The Idea, marketing,Recording
Completed	Sourabh	Algorithm	The underlying Algorithm for SDC System
Completed	Wilson,Srividya	Project Report	Document Creation ,Formatting
Completed	Sourabh	Implementation	Building the code

Task Status Notation
Completed
In Progress
Blocked
Pending