# **GBM Fitness**

# **Software Requirements Specification**

Software Engineering Project

# Version 1.0



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**Group Members:** 2018-CS-52

2018-CS-65

2018-CS-100

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# **Table of Contents**

# Introduction

### **Purpose**

The purpose of this document is to provide detailed description of the requirements (functional, non-functional and constraints etc.) of the Web Application "GBM Fitness"; an automated version of the manual system. This application is being designed to facilitate a fitness center to automate its operations of keeping records and store them in form of a large and user-friendly database for those who exercise on a regular basis and to keep notes on their progression.

The intended audience of this document is anyone who has a need for good quality services and online facilities to maintain good health whilst staying at home.

# • Scope

GBM Fitness covers the whole room, it aims to provide a one stop place for people to develop their health and fitness goals under expert and skilled trainers. It's the best application for those Gym admins who manually manage the particular functionalities e.g. manage large data of members etc. They will be able to get it all done quickly through such project as ours. It provides much more ease to users such as; separate Login roles for Admin and Members, also enables its users to access and manage their workouts, diet plans at any time useful.

Our GBM Fitness is the best option for it.

## • Glossary

Term	Definition
Admin	Any person who is allowed to manage project members,
	services and to perform specified roles.
Member	A person who is using the services of the gym and web

	application, who only has access to a specific one or more roles.
<u>Trainer</u>	A person who teaches fitness skills to members, prepares
	them for workout activities, and motivates them to reach
	their fitness goals.

# • Technologies to be used

Technology	Description
HTML	HTML stands for Hyper Text Markup Language. It is the standard markup language for creating and describing the structure of a Web It consists of a series of elements; to tell the browser how to display the content.  (Front-end)
CSS3	CSS stands for Cascading Style Sheets. CSS3 is the latest evolution of the CSS language. It is used with HTML to create content structure. It is responsible for font properties, colors, text alignments, graphics, background images, tables and other components. (Front-end)
Bootstrap4	Bootstrap is a popular HTML, CSS and JavaScript front-end development framework, an open-source tool collection for creating websites and web applications. It solves cross-browser compatibility issue. (Front-end)
C#	C# is an object-oriented programming language developed by Microsoft that runs on the .NET Framework. It is used to develop web apps, desktop apps, mobile apps, games.
SQL Server	SQL stands for Standard Query Language. SQL is a standard language for storing, manipulating and retrieving data in databases.(Back-end)

# Overview

The rest of this document describes the requirements that will go making this website functional. It outlines the type of database used, programming languages, user interface looks, etc.

# General Description

### • User Characteristics

#### **Admin:**

Admin will maintain and manage the data in the application. After logging in to the application, he will be able to manage members, trainers, equipment's, products, assign workout and diet plans etc.

### Unregistered User

Unregistered users will not be able to gain access to the application or use any of its features. They are required to register first in order to use their desired features

#### **Members:**

Members will gain full, non admin access to the application. Once a user is registered on application and agrees to the ToS, he will be able to perform specified roles i.e. he may view his profile, diet or workout plans, progress, calculate his/her BMI etc.

#### **Trainer:**

A trainer is an expert and skilled person that uses the online GBM Fitness application to teach fitness skills and health maintaining tips to members, prepares them for workout activities, and motivates them to reach their fitness goals.

### • General Constraints

- There must be the use of compatible computers for smooth running of the application.
- Users must be agreed on Terms of Services to access their desired features.
- Only the authenticated user and registered members can use the application.
- Suitable Internet Connection should be acquired to perform roles etc.
- Data stored in database must be secured, authenticated and reliable.

# • Assumptions & Dependencies

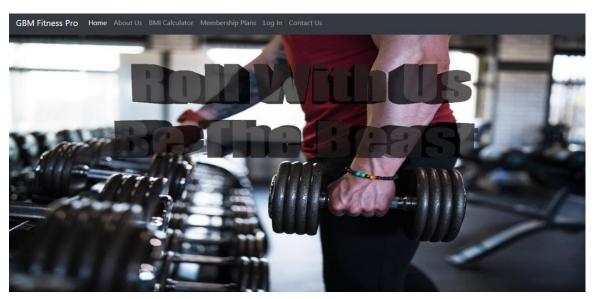
- It is assumed that compatible computers should be used before the application is monitored tested.
- It is assumed that Gym Terminal have the enough trained staff to take care of the application.
- It is assumed that suitable internet connection is available in order to their fitness log in or access any functionality of the application.
- The system is web-based only.
- Unregistered users will have no access to the application.
- Users will only be permitted to register and get membership once they agree to the terms of service agreement.
- The website will require no plug-ins / special software to run.

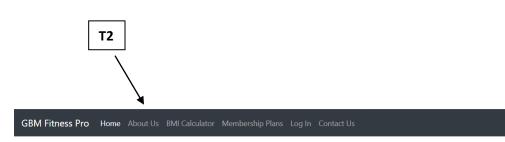
# • Specific Requirements

- External Interface Requirements:
- User Interfaces

# **Home Page**







# **About Us**

We are students of university of engineering and technology who decided to start a fitness club named as GBM FITNESS PRO. Here you will get all the guidenace in the world to become the fitness freak. From your vrey own personal trainers to your specific diet and workout plan depending upon your current health. You don't need to go anywhere as we provide you with all the products as well that are required for u to be on this fitness journey with us. Join us now and have the body you have always dreamed of.

T1: As a user, I can visit home page of the website.

T2: As a user, I can learn more about the website operation and services.

Т3	T4			
GBM Fitness Pro Home About Us BI	MI Calculator Membership Plans Log In C			
		BMI Calculator		
		Body Weight(kg)		
		Body Height(cm)		
		Calmina		
		Calculate Your BMI		
		Membership Plans		
	Free Trial	6 Months/5,000pkr	1 Year/9,000pkr	
	7 Days	6 Months Membership Card	1 Year Membership Card	
	A Week Workout Plan	Weekly Workout Plans	Weekly Workout Plans	
	No Diet Plans	Weekly Diet Plans	Weekly Diet Plans	
	No Trainer	Derconal Trainer	Personal Trainer	

T3: As a user, I can calculate BMI.

T4: As a user, I can view membership plan.



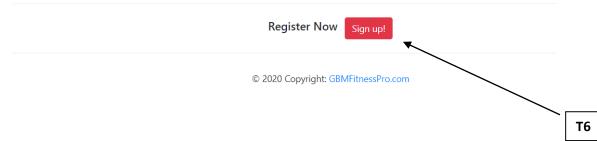
#### TO CONTACT US

Whatsapp: 03414022676

Facebook: www.facebook.com/momeghias

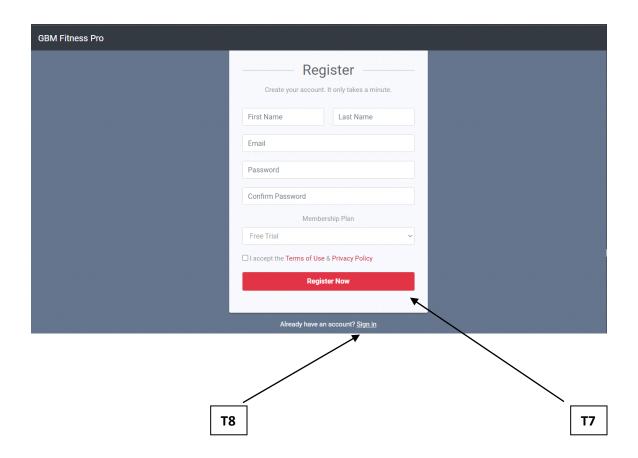
instagram: instagram/momeghias07

Email: momeghias786@gmail.com



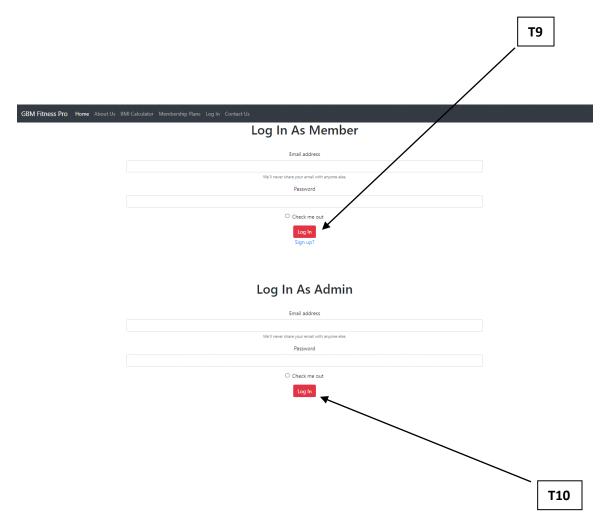
T5: As a user, I can contact the owner or admin.

T6: As a user, I can register as member.



T7: As a user, I can register as a member by clicking Register Now button.

T8: As a Member, I can sign in to the website.



T9: As a user, I can log in as a member.

T10: As a user, I can log in as an admin.

# **Admin Page**

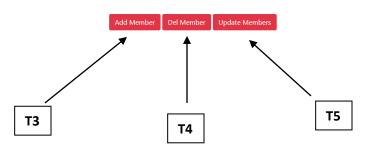
GBM Fitness Pro Members Assign Diet Plans Assign Workout Plans Trainers GBM Products Log Out

Hi, Admin!



# Members

#	name	DOB	Membership plan	Progress rate	Trainer
1	mome	15-08-99	6 months	60%	Alex
2	mudassar	10-08-99	1 year	50%	Alex
3	Bisma	19-08-99	6 months	40%	Sarah
4	waseh	15-08-99	6 months	60%	Alex
5	hassan	09-09-99	6 months	50%	Adam



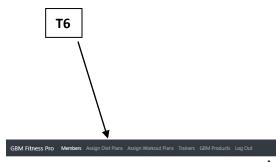
T1: As an Admin, I can view My profile or dashboard.

T2: As an Admin, I can view Members.

T3: As an Admin, I can Add Members.

T4: As an Admin, I can Delete Members.

T5: As an Admin, I can Update Members.



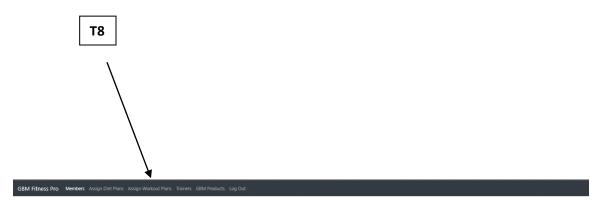
### Assign diet plans

#	name	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	mome	3 eggs(morn), 6 bananas(even), chicken breast(night)	7 almonds(morn), 6 bananas(even), chicken breast(night)	3 eggs(morn), 6 bananas(even), chicken breast(night)	3 eggs(morn), 6 bananas(even), Beef(night)	a apple(morn), 7 bananas(even), chicken breast(night)	3 eggs(morn), 6 bananas(even), chicken breast(night)	3 eggs(morn), 8 bananas(even), qeema(night)
2	mudassar	2 eggs(morn), 6 bananas(even), chicken breast(night)	3 eggs(morn), 6 bananas(even), chicken breast(night)	3 eggs(morn), 7 bananas(even), Beef(night)	3 almonds(morn), 6 peach(even), chlcken breast(night)	2 apple(morn), 6 bananas(even), qeema(night)	3 eggs(morn), 6 bananas(even), chicken breat(night)	3 eggs(morn), 6 bananas(even), chicken breat(night)
3	Bisma	4 eggs(morn), 4 bananas(even), Spanich(night)	a apple(morn), 6 Nuts(even), chicken breast(night)	3 eggs(morn), 6 bananas(even), chicken breat(night)	3 almonds(morn), 7 bananas(even), Beef(night)	3 breads(morn), 6 oat meal(even), chicken breast(night)	3 eggs(morn), 6 bananas(even), chicken breast(night)	3 eggs(morn), 6 bananas(even), chicken breast(night)
4	waseh	3 eggs(morn), 6 bananas(even), chicken breat(night)	3 eggs(morn), 6 bananas(even), chicken breat(night)	3 eggs(morn), 6 bananas(even), chicken breat(night)	3 eggs(morn), 6 bananas(even), chicken breat(night)	3 eggs(morn), 6 bananas(even), chicken breat(night)	3 eggs(morn), 6 bananas(even), chicken breat(night)	3 eggs(morn), 6 bananas(even), chicken breat(night)
5	hassan	3 eggs(morn), 6 bananas(even), chicken breat(night)	3 eggs(morn), 6 bananas(even), chicken breat(night)	3 eggs(morn), 6 bananas(even), chicken breat(night)	3 eggs(morn), 6 bananas(even), chicken breat(night)	3 eggs(morn), 6 bananas(even), chicken breat(night)	3 eggs(morn), 6 bananas(even), chicken breat(night)	3 eggs(morn), 6 bananas(even), chicken breat(night)

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T6: As an Admin, I can Assign Diet Plans.

# T7: As an Admin, I can Update Diet Plans.

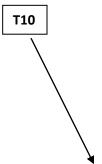


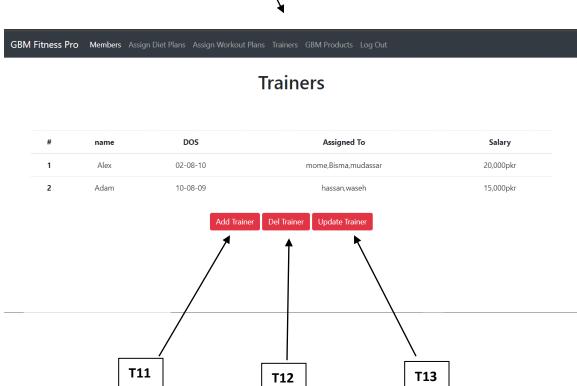
**Assign Workout plans** 

name	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
mome	60 push ups, 10	90 push ups,	100 push ups, 10	120 push ups,	50 push ups, 10	100 push ups, 10	60 push ups, 10
	planks, chest	8 sit ups,	planks, chest	leg lifting, chest	planks, chest	planks, chest	planks, chest
	stretch(5 min),	chest stretch,	stretch(5 min),	stretch(5 min),	stretch(5 min),	stretch(5 min),	stretch(5 min),
	30 chin ups	10 min walk	30 chin ups	30 chin ups	30 chin ups	30 chin ups	30 chin ups
mudassar	60 push ups, 10	90 push ups,	100 push ups, 10	120 push ups,	50 push ups, 10	100 push ups, 10	60 push ups, 10
	planks, chest	8 sit ups,	planks, chest	leg lifting, chest	planks, chest	planks, chest	planks, chest
	stretch(5 min),	chest stretch,	stretch(5 min),	stretch(5 min),	stretch(5 min),	stretch(5 min),	stretch(5 min),
	30 chin ups	10 min walk	30 chin ups	30 chin ups	30 chin ups	30 chin ups	30 chin ups
Bisma	60 push ups, 10	90 push ups,	100 push ups, 10	120 push ups,	50 push ups, 10	100 push ups, 10	60 push ups, 10
	planks, chest	8 sit ups,	planks, chest	leg lifting, chest	planks, chest	planks, chest	planks, chest
	stretch(5 min),	chest stretch,	stretch(5 min),	stretch(5 min),	stretch(5 min),	stretch(5 min),	stretch(5 min),
	30 chin ups	10 min walk	30 chin ups	30 chin ups	30 chin ups	30 chin ups	30 chin ups
waseh	60 push ups, 10	90 push ups,	100 push ups, 10	120 push ups,	50 push ups, 10	100 push ups, 10	60 push ups, 10
	planks, chest	8 sit ups,	planks, chest	leg lifting, chest	planks, chest	planks, chest	planks, chest
	stretch(5 min),	chest stretch,	stretch(5 min),	stretch(5 min),	stretch(5 min),	stretch(5 min),	stretch(5 min),
	30 chin ups	10 min walk	30 chin ups	30 chin ups	30 chin ups	30 chin ups	30 chin ups
hassan	60 push ups, 10	90 push ups,	100 push ups, 10	120 push ups,	50 push ups, 10	100 push ups, 10	60 push ups, 10
	planks, chest	8 sit ups,	planks, chest	leg lifting, chest	planks, chest	planks, chest	planks, chest
	stretch(5 min),	chest stretch,	stretch(5 min),	stretch(5 min),	stretch(5 min),	stretch(5 min),	stretch(5 min),
	30 chin ups	10 min walk	30 chin ups	30 chin ups	30 chin ups	30 chin ups	30 chin ups
			Update \	Workout Plans			
				•			
				•			
					_	_	
						_	
							\

T8: As an Admin, I can Assign Workout Plans.

T9: As an Admin, I can Update Workout Plans.



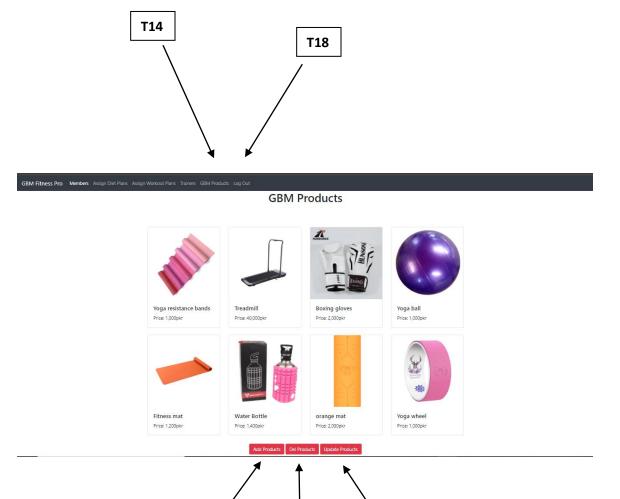


T10: As an Admin, I can View Trainers.

T11: As an Admin, I can Add Trainers.

T12: As an Admin, I can Delete Trainers.

T13: As an Admin, I can Update Trainers.



T16

**T17** 

T14: As an Admin, I can View GBM Products.

T15

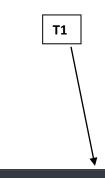
T15: As an Admin, I can Add GBM Products.

T16: As an Admin, I can Delete GBM Products.

T17: As an Admin, I can Update GBM Products.

T18: As an Admin, I can Logout from the website.

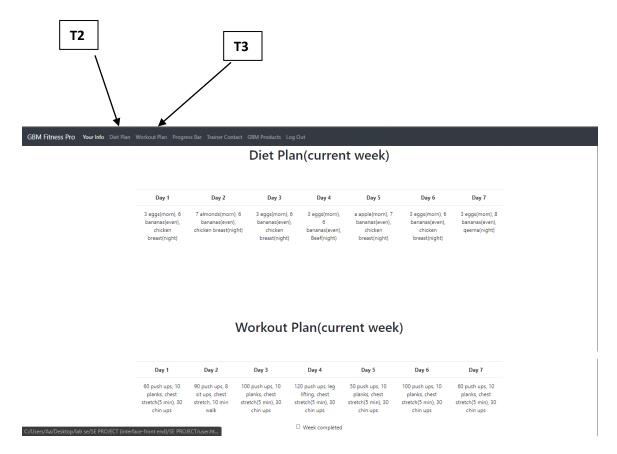
# **Member Page**



GBM Fitness Pro Your Info Diet Plan Workout Plan Progress Bar Trainer Contact GBM Products Log Out

# Hi, Member!

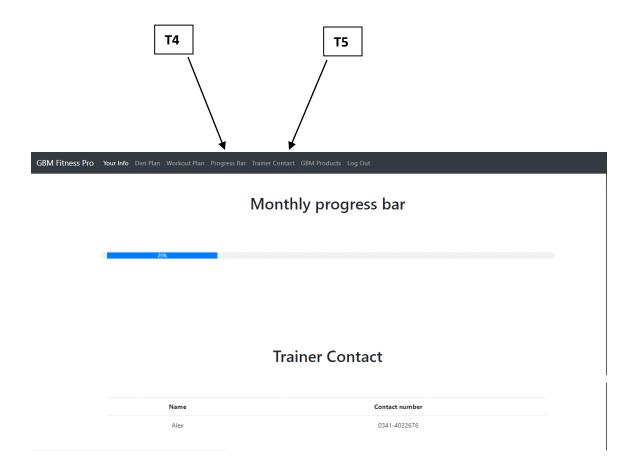
name	DOB	Membership plan	Trainer
mome	15-08-99	6 months	Alex



T1: As a Member, I can view my profile.

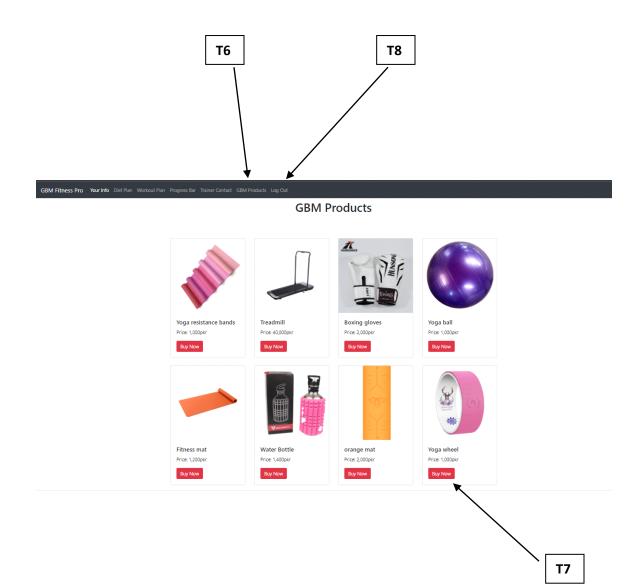
T2: As a Member, I can view weekly Diet Plan.

T3: As a Member, I can view weekly Workout Plan.



T4: As a Member, I can view my Monthly progress.

T5: As a Member, I can contact with the Trainer.



T6: As a Member, I can view GBM Products.

T7: As a Member, I can Buy GBM Products.

T8: As a Member, I can Log out from the website.

# • Functional Requirements

### 1. Admin

1. Admin shall be able to log in.

- 2. Admin shall be able to view his profile.
- 3. Admin shall be able to manage members.
- 4. Admin shall be able to add members.
- 5. Admin shall be able to delete members.
- 6. Admin shall be able to update members.
- 7. Admin shall be able to assign diet plans.
- 8. Admin shall be able to update diet plans.
- 9. Admin shall be able to assign workout plans.
- 10. Admin shall be able to update workout plans.
- 11. Admin shall be able to manage trainers.
- 12. Admin shall be able to add trainers.
- 13. Admin shall be able to delete trainers.
- 14. Admin shall be able to update trainers.
- 15. Admin shall be able to assign trainers.
- 16. Admin shall be able to manage GBM Products.
- 17. Admin shall be able to add GBM Products.
- 18. Admin shall be able to delete GBM Products.
- 19. Admin shall be able to update GBM Products.
- 20. Admin shall be able to log out.

#### 2. Member

- 1. Member shall be able to sign up.
- 2. Member shall be able to login in.
- 3. Member shall be able to view his/her profile.
- 4. Member shall be able to view weekly Diet Plan.
- 5. Member shall be able to view weekly Workout Plan.
- 6. Member shall be able to view his/her Monthly progress.
- 7. Member shall be able to contact with the Trainer.
- 8. Member shall be able to view GBM Products.
- 9. Member shall be able to Buy GBM Products.
- 10. Member shall be able to Log out from the website.

#### 3.Trainer

- 1. Admin shall be able to teach fitness skills to the members.
- 2. Admin shall be able to provide health tips to the members.
- 3. Admin shall be able to prepare the members for workout activities.
- 4. Admin shall be able to contact with his/her members.
- 5. Admin shall be able to motivate his/her members to reach fitness goals.

#### • Use Cases:

### 1. Member

Use Case Title	Create account
Use Case Id	1
Requirement Id	1
<b>Description:</b> A us	er starts the application for the first time and is prompted to create an

#### account.

#### **Pre-Conditions:**

• The application is started by a new user who does not have an account

#### **Normal Flow**

- 1. It starts when a new user uses the application for the first time and opts to create an account.
- 2. The user add his/her email and set password into the allotted text fields.
- 3. The application notifies the user that the account has been created and grants access to the application.

#### **Alternative Flow**

- The user enters invalid characters into the text field or leaves them blank. The system notifies the user of their error.
- Then user can continue from step 2

#### **Post Conditions:**

• Account is being created and user is returned to the Login page.

**Open issues:** Account cannot be created if user added wrong or invalid data.

**Authority:** Member

<b>Use Case Title</b>	Login Member
Use Case Id	2
Requirement Id	

**Description:** When the member is intended to login to the application.

#### **Pre-Conditions:**

- Member must have registered first on websites.
- Member have an internet connection.

### Normal Flow

- 1. A registered user sign in to the website by entering his/her username and password.
- 2. Member then have access to specified features.

#### **Alternative Flow**

- The member provides an incorrect username or password and is notified.
- Then member can continue from step 1

#### **Post Conditions:**

Member logged in successfully.

**Open issues:** User cannot sign in to the website if he/she added wrong or invalid data.

**Authority:** Member

Use Case Title	Log out Member
Use Case Id	3
Requirement Id	3

**Description:** When the admin is intended to logout from application

#### **Pre-Conditions:**

• Member must log in first.

#### **Normal Flow**

- 1. Member performs the desired task and wants to log out from the website.
- 2. System asks for confirmation.

### 3. User confirmed the information and logged out.

#### **Alternative Flow**

- There may a problem in the confirming.
- Member review the problem and fix the error.
- User then continues from the step 2.

#### **Post Conditions:**

The user logs out successfully.

**Open issues:** There may be errors in providing information.

**Authority:** Member

Use Case Title	View Profile
Use Case Id	4
Requirement Id	4

#### **Description:**

The use case begins when the member wants to view profile.

#### **Pre-Conditions:**

- Member Logs in first.
- Data exists.

#### **Normal Flow**

- 1. This use case begins when a logged in user clicks my info button.
- 2. The member is then provided with a list of all the related data.

#### **Alternative Flow**

• The application does not have Member record and has nothing to display to the member. The system notifies the member of this and returns them to the home page.

#### **Post Conditions:**

• The actor views his profile successfully.

**Open issues:** There may be no record.

**Authority:** Member

Use Case Title	View Diet Plan
Use Case Id	5
Requirement Id	5

#### **Description:**

The use case begins when the member wants to view diet plan.

#### **Pre-Conditions:**

- Member Logs in first.
- Data exists.

#### **Normal Flow**

1. This use case begins when a logged in user clicks the view diet plan button.

2. The member is then provided with a list of all the related data.

#### **Alternative Flow**

• The application may not have assigned diet plan and has nothing to display to the member. The system notifies the member of this and returns them to the home page.

#### **Post Conditions:**

•	The member view diet plan successfully.
<b>Open issues:</b> There may be no record.	
Authority: Member	

Use Case Title	View Workout Plan
Use Case Id	6
Requirement Id	6

**Description:** The use case begins when the member wants to view workout plan.

#### **Pre-Conditions:**

- Member Logs in first.
- Data exists.

#### **Normal Flow**

- 1. This use case begins when a logged in user clicks the view workout plan button.
- 2. The member is then provided with a list of all the related data.

#### **Alternative Flow**

• The application may not have assigned workout plan and has nothing to display to the member. The system notifies the member of this and returns them to the home page.

#### **Post Conditions:**

• The member view workout plan successfully.

**Open issues:** There may be no record.

**Authority:** Member

Use Case Title	Buy GBM Products
Use Case Id	7
Requirement Id	7

**Description:** The use case begins when the member wants to buy products.

#### **Pre-Conditions:**

- Member Logs in first.
- Products exists.

#### **Normal Flow**

1. This begins when a logged in user clicks the Buy Product button.

2. The member is then provided with a list of all the related data.

### **Alternative Flow**

• The system may not have assigned product and has nothing to display to the member. The system notifies the member of this and returns them to the home page.

#### **Post Conditions:**

• The member buys the product successfully.

**Open issues:** There may be no record.

**Authority:** Member

<b>Use Case Title</b>	Contact Trainer
Use Case Id	8
Requirement Id	8
<b>Description:</b> The	use case begins when the member wants to contact to his/her assigned

#### trainee.

#### **Pre-Conditions:**

- Member Logs in first.
- A trainer is assigned to the member.

#### **Normal Flow**

- 1. This use case begins when a logged in user clicks the Contact trainer button.
- 2. The member is then provided with the related data.

#### **Alternative Flow**

• The admin may not have assigned the trainer to the member yet and the application has nothing to display to the member. The system notifies the member of this and returns them to the home page.

#### **Post Conditions:**

• The user contacted his/her trainer successfully.

**Open issues:** There may be no trainer assigned.

**Authority:** Member

#### 2. Admin

Use Case Title	Login Admin
Use Case Id	1
<b>Requirement Id</b>	1

**Description:** When the admin is intended to login to the application.

#### **Pre-Conditions:**

- Admin has access to all features of websites.
- He/She must have an internet connection.

#### **Normal Flow**

- 1. Admin sign in to the website by entering his/her username and password.
- 2. Admin then have access to specified features.

#### **Alternative Flow**

- Admin provides an incorrect username or password and is notified.
- Then he/she can continue from step 1

#### **Post Conditions:**

• Admin logged in successfully.

**Open issues:** Admin cannot sign in to the website if he/she added wrong or invalid data.

**Authority:** Admin

Use Case Title	Log out Admin
Use Case Id	2
Requirement Id	2
<b>Description:</b> When the admin is intended to logout from application	
Pre-Conditions:	
Admin must log in first.	

#### **Normal Flow**

- 1. Admin performs the desired task and wants to log out from the website.
- 2. System asks for confirmation.
- 3. User confirmed the information and logged out.

#### **Alternative Flow**

- There may a problem in the confirming.
- Admin review the problem and fix the error.
- User then continues from the step 2.

#### **Post Conditions:**

• The user logs out successfully.

**Open issues:** There may be errors in providing information.

**Authority:** Admin

Use Case Title	Manage Members Records
Use Case Id	3
Requirement Id	3

**Description:** It begins when the Admin is intended to view, update add or delete Member records.

#### **Pre-Conditions:**

- Admin is logged in
- Member data must exist for viewing, editing, deleting and updating record.

#### **Normal Flow**

- 1. Admin logged in to the website.
- 2. Admin filled the required information, asked by the application, according to his/her desired task.
- 3. Information is edited when admin clicks the add, delete or update buttons.

#### **Alternative Flow**

- . Admin enters invalid information or leaves some or all fields empty and the system informs the user of their error.
- After fixing the error admin can continue from step 3.

#### **Post Conditions:**

• The member record is edited or deleted.

**Open issues:** Wrong information can lead to add or delete the wrong member.

**Authority:** Admin

Use Case Title	Manage Equipements or GBM Product Records
Use Case Id	4
Requirement Id	4

**Description:** It begins when the Admin is intended to view, update add or delete Products records.

### **Pre-Conditions:**

- Admin is logged in
- Equipment data must exist for viewing, editing, deleting and updating record.

#### **Normal Flow**

1. Admin logged in to the website.

- 2. Admin filled the required information, asked by the application, according to his/her desired task.
- 3. Information is edited when admin clicks the add, delete or update buttons.

#### **Alternative Flow**

- . Admin enters invalid information or leaves some or all fields empty and the system informs the user of their error.
- After fixing the error admin can continue from step 3.

#### **Post Conditions:**

• The Product record is edited or deleted.

Open issues: Wrong information can lead to add or delete the wrong member.

**Authority:** Admin

## • Non Functional Requirements:

#### Ease of Use:

The application will be user friendly and intuitive to use. Users will be comfortable using the application.

### **Reliability:**

The Application shall not crash or close under any circumstances and will always be available to be used by the user.

### Maintainability:

If the Application is to be changed, it will go through detailed testing to determine the Reliability and Security of the Application.

#### **Speed:**

The application will open and be ready to use within seconds of being selected. The UI should be quick and smooth with no delays between button presses and screen reaction.

#### **Data Accuracy:**

Our web application will be accurate because now admin does not enter a single record in so many registers but only in one single computer-based System.

#### **Data Consistency:**

Data consistency is the major benefit, as when data is changed in one portion, it will automatically change in every related portion.

# Project Work Plan

