National College of Ireland

Requirements Elicitation and Analysis Document

Topic: Fitness - Gym and Nutrition

Website: http://gymandnutrition.com

CA 2: Usability Design Project Deliverable 1

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1 <u>Executive Summary</u>

We all know the importance of being physically fit. A fit person is capable of living life to its fullest extent and enjoy the internal happiness. Eating a balanced diet full of nutrients and including physical activity like sports or gym or both helps us release stress, anxiety and sweat out the harmful substances out of our bodies, which helps us prevent diseases, improves mood and helps sleep better. Physical fitness is directly linked to our mental, cardiovascular health etc.

But the sad thing these days is most of the human population (mainly in cities) is consuming processed and fast foods which leads to excessive weight gain and various health problems.

So, we have decided to re-develop an existing website based platform which one of us (Navjot Singh) owns and to make it better, where people will be able to read information on nutrition, gym workouts, meal plans etc. Which will help millions of people around the world to accomplish their fitness goals and live more fulfilling life.

The aim of this report is to gather requirements of this system from the users and other stakeholders like owner, fitness athletes etc. and perform data analysis.

Lets, start with identifying stakeholders –

2 <u>Identification of Stakeholders</u>

Users/Clients/Fitness Enthusiasts
Users will use our website to see the nutritional information of foods, gym workouts, meal plans, How to? Videos and content and ask their questions on the website forum and also contribute/help other member of the site by answering their questions.

Admin/Owner/ Sponsors
Admin or owner would use the website to add new content, moderate content and add new accounts and do other administrative tasks like approving and rating the articles posted by users and content writers.

Developers/Support Team
The website will be developed by Navjot Singh. Any problems with the site will be seen by him and support team will use the website to provide useful articles/tips on site, on How to use the site and its different components and help customers facing trouble with the ecommerce section of the site.

Fitness Athletes/Models
Fitness Athletes and Models will use the site to build their portfolio page with an profile image, about me description and their photos and videos and participate in the forum and create a social following.

Advertisers and Affiliates
Advertisers and Affiliates will use the website to view which pages (articles and products) are doing well on the site and contact the support team in order to advertise their products and services on that section/pages of the site.

Sports Complex/Gym Owners/Managers
Gym Owners and Managers will use the site to create a profile for their gym on the site and build social following and attract new clients in their areas, and they can access and allow

people to rate and comment about their gym and improve/make changes based on the feedback.

Nutritionists

Nutritionists will use the website to build their profile and offer service and also provide information on foods and healthy eating and provide meal plans and different recipes on the website.

Body Builders

Body Builders will use the website to access workout information and the meal plans and recipes provided by nutritionist on the website and also ask their question and seek support to their problems in the forum.

Doctors

Doctors can use the website to provide useful health related information on the website in order to contribute towards the community as many doctors in this are very generous and kind and this way a lot many people will benefit from the experience and knowledge doctors will bring to the site.

Marketing Team

The marketing team will use the site to run different marketing campaigns, share articles and try different SEO and marketing techniques to achieve the goals.

Product Resellers/Retailers

Since, the fitness industry is huge our website will be selling self branded products and our product resellers will use a section on the site where they can buy products in bulk at reseller prices and also to see trends and which products/supplements are doing well in the market.

Content Writers and Moderators

The content writers will use the website from backend in like an admin but with limited administrative options like they will use the site to login with their account, write content, upload HD images and videos and be able moderate content on the site as well necessary, whereas the moderators will use the site to take out the unnecessary and bad quality materials from the site.

3 **Data Gathering**

Techniques

As part of the report, we have decided to acknowledge two methods that comply in Data gathering techniques which are based on an interview and a survey. The interview will be on five participants questioning on them of how they find the importance of nutrition in their life. And how often they would exercise to live a healthy balanced life.

We have designed a survey form for the improvements and knowing what people's thoughts are towards their nutrition diet and exercise. This will benefit our website to know the customer demanding needs which will bring improvements.

Interviews

Interview 1
Our first interview influenced us to know the diet of an athlete. Sarah has been an athlete for five years as a swimmer and won a national gold medal during her early stage. During her interview, we found that she was a negligent about her food. She would consume a staggering 8,000 calories each day. An average person only needs 2000 calories a day, and weightlifters consume around 6000 calories a day. So, this made us very interested to know more about her diet.

Q1: Tell me a bit about yourself?
A: Hi, I'm Sarah as you must be aware of it. My passion is swimming and I love it more than anything.

Q2: How did your interest grow of living a balanced healthy life?
A: As dieting was never part of my life. I think I was born with good genetics because I eat a lot but I don't get fat. So, eating was never a hard thing for me but what was hard is keeping it balance and consume as much protein as possible. As a swimmer, I need to eat full on energy meals but light on stomach.

Q3: How long have you been exercising and dieting?
A: I've been on strict diet for my competition so whenever I travel I always have various snacks on hand for emergencies, especially when I travel: dried plums, nuts, chocolate & herbal teas are always in my purse.

Q4: Do you think that you would benefit from a website by reading articles on nutrition, gym workouts and meal plans for free?
A: Yes, it will absolutely help youngster who don't know anything about diet. I love reading healthy and fitness article in my free time.

Interview 2
Paul is a student who is graduating from Trinity. He plays rugby for the university and in very good shape. What influence us to interview him that he has such a great strength in his game and the shape of his body is like a fit athlete.

Q1: Tell me a bit about yourself?
A: Hi, I'm Paul from Co. Kerry. I'm doing my Master in Computing but I love sports. It makes me feel alive and fit.

Q2: How did your interest grow of living a balanced healthy life?

A: I always loved sports but what makes my better performance is my diet. Having a balanced diet in my routine helps in better conditioning and greater strength.

Q3: How long have you been excising and dieting?
A: On regular basis, I train with my rugby coach but for better performance I train extra hours in the Gym. Usually, strength and conditioning is the programme I follow in my training and loading carbohydrates keeps me full on energy during the session.

Q4: Do you think that you would benefit from a website by reading articles on nutrition, gym workouts and meal plans for free?
A: Yeah, I think it would be great to read an article about the diet of legends out there. Every fitness freak wants to know about their icons diet and workouts.

Interview 3
Coming on to our third interview which was quite interesting to know about Dominic losing 20 kg in two months. Dominic has been always genetically over weighted but he managed to lose weight in such a limited time. What we learned from him is that with right guidance and dedication towards your goals then anything is possible.

Q1: Tell me a bit about yourself?
A: I have always been named certain bully names but now I can proudly say my name is Dominic. I have always been computer nerd because I love computers.

Q2: How did your interest grow of living a balanced healthy life?
A: Well, as I was always being bullied in college which made me hate myself. At times I use to curse on myself because I loved chocolates bars so much. To live a healthy life was never my goal till I got bored of myself.

Q3: How long have you been excising and dieting?
A: After few personal trainers, it was not helping to get to my goals. I then when online and read a lot of articles and did research on nutrition's. Google has everything that you need and for exercising techniques YouTube is the best. So, I finally managed to make my own plan which workout best.

Q4: Do you think that you would benefit from a website by reading articles on nutrition, gym workouts and meal plans for free?
A: As I mentioned above that reading articles online and watching videos is the best help out there. I totally will love to read about nutrition meals because you get bored of same recipes.

Interview 4
We interviewed Susan who is Herbalist & Nutritional Therapists where she owns a clinic in Dalkey and have developed a great reputation for helping people with a wide range of health issues.

Q1: Tell me a bit about yourself?

A: Hi, I'm Susan and I have 3 years' degree in Nutritional Therapy and 2 years studying Herbal Medicine. Before then I worked as an antiques dealer for a long time and back then I was at 56 years old, by the time I finally got to study what I wanted.

Q2: How did your interest grow of living a balanced healthy life?
A: I lived in India as a child and I use to love reading books. I use to have a book called "A Family Doctor" and I read it from page to page and became fascinated with the human body and all the different diseases which made me realize that healthy diet is a must in my life and I want to treat other people that are out there without knowledge.

Q3: How long have you been excising and dieting?
A: I was always slim, maybe because my metabolism is good. But that doesn't mean that I should not exercise and eat healthy. Getting the gut in balance and the body working well is key.

Q4: Do you think that you would benefit from a website by reading articles on nutrition, gym workouts and meal plans for free?
A: I always love reading as you know now. So, reading an article is my hobby when build my knowledge more and more.

Interview 5

Finally, we interviewed young teen Khan who is 20 years old. His goal is to win national bodybuilding championship. He always loved lean ripped muscle and wanted to get deeper information about getting ripped like what he sees in cover model magazines or in social media. What we learned from Khan is that most of the website's and fitness model's meal plans and workout are very expensive. Even few times he got scammed on buying an online meal plan from some fitness model. He said that a lot of fitness icons don't tell their secret and full meal plans.

Q1: Tell me a bit about yourself?
A: Hey, I'm Khan studying in UCD. I'm doing my masters in Science and I love fitness.

Q2: How did your interest grow of living a balanced healthy life?
A: Early days when I was a bit younger I was always fond of fitness models. My idol is Arnold Schwarzenegger and I always wanted to look like him but naturally. So, living a healthy balanced life has been my priority in life till I'm alive.

Q3: How long have you been excising and dieting?
A: I have been doing a lot of research online for guidance on my meals plan and workouts. There's a lot out there but not for free which is very expensive for me to buy so I made my own diet plan buy gathering bits and pieces of information from online articles and change every month.

Q4: Do you think that you would benefit from a website by reading articles on nutrition, gym workouts and meal plans for free?

A: Yes, I would love to see a website with free full workout guides and read articles of full meals plans to gain my knowledge in nutrition.

Survey

We have designed a survey on secondary college of student to find out about their nutrition intake and physical activity behaviour. The college students are between 12 -18 years of age and it mixed up with boys and girls. Their answers will help us gather data which can improve our knowledge on teenager's diet and will encourage us to make website nutritional programs better. The following questions are asked:

1. What is your age?
2. What is your gender?
3. What is your Racial and Ethnic Identity?
4. How physically healthy are you?
5. How do you describe your weight?
6. In a week, how many times would you eat fruit?
7. In a week, how many of your meals or snacks include carbohydrates?
8. How many times do you eat green salad a day during the week?
9. During your week, how many times did you eat breakfast in the morning?
10. During the week, how many times did you had fizzy drinks, such as Coke, 7up etc.?
11. What are your Daily activities?
12. How much do you know about a healthy diet?

The results of the survey seem to be that most of the students eat unhealthy diet. There was mostly mix responses and most of the responses were from males. What we discovered is mostly teenagers between 11 to 16 have very little to eat as comparing to their daily activities. Also, most of student had no knowledge of what kind of food has carbohydrates. Most of their snacks were filled with carbohydrates whereas a healthy diet they should have lunch filled with fruits and vegetables. And about the concern of fizzy drinks, majority of students drink fizzy drink and they are no aware of the effects on their body. Also, many student miss their breakfast due to being lazy as we can imagine.

Below is the link to the survey we have created.

https://www.surveymonkey.com/r/Preview/?sm=7ymPOMHe_2B05GyT_2Bo_2BvIVW44a6 75ew57NZgn_2F4TEn64EAJG_2BXmMtYxAxOmcK0L8dR

4 Data Analysis

User Groups Identified
Ali will do

Personas
Navjot

Scenarios
Ali will do

Task Analysis
Navjot and Ali will do

5 <u>Requirements</u>

<u>Functional Requirements</u>

Requirement 1: Easy to Use GUI/Interface
User Story
As a user I want to have an easy to use interface so I can navigate around the website easily with little time needed to be spent on how to use the website.

Description and Priority
The website shall have easy to use graphical user interface. Navigation will be possible through menus and sidebars and call to action buttons. The website shall also be responsive so as to support different screen sizes. Example, smartphones and tablets.
Essential and High Priority Requirement.

Requirement Activation
The requirement will be activated upon visiting the site.

Technical Issues
The GUI will be designed using different technologies like css and JavaScript and others slow internet connection can affect the performance of the GUI.

Risks
Provision must be taken that not all users have a good understanding of the technology and use of websites. If he GUI is too complex, the users may not use the website at all. The requirement is t the core to the success of the website.

Dependencies on other requirements
N/A

Requirement 2: Search
User Story
As a user I want to be able to find articles, products, profiles and Q/A on the forum with ease.

The website shall allow to search for all sorts of information on the website including products. This can be achieved by placing a search bar in the header and footer of the site along with that in the right/left sidebar of the site. *High Priority*.

Requirement Activation

The search requirement is activated when user enters their desired keywords in the search bar.

Technical Issues

N/A

Risks

The requirement is at the core to the success of the website if not implemented well may result in user dis-satisfaction.

Dependencies on other requirements

This requirement has dependency on the above requirement 1: Easy to Use GUI/Interface.

Requirement 3: User Registration and Login

User Story

As a user I shall be able to easily register within few seconds to get started and the website should also save my data when I login from a different system I shall be able to accesses all the information.

Description and Priority

The website shall provide an easy signup and login because the users will need this in order to contribute on the forum community and if they want to buy some products.
High Priority.

Requirement Activation

The requirement is activated when the user wants to buy products, contribute on the forum and want to use any other advanced features other then just crawling the site.

Technical Issues

Poor Internet connection may sometimes cause problems registering the user in that case the website shall provide with error handling.

Risks

N/A

Dependencies on other requirements

N/A

Requirement 4: Support Forum

User Story

As a user I shall be able to ask questions to my problems on the website.

Description and Priority

The website shall provide an easy to use forum which allows the user to start topics/questions on the website after signing up on the website. And also, allow the user to subscribe to favourite topics, tags etc. And, contribute towards other people's questions and answers. *Very High Priority*.

Requirement Activation

The requirement is activated after signup on the website and when the user wishes to use the forum.

Technical Issues

N/A

Risks

Moderating the spammers on the site and only allowing the authentic users on the site.

Dependencies on other requirements

The requirement has a dependency on Requirement 3: User Registration and Login

Requirement 5: User Profiles

User Story

As a user I shall be able to save and share my profile with people.

Description and Priority

The website shall provide the user with the opportunity to save his profile with description, photos and video gallery, cover photo and body measurements, before and after training profile section where user can share his progress. *Medium-High Priority*.

Requirement Activation

The requirement is activated upon user registration and users can edit their profiles.

Technical Issues

N/A

Risks

N/A

Dependencies on other requirements

The requirement has a dependency on Requirement 3: User Registration and Login

Requirement 6: Ecommerce Support

User Story

As a user I shall be able to purchase the nutrition and meal plans and other available products on the site.

Description and Priority

The website shall allow the user to buy products on the site with ease, it should have a product catalogue, user could add products to the cart, checkout and proceed to secure payment. *High Priority*.

Requirement Activation

The is activated when the user adds product to the cart upon visiting the product catalogue.

Technical Issues

Some users may face problems proceeding with payment due to various reasons like bad/unsecure internet connection.

Risks

Secure Payments and Achieving High Customer Satisfaction.

Dependencies on other requirements

The requirement has a dependency on Requirement 3: User Registration and Login

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Requirement 7: Review and Comment System

User Story

As a user I shall be able to review and comment on the site and express myself.

Description and Priority

The website shall allow the user to comment and review once they are logged in. This will help maintain quality on the site and also help with SEO upon good user reviews.

Requirement Activation

The Review requirement is activated when a logged in user wishes to review a page, product, article, photo or video on the website. *Medium Priority*.

Technical Issues

N/A

Risks

N/A

Dependencies on other requirements

The requirement has a dependency on Requirement 3: User Registration and Login and Requirement 5: User Profile.

Requirement 8: Contact Form

User Story

As a user I shall be able to contact the people running the site.

Description and Priority

The website shall allow the user to contact the support team by providing a easy to fill contact form.

Requirement Activation

The requirement is activated when user visits the contact us page and fills in the details and click the submit button. *Low Priority*.

Technical Issues

N/A

Risks

Too many contact requests may cause delays in response time.

Dependencies on other requirements

N/A

Requirement 9: Subscribe

User Story

As a user I shall be able to subscribe and receive updates on my subscribed topic on the forum.

Description and Priority

The website shall allow the user to subscribe topics on the forum and send email notification upon new activity on that topic. *Medium-Low Priority*.

Requirement Activation

The requirement is activated when the user clicks subscribe button on a page.

Technical Issues

N/A

Risks

N/A

Dependencies on other requirements

The requirement has a dependency on Requirement 3: User Registration and Login and Requirement 4: Support Forum.

Requirement 10: Easy Navigational Structure (Menus and Sidebars)

User Story

As a user I shall be able to navigate the site with ease.

Description and Priority

The website shall provide easy navigation through menus, sidebars and call-to-action buttons etc. and provide a link to homepage on every single page of the site. This will put user under ease and improve websites usability.

Requirement Activation

The requirement is activated upon visiting any page of the site.

Technical Issues

N/A

Risks

N/A

Dependencies on other requirements

The requirement has a dependency on the Requirement 1: Easy to Use GUI/Interface.

Non-Functional Requirements

Scalability Requirements

User Story

N/A

Description and Priority

With regards to the high number of users the website will be attracting from around the world. Since, this website is intended at global audience, the intention is for the system to be able to serve queries in thousand/hour through out the day, 7 days a week and the website should be scalable to accommodate these needs and be able to serve users from different time-zones with little to no changes to the website code. *High Priority.*

Security and Privacy Requirements

User Story

As a user I want the website to be safe and secure where my password and bank details are safely processed.

Description and Priority

The website shall achieve security through encryption and SSL certificate when connecting to server and processing payments. *High Priority*.

Availability Requirements

User Story

As a user I want to be able to access the website at any time I wish.

Description and Priority

The website shall be available at all times throughout the year with prior notification in case of maintenance. This can be achieved using clean code practices on the backend so the website code is less error prone, using a good cloud service/hosting for the site that promises 99.9% uptime and through continuous improvements to the site without users noticing them. *High Priority*.

Reliability Requirements

User Story

As a user I want the website to be reliable in terms of content, availability and performance.

Description and Priority

The website shall be reliable i.e. stable and consistent of what is expected out of it. *Very High Priority*.

Physical Requirements

User Story

As a user I want to be able to access the website from just anywhere.

Description and Priority

The website shall work on devices with different screen sizes effectively like smartphones and tablets. *Medium-High Priority*.

Maintainability Requirements

User Story

N/A

Description and Priority

The website shall be easy to maintain on daily basis, some automation can be used and it must be easy to fix bugs, add new features, increase performance. *Medium Priority*.

Compatibility Requirements

User Story

As a user I shall be able to use the website from browser of my choice.

Description and Priority

The website shall be compatible with all the popular browsers like Chrome, Firefox, Safari and Internet Explorer. *High Priority*.