Software Requirements Specification

Group 24

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Introduction

Document Overview:

The purpose of this document is to give a detailed description of the requirements for the “Nutrition World”. It will illustrate the purpose and complete declaration for the development of system. It will also explain system constraints, interface and interactions with other external applications. This document is primarily intended to be proposed to a customer for its approval and a reference for developing the first version of the system for the development team.

Executive Summary:

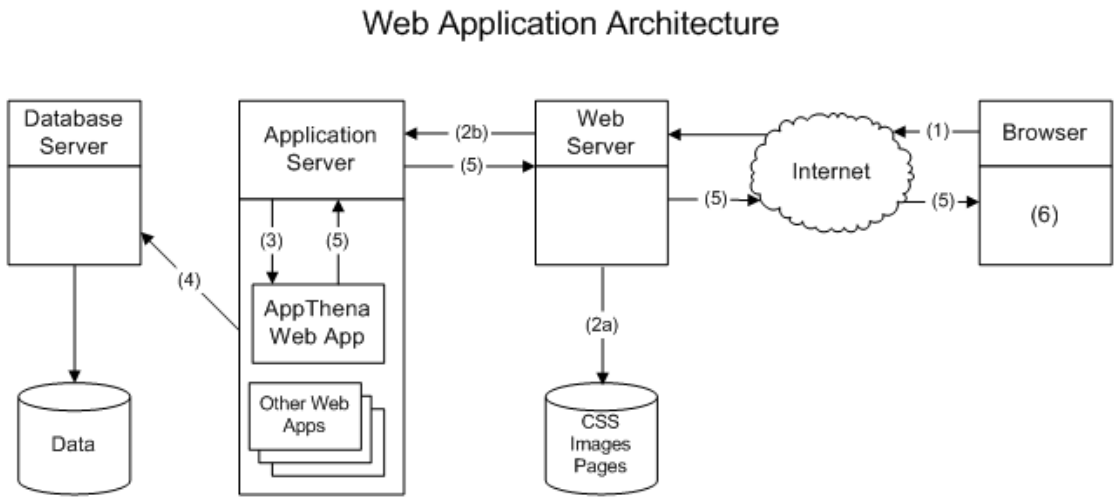
“Nutrition World” is a website for someone who aims to be in shape ... Imagine a lot of articles, videos, recipes, motivating stories, daily exercises and much more in one place.
By having an account, you can keep in touch with all the daily updates concerning diet programs, recommendations about food that suit you and your body and tracking your progress.
You can add your country region in order to present to him/her the names of the available doctors in his/her regions by using GPS and interact with them to ask them questions.

Abbreviations and Terminologies:

Term	Definitions
User	Someone who interacts with the internet
Admin	System administrator who is given specific permission for managing and controlling the system
Diet	means the usual food and drink consumed by a person
GPS	Global Positioning System
GPS-Navigator	An installed software on mobile phone which could provide GPS connection and data, show locations on map and find paths from current position to defined destination

System Description :

- Introduction :



This software product is eventually intended for someone who aims to be in shape . Product will be
deployed to web site and all users of the product will access by use of the website. Website will be
main user interface where users can operate all the provided functionality. However, this web site
will be only a part of a larger system. There will be cloud server where all the user data is kept and all
the execution is done. Website will only be the interface for the user data and the execution of
provided functionalities.
To use product, users are required to register through the web interface. Whenever a new
user registered, all the required data will be created in the database and a predefined workspace will
be assigned for the user. Later, user will be able to login and logout the system anytime he wants.
Since every operation that user perform reflected to our database.

From the user point of view, user will have to functionality to create and edit information . User will be able to get Nutrition plans and work-outs, communicate with doctors and he can add his region in order to get a list of doctors in his region .

- Users :

There are three types of users that interact with the system: users of the website, doctors and administrators. Each of these three types of users has different use of the system so each of them has their own requirements.
The website users can use the website to find a doctor or to get Nutrition plans and work-outs or communicating with doctor . This means that the user have to be able to search for doctors, choose a doctor from that search . In order for the users to get a relevant search result there are multiple criteria the users can specify and all results matches all of those.
The doctors . They will manage the information about their patients, for example contact information and their inbody.
The administrators also only interact with the web . They are managing the overall system so there
is no incorrect information within it.

- Modules :

Finding a doctor :

- Search for available doctors at the user region.
- Display a list for all the available doctors for the user region to choose from.
- Reserve a date for the user and inform the doctor.

Nutrition plans and work-outs :

- Process the In-body entered by the user and analyze it.
- Display a detailed list for all the suggested nutrition plans and work-outs.

System Users:

- Users of website :

The website users can use the website to find a doctor or to get Nutrition plans and work-outs or communicating with doctor . This means that the user have to be able to search for doctors, choose a doctor from that search . In order for the users to get a relevant search result there are multiple criteria the users can specify and all results matches all of those.

- Doctors :

They will manage the information about their patients, for example contact information and their inbody so they can answer the quetions.

- The Administrators :

The administrators also only interact with the web. They are managing the overall system so there
is no incorrect information within it.

System Features:

Nutrition World maintains information on meals preparation, health doctors and reservation of appointments, calculating calories and processing the needed exercises and nutrition plans for the user. Of course, this project has a high priority because our heath is on top of our priorities.

Stimulus/response sequences:

For the first task:

- Search for available doctors at the user region.
- Display a list for all the available doctors for the user region to choose from.
- Reserve a date for the user and inform the doctor.

For the second task:

- Process the In-body entered by the user and analyze it.
- Display a detailed list for all the suggested nutrition plans and work-outs.

Safety Requirements:

If there is extensive damage to a wide portion of the database due to catastrophic failure, such as a disk crash, the recovery method restores a past copy of the database that was backed up to archival storage (typically tape) and reconstructs a more current state by reapplying or redoing the operations of committed transactions from the backed up log, up to the time of failure.

Nonfunctional Requirements:

- **Security Requirements:**

- The user information will be totally private and not available to any parties except those who will be allowed access by the user.

All the users must accept the terms and policies of the website to be able to access their information with their approval.

- **Usability Requirements:**

All the suggested nutrition plans and work-outs should be easy to follow and available for the users.
All the reservations should be accurate and editable for the users.
Any user profile must be editable and updated every period of time to be of maximum efficiency for the doctors and to match accurately the nutrition plans and work-outs.

- **Performance Requirements:**

If 0.1 second is the time for a task to be completed, then there is no need for a feedback message for the user.
If 1.0 second is the time for a task to be completed, then there will not be a feedback message for the user.
If more than 10 seconds, then there must be a feedback message indicating when the task will be completed to keep the user interaction with the website.

- **Technology Requirements:**

We will use PHP for the backend, mySQL for the database and HTML and CSS for the frontend.

System Functions:

- Create an account:

Description : create an account in order to use the website.
Input : email and password.
Output : regitered on website.
Pre-conditions: The user should be connected to the Internet.
Post-conditions: None.

- User log-in:

Description : So the user can log-in to his account.
Input : email and password.
Output : logged in.
Pre-conditions: the user made and account on website before.
Post-conditions: None.

- Update information:

Description : The user can have the ability to change in any information, he/she has made in his profile.
Input : the information user wants to update.

Output : information updated.
Pre-conditions: The user should be connected to the Internet.
Post-conditions: None.

- Search feature:

Description : The search feature should be easy to find for the user in order to find anything in website easily.
Input : anything the user want to search for.
Output : what user searched for.
Pre-conditions: The user should be connected to the Internet.
Post-conditions: None.

- Searching for doctors :

Description : Search for available doctors at the user region.
Input : user region.
Output : Display a list for all the available doctors for the user region
Pre-conditions: the user should be connected to the Internet.
Post-conditions: None.

- Usage of the result in the list view:

Description : The results displayed in the list view should be user friendly and easy to understand.
Input : Selecting an element in the result list should only take one click.
Output : doctor address.

Pre-conditions: None.
Post-conditions: None.

- Response Time :

Description : the fastness of the search.
Input : None.
Output : None.
Pre-conditions: The user should be connected to the Internet.
Post-conditions: None.

- Nutrition plans and work-outs:

Description : Process the In-body entered by the user and analyze it then display a detailed list for all the suggested nutrition plans and work-outs.
Input : In-body.
Output : Display a detailed list for all the suggested nutrition plans and work-outs.
Pre-conditions: The user should be connected to the Internet.
Post-conditions: None.

- Communicating with doctor:

Description : There will always be an option to send a message to the doctor at any time, giving him a feedback about the food system or asking him/her a question.
Input : Message .
Output : a reply from the doctor.
Pre-conditions: The user should be connected to the Internet.
Post-conditions: None.

- System dependability:

Description : If the system loses the connection to the Internet or to the GPS device or the system gets some strange input, the user should be informed.

Input : None .

Output : None.

Pre-conditions: None.

Post-conditions: None.

- System Reliability:

Description : The reliability that the system gives the right result on a search.

Input : None .

Output : None.

Pre-conditions: None.

Post-conditions: None.

- System Availability:

Description : The availability of the system when it is used.

Input : None .

Output : None.

Pre-conditions: None.

Post-conditions: None.

- Communication Security:

Description : The messages should be encrypted for log-in communications, so others cannot get user-name and password from those messages.

Input : None .
Output : None.
Pre-conditions: None.
Post-conditions: None.

Domain Requirements :

- **Constraints** :
- Developers of the product should be aware that main feature of the intended product is portability. So they should use common libraries and tools that can work with all the common internet browser application with no problem.
- Developers should also be careful about the privacy of users. Since product will be cloud application, all user data will be kept on cloud server and necessary precautions should be taken to protect user data.
- Since product will be cloud application and all user programs will be executed on cloud server, developers should limit the privileges of the users so that they cannot harm other users' data and system server.

System Interfaces:

User Interfaces:

-The user can make a new profile on the system in the first time to log in. This profile will include his/her name, age, weight,

height, and percentage of fats, water and muscles (which can be known using a body in from any pharmacy).
After that the user will be requested to include his/her email and then making a password to this email.

-On each time the user opens the website, he/she will be requested to log in using his/her email and password which he/she has created in the profile.
This log in page will check if the taken user email and password match, if matches, the home page will be opened, and if not the user will be requested to enter his/her email and password again.

-The user can select his/her country and region in order to present to him/her the names of the available doctors in his/her regions.
The user will select his/her preferable doctor in order to communicate with him if the user wants.

-There will always be an option to send a message to the doctor at any time, giving him a feedback about the food system or asking him/her a question.

-The user can have the ability to change in any information, he/she has made in his profile.

- Hardware interfaces :

Since neither the mobile application nor the web portal have any designated hardware, it does not have
any direct hardware interfaces.

- Software interfaces :

The device communicates with the GPS application in order to get geographical information
about where the user is located and the visual representation of it, and with the database in order to get the
information about the doctors place . The communication between the database and the web
portal consists of operation concerning both reading and modifying the data, while the communication
between the database and the device consists of only reading operations.

- **Communications interfaces** :

The communication between the different parts of the system is important since they depend on each
other. However, in what way the communication is achieved is not important for the system and is
therefore handled by the underlying operating systems for web.