Health-Nut

The Code Crackers

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**Software Requirements Specification**

**Document**

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# 1. Introduction

*We are attempting to build a database application using a website for the front end to be used as a nutritional assistant for users. Our application will be user-friendly with easy access to log any food/drink and to look up and record exercise routines. The environment of the platform will be easy for the user to understand the structure of the website. Our back-end database will be developed using PHP to run all accounts from the website.*

## 1.1 Purpose

*The purpose of this webpage is to for people looking for better nutritional information that will help with weight loss and/or maintain a healthy lifestyle. It will also be intended to provide some quick simple workout routines to help get into shape. It will also provide healthy recipes to be shared and uploaded by users.*

## 1.2 Scope

*In this subsection:*

*The name of our application will be called Health-Nuts. It will act as a nutritional/dietary help website which people can use to track their progress by entering their current weight, find helpful information about healthy eating styles, and find helpful exercise tips on the site. The site will allow a user to have login to access the page as a member and will allow people to upload different exercise and diet ideas. Overall this application aims to help assist people in having a healthier lifestyle by accessing necessary resources to change their diet and exercise habits. The benefits of having access to this website will be that the user will be able to find recipes and exercise methods that fit their routine and lifestyle. The website will also allow the user to provide a rating on the recipes.*

## 1.3 Definitions, Acronyms, and Abbreviations.

*Cal(calories), DV(daily value), Amt(amount), Vit(vitamin), Hr(hour), Min(minute), Sec(second), g(gram), In(inch), pkg(package), gal(gallon), fl(fluid ounces), L(liter), mL(milliliter), doz(dozen), pt(pint), qt(quart), lb(pound), oz(ounce), c(cup), Tbsp(tablespoon), tsp(teaspoon), F(fahrenheit), C(celsius)*

## 1.4 References

*Currently there are no references in use for this webpage however we will obtain some as the project gets started.*

## 1.5 Overview

*In this subsection:*

1. *The rest of this SRN will describe how we will go about creating this webpage by creating a step by step process and completing each stage simultaneously in order to stay on track and create a very unique webpage. The customers or users will want to go to section 2 of this document while the developers will want to go to section 3 for more information.*
2. *The SRN is organized in the order of how we’re going to execute our production of the webpage.*

# 2. The Overall Description

*We will have a great easy-to-use website, that will be simple enough for users of all ages to be about to navigate. By using pleasant colors, pictures, and animations the user will be able to find the information that they are looking for in no time at all. The nutritional content of most foods will be on the side with a list as well as a search bar if the user wanted to look up a specific food. Same goes for drinks the search bar will be the same but a different tab with the link to all the drinks will be on the side as well. The exercise routines will be the third tab with several different ways using step-by-step instructions, pictures and videos. The overall goal of this website is to help users live a healthier lifestyle.*

## 2.1 Product Perspective

*We will be using information that is already known by the outside world. However, our website will make it easy to pick some of your favorite foods and list the benefits of them and the amount you should have of each. While some of the other diet-based websites are confusing and offer little help and cause more confusion.*

### 2.1.1 System Interfaces

*The interfaces will be as I mentioned before. There will be a food category, a drink category and a workout routine category. The user will click an item located on the top of the webpage and it will open and bring you to more of the items of that subject. We will also have a working search bar that will also help locate a specific item if needed. There will be a small tab at the bottom of the page with the authors of the webpage and a bio of each of the members.*

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### 2.1.2 Interfaces

*The user will only have to click on the interface for the GUI to help bring the user to the next location and from there to the next and so on until they find what they’re looking for. In order to use this website, a user must create a log in for the application.*

### 2.1.3 Hardware Interfaces

*The system has no hardware interface requirements*

### 2.1.4 Software Interfaces

*Software products and interfaces:*

1. *Account Name*
2. *Account Password*
3. *A remember me option so the user won’t need to type their password every time*
4. *Version number will be updates for each update to the page*

*The user must have access to the internet as well as a browser to use this website*.

*The interface will provide:*

1. *Easy to use links that will guide the user to information about food and fitness*
2. *With the website name at the top of the page with tabs under it “Healthy Food” “Healthy Beverages and Smoothies” “Workouts” “Quick Meals” “Recipes”*
3. *On the right-hand side of the page is where the users personal information will be saved such as recipes, current weight, height, goals, etc.*

### 2.1.5 Communications Interfaces

### *DNS: The "Domain Name Service" abstraction of an Internet-wide directory service that allows us to map user-friendly names to IP addresses.*

### *TCP: The "Transmission Control Protocol" abstraction of a wire connecting two programs speaking the Hyper-Text Transfer Protocol (HTTP) language/vocabulary.*

### *IP: The Internet Protocol abstraction of packet delivery allowing a single packet to make its way (through repeated routing and forwarding between routers) from a sender to a receiver.*

### 2.1.6 Memory Constraints

*There are no memory constraints.*

### 2.1.7 Operations

The user will be opened to a main page of our application where they can go to different sections of the application to access exercises routines, nutrition logging, etc. When logging in the application, the information will be recorded and saved on our server. Users will be able to log into their account at any time from any device. Each user will have their own account linked up to our database server where if there was event, the user may log into another device to access their current account.

### 2.1.8 Site Adaptation Requirements

The application requires a log-in account where each account is saved to our database server. Setting up an account requires the users name and a password to keep all information private. From there, the user will be able to log in their height and weight where it starts the tracker of the program.

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## 2.2 Product Functions

*-Having a personal login*

-Providing a list of healthy recipes uploaded by the users and the administrators

-Having a page for a list of exercises with an ability to search for specific exercise

-Providing the ability to save desired recipes

-A rating system for the recipes for the user to give feedback

-Use of a database to store all information

-Links to useful webpages or articles to aid in developing a healthier lifestyle.

## 2.3 User Characteristics

*This website will be open to anyone. The user will be informed and educated with our website and find out a lot more information about their daily nutrition and what they need to eat and do day to day in order to gain fitness and lose weight if that is the intended purpose. The webpage will list the specific food, nutrition facts, vitamins, suggested amounts due to weight, calorie count and more.*

*We are aiming just to create an easy to access webpage that is simple and easy to navigate.*

## 2.4 Constraints

1. *Time for use to work on this project will be a constraint*
2. *The amount of information that we can add to the website*
3. *Size of our production group*
4. *Knowledge of different programing languages*
5. *Overall experience with creating webpages and implementing them*
6. *Meeting up with partners on a weekly basis.*

## 2.5 Assumptions and Dependencies

*The type of information may change or increase which in turn may require more memory for us. Also the overall speed of the webpage with the server.*

## 2.6 Apportioning of Requirements.

*Technique difficulties that may occur on the way as we start this project. As well as other classes that require time and effort that will take away from this project. Having to multitask with everything and still have a full project. We should have all the information done by the end but adding extra features and making the website look very nice and easily accessible may be restricted toward the end of the project and the school year.*

# 

# 3. Specific Requirements

The software requirements for this application to be built include

1. The system requires Access to a database server.
2. The system requires Use of a software to build the front end of the website
3. The system requires Access to a server-side language to allow the user to enter information to be stored in the database.
4. The system shall use a server to allow access to the website from other devices
5. An optional feature would be to make the website portable to mobile devices as well as to all laptops and desktops

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## 3.1 External Interfaces

1. *All input from the application will be accessed by a database server and all information will be stored in that server. Dates and dynamically changing information such as the current date displayed on the webpage will be constantly updating by using the DATE function in SQL. The username, password, and email will be stored in a table located in the database and will be accessed by other tables through use of a foreign key.*

## 3.2 Functions

* The system shall require users to create a log in with a username and password. This information will be stored in the database
* The system shall have access to a database, and allow users to enter data into specific parts of the database
* The system shall check input before allowing data to be entered.
* The system shall allow users to easily access different parts of the site with ease.
* The system shall provide a graphical interface for the users on a webpage.
* The system shall allow users to have their own personal page which will include saved recipes, diets, exercise routines as well as their profile information
* The system shall keep personal information private such as password, saved recipes, dietary methods, exercise routines, weight, and any other profile information the user chooses to keep private.

## 3.3 Performance Requirements

Our database server will have to handle multiple user sending their information simultaneously. Information to be handle with be text such as body weight, workouts recorded, and food recorded.

*(a) We will only need one terminal for our webpage due to the lack of activity*

*(b) The number of users that can make account will be about 500 as our website won’t have a lot of activity.*

*(c) The amount of information will be 1mb to 50mb of information due to pictures, videos and all the text written.*

*Static numerical requirements: Will be able to hold large amount of information with minimal bytes.*

*Dynamic numerical requirements: The webpage will run fast as not much activity will be occurring at once. The speed of the server should be able to keep up with the demands of the user(s) efficiently without the page crashing.*

*95%-99% of the transactions shall be processed in 1 second or less*

## 3.4 Logical Database Requirements

The website will have access to a database which will include the following information

* Username
* Password
* Email account
* Recipes
* Personal recipes
* Saved recipes
* Exercise routines
* Saved exercise routines

## 3.5 Design Constraints

*We are constricted to what we have here at SUNY Oneonta and what we can and can’t access using the resources provided. Other than that, our webpage shouldn’t have any issues with hardware.*

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### 3.5.1 Standards Compliance

*We will have a history of accounts and what user logs in at what time to see how many users we have. The website will be free to use to there will be no need for any accounting procedures and other important confidential information. We will make the user accept our terms and conditions after making an account so that we’re not held liable if the user does an activity incorrectly or doesn’t prep their food as the recipe states.*

## 3.6 Software System Attributes

### 3.6.1 Reliability

*The system must be able to accept input and allow the user to access all public data contained on our application. It shall also allow the user to save and store information with regards to their personal profile. This means that our system needs to be able to access the database by using a server-side language, while also keeping information private so other users can not see.*

### 3.6.2 Availability

*The system will be able to be accessed by users at any time. We are required to ensure that the website is accessible on multiple browsers and if the system crashes we need to be informed so that we can get it up and running.*

### 3.6.3 Security

1. *For security purposes all personal data will be saved and stored in an external database and the users of this website will not have access to the actual database information itself. The users of this website will be required to sign up with a valid email address. If a user wishes to keep their information private when uploading to the site, the server will allow them to chose to do so.*

### 3.6.4 Maintainability

*The site will be maintained and updated by the administrators of this site and will be checked at least on a weekly basis. We will check to make sure all updated material is relevant to the site as well as appropriate. The site will also be checked and updated should issues arise with the functioning of the overall application.*

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### 3.6.5 Portability

For purpose of portability to other devices we will be using a framework such as bootstrap which allows the code to adjust to the device it is being accessed on automatically.

## 3.7 Organizing the Specific Requirements

*For anything but trivial systems the detailed requirements tend to be extensive. For this reason, it is recommended that careful consideration be given to organizing these in a manner optimal for understanding. There is no one optimal organization for all systems. Different classes of systems lend themselves to different organizations of requirements in section 3. Some of these organizations are described in the following subclasses.*

### 3.7.1 System Mode

*In system mode, we can change up the background of the webpage and move links around to make the application easy to use. From there we can add more features to the application over time when we release updates.*

### 3.7.2 User Class

*If a user has a registered profile they will be able to upload and save information that can be accessed on the system. People who log on with a guest username will only be able to view a limited portion of the site and can not upload or change anything on the site.*

## 3.8 Additional Comments

There are no additional comments in this section

# Change Management Process

*All changes that need to be applied to the SRS document will be submitted formally by email to one of the members of our team. From there it is our responsibility to apply the changes and be able to satisfy the customers ad designers needs. After the changes have been made and finalized we will send the revised copy back to the customer or designer.*

# Document Approvals

*Peter Paterson \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2/15/2018*

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