1. Introduction

1.1 Purpose

The purpose of this document is to outline and describe the functional and performance related requirements relating to the Carone Fitness Personal Fitness Suite Project.

1.2 Scope

The scope of the project to be developed for Carone Fitness is an online Fitness log. The list of priorities for the online fitness log is:

1. Separate Login Roles (Admin, Organization, Parent/Supervisor, Teacher, Student)
2. Fitness Log Entry and Database
3. Reporting Features
4. Automated Messaging
5. Goal Center
6. Tool Center
7. Message Center

If there is additional time to add to the project some lower priorities are:

1. Fitness Measurements and tracker.
2. Database of Health and Fitness Tips.
1.3 Definitions
- AJAX: Asynchronous Java Script and XML
- PHP: Scripting language used in web development.
- RSA: Encryption method that ensures safety of private information on the web.

1.4 References
Carone Fitness Website. http://www.caronefitness.com
Carone, Katie. CS4500 Project: Online Fitness Log Project Priorities

1.5 Overview
The rest of this document will describe some of the main requirements that will go into making this website functional. Specifically it will outline the type of database used, programming languages, user interface looks, etc…

2. General Description

2.1 User Personas and Characteristics
- Student: a typical student that uses the online fitness log.

  The student uses the online fitness log regularly to keep up to date for their online class. It helps them to keep track of all their exercise as well as keeping in touch with their teacher to track their progress in the class. Some of the goals the student has with using the product are to utilize the product to help them pass their class. Another goal the student has is to keep all their progress in the class in an organized manner.

- Teacher: a teacher that uses the online fitness log to keep track of their students to track their progress and goals.

  The teacher’s main purpose in using the online fitness log is to help keep in touch with their students and keep track of their students’ progress in the course. If they need to send a message to all students in their class they can use the message center of the product to send a mass email to everyone at once. Also, the teacher can use the online fitness log to verify that students have completed the required course load and assignments.

2.2 Product Perspective
The Online Fitness Log will be a part of the Carone Fitness website. Once it is completed it will be integrated into the Carone Fitness website via a new login. The login page will have a place for the user to identify them self. Once logged in the user will be taken to a page where they will have access to all features available to their level of access.

2.3 Overview of Functional Requirements
The Online Fitness log has the following functional requirements:
- Users must be able to log into the system via a login page. The page will allow access to different level of users ranging from student to Administrator, each having their own level of access.
- Once users have logged in they will be taken to a page where they can browse through the Online Fitness log.
- Students must be able to enter their fitness log and have it stored in their profile.
- Teachers must be able to retrieve their student’s fitness logs.
- Parents/Supervisors must be able to verify their students work.
- Teachers must be able to send/receive messages to all their students through the message center.
- Students must be able to send/receive messages via the message center.
- Students / Teachers must be able to update personal information.
- Users must be able to print off reports for themselves about fitness statistics/ history.

2.4 Overview of Data Requirements
- The user is required to input a password to login to the system.
- The system can print out reports about student’s fitness history / students fitness statistics vs. national statistics.
- Message center requires user’s names / emails to send messages to.

2.5 General Constraints, Assumptions, Dependencies, Guidelines
- The system is web-based only.
- The system is dependent on an apache database to store login information / user’s information.
The website will be hosted and maintained by Carone Fitness.

The website will require no plug-ins / special software to run.

2.6 User View of Product Use

The student logs into the Online Fitness Log through the Carone Fitness website. Once the student has logged in they are taken to their personal profile. Once in the personal profile there are tabs along the top of the page that can direct them to the other areas of the site. The student clicks on the message center tab and it dynamically loads their personal message center where they retrieve any messages that are for them. They are also able to send a message to their teacher via the message center. After they retrieve their messages they click on the fitness log tab which loads the fitness log page. They enter their data and it is displayed to them and saved in the database for later use.

The student then decides to enter some of their fitness information into the tool center and get their ranking among national averages. The system outputs information to the student that gives them a good idea of how fit they are compared to the national average. The student decides to make a report of the information that is given to them in a format that is easily printed.

The teacher decides to log into the Online Fitness Log through the Carone Fitness website. Once the teacher has logged in they are directed to their personal profile page where they are able to reach the other areas of the site. The teacher decides to send a reminder to all their students via the message center. The teacher sends a reminder to all the students reminding them that their fitness logs are due in 3 days. After the teacher has sent a reminder to the students, the teacher goes to the verification page. Once on the verification page the teacher checks the report for the previous week that all students have finished their logs. After the teacher sees that one parent did not verify their students work. The teacher returns to the message center and sends a message to the parent inquiring as to why the work was not verified. The teacher then logs out of the system.

3. Specific Requirements

3.1 External Interface Requirements

User Interface – All user interfaces will be created through PHP and AJAX. PHP will be the main programming language driving the website. AJAX will be used to help give the website a dynamic touch. AJAX allows portions of web pages
to be refreshed without having to re-load the entire webpage. One application of this is tabbed browsing within a website.

Database Interface – All database interaction will be hidden from the users and will be dynamically handled through the website. If a user requests a report or something then the website will query into the database retrieving the information and displaying it to the user in a user friendly fashion.

3.2 Detailed Description of Functional Requirements

3.2.1 Login Page

<table>
<thead>
<tr>
<th>purpose</th>
<th>Allows users to log into the website and retrieve their personal information.</th>
</tr>
</thead>
<tbody>
<tr>
<td>inputs</td>
<td>User name and password</td>
</tr>
<tr>
<td>processing</td>
<td>System checks for validity of username and password if it passes it directs user to User Profile. If it fails then display error page.</td>
</tr>
<tr>
<td>outputs</td>
<td>Direct user to Personal User Profile page. If error occurs invoke error and direct user to error page.</td>
</tr>
</tbody>
</table>

3.2.2 Personal Profile Page

<table>
<thead>
<tr>
<th>purpose</th>
<th>Allows user to navigate Online Fitness Log and retrieve personal information.</th>
</tr>
</thead>
<tbody>
<tr>
<td>inputs</td>
<td>Click on Tabs to navigate website.</td>
</tr>
<tr>
<td>processing</td>
<td>Each tab will direct user to different section of website.</td>
</tr>
<tr>
<td>outputs</td>
<td>System will display specified section of website.</td>
</tr>
</tbody>
</table>

3.2.3 Fitness Log

<table>
<thead>
<tr>
<th>purpose</th>
<th>Allows user to enter fitness log.</th>
</tr>
</thead>
<tbody>
<tr>
<td>inputs</td>
<td>User types fitness log into a form.</td>
</tr>
<tr>
<td>processing</td>
<td>System saves fitness log in a database.</td>
</tr>
<tr>
<td>outputs</td>
<td>Displays fitness log and verification that it was saved in database.</td>
</tr>
</tbody>
</table>

3.2.4 Verification Center

<table>
<thead>
<tr>
<th>purpose</th>
<th>Parents / Supervisors</th>
</tr>
</thead>
<tbody>
<tr>
<td>inputs</td>
<td>Click fitness log and verify that it is correct via a checkbox.</td>
</tr>
<tr>
<td>processing</td>
<td>System saves that fitness log is verified in database and sends message to teacher.</td>
</tr>
<tr>
<td>outputs</td>
<td>System displays verification that transaction completed successfully.</td>
</tr>
</tbody>
</table>

### 3.2.5 Message Center

| purpose | Allows users to send / retrieve messages. |
| inputs | Send – Fill out form indicating recipient and message and hit send. |
| processing | Retrieve – System retrieves message from database. |
| outputs | Retrieve – Displays message to user. |

### 3.2.6 Tool Center

| Purpose | - Allows users to update personal information. - Allow users to print reports about fitness statistics. |
| inputs | Update personal information through form. User can input fitness information. User can generate report. |
| processing | For fitness statistics system queries database and compares against national averages. Updated information is saved to database. |
| outputs | The reports generated are displayed to user in a printer friendly manner. The information is displayed to user comparing them to the national averages so they can understand how fit they are. Updated information displays verification that information was saved correctly to database. |

### 3.3 Performance Requirements

Database queries should be fast. For personal information and fitness logs it should be instantaneous. For national average reports it can take longer.

### 3.4 Quality Attributes

All personal information will be encrypted and saved so that it will be safe from online hackers. RSA algorithms will be used to ensure safety on internet.
3.5 Other Requirements

Currently no other requirements.