Software Project Management Plan

COSC 412 Individual Project

Fall 2019

Krysta Valenzia

Overview

Purpose and Scope

The purpose of this website is to help users choose healthy options in a very unhealthy world. Most of what we revolve around is food oriented. I am creating a program that has a mixture of a few different key aspects of life that will make it easier on all the everyday people to create a better lifestyle for themselves. When I say “everyday people” I mean those that don’t feel up to cooking some night and just want to order out, or those that need a little more motivation to work out.

Product Features

* Find healthy food in the local area (eating out)
  + Enter information:
    - Your location
    - Diet Restraints
* Create healthy recipes from what you have at home
  + Enter information:
    - What food you have at home
    - Breakfast/lunch/dinner
* Track weight/height/age and formulate information needed to get to specific goal
  + Enter information:
    - Age/Height/Weight
    - How much you wish to gain/lost
* Track food/caloric intake
  + Enter food you ate that day
  + Protein needed for your specific body type
  + Water intake needed

Assumptions and Constraints

The project will be conducted with the following assumptions:

* Work will be periodically reviewed and updated by client but mainly by individual creator
* A working prototype will be constructed by the end of the semester

The following constraints are observed:

* Inexperienced individual working with new technologies requires a steep learning curve
* Scheduling difficulty between group work and individual work
* Working in virtual environment
* Short time span

Communication Plan

Members and stakeholders will utilize GitHub to coordinate production and submit deliverables.

Link to GitHub: <https://github.com/4krysta/IndividualProject412>

Point of Contact for GitHub: Krysta Valenzia

Staff and Contacts

|  |  |  |
| --- | --- | --- |
| Name | Role | Notes |
| Professor Rebecca Broadwater | Client | Office Hours (virtual): Mondays/Thursdays: 6PM-6:30PM (Please contact me to schedule a WebEx)  Phone: 410.598.3483 (text message preferred)  Email: rbroadwater@towson.edu |
| Krysta Valenzia | Client/Coordinator/  Documenter/Programmer | Email: kvalen14@students.towson.edu |

Tasks and Outline

Weekly Deliverables

|  |  |  |
| --- | --- | --- |
| Item # | Description | Date Due |
| 1 | Requirements | 11/27/2019 |
| 2 | HLA, Class Diagram and Interface Spec | 11/27/2019 |
| 3 | Use Cases and Sequence Diagram | 11/27/2019 |
| 4 | SPMP | 11/27/2019 |
| 5 | Repo Setup | 9/30/2019 |
| 6 | Create skeleton of unit tests   * Fill in skeleton of unit tests as code is written * Unit tests completed by end of project   Create skeleton Integration tests   * Fill in skeleton of integration tests as code is written * Integration tests completed by end of project   Write end-to-end System Test Procedure  Write Regression Test Procedure (Use **Prioritization** Method | 11/27/2019 |

Product Creation

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| --- | --- |
| **Task ID** | **Task** |
| 1 | Create Landing Page for website   * Include the following: * About Creator * Redirecting links to what the user is interested in * Registration Option |
| 2 | Create User Registration Page   * Possibly Java/Spring framework * Include following fields   + Username   + Password   + First and Last Name   + Age   + Weight   + Height * Leads to main web page after registration |
| 3 | Create Healthy Eating Page   * Consists of APIs * Includes following options:   + Restaurants Near You     - API to configure information gathered to find restaurants   + Make Healthy Food at Home     - API to configure information gathered to find recipes to make at home |
| 4 | Create Tracking Page   * Consists of Widgets * Includes following options:   + BMI Calculator     - Widget: BMI Calculator   + Calorie Calculator     - Widget: Calorie Calculator Pro   + Protein and Water Calculator     - Widget: Protein Intake Calculator     - Widget: Water Intake Calculator |
| 5 | Create Database System   * Possibly using MySQL server in Linux environment * Setup tables for user information and PII * Create table for user accomplishments |
| 6 | Create Web Server   * X10 Hosting with cPanel * Hosts website on WordPress |

Product Presentation

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| Section |
| Intro to Problem and Solution   * General Product Overview * Challenges faced * Constraints * Overview of collaboration tools |
| Intro to Product   * Features * Website Demo |
| Technical Aspects of Product   * Programming Languages Used   + Advantages/Disadvantages * Infrastructure Used   + High level Architecture Diagram   + Ex) Linux, Apache, MySQL, AWS Cloud environment   + Show and Tell * Database demo |
| Plan for Expansion   * Addresses scalability and adaptability of the system * Possible additions to the program |

Work Breakdown Structure

API’s :

* Restaurants near you
* Create recipes from what ingredients you have
* Fitness Tracker