**SEIS 610 -03 –Software Engineering:**

**Meal Picker App**

**by:**

**Uma Krishnaraju**

**Angela Holden**

**Brenda Canales**

**Anil Kumar Reddy**

**INCEPTION**

|  |  |  |
| --- | --- | --- |
| **Version** | **Status** | **Version Date** |
| **1.0** | **Draft** |  |

1. **Project Vision (10 points)**

ANGELA

1. **Project Boundaries (10 points)**

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| --- | --- |
| a. | This would be a web-based application written in Java, Java script, HTML and CSS. |
| b. | ~~This Application would be compatible only with IE and google chrome browsers and browsers on smart phones. This application will not be compatible with Firefox or any other browsers and not intended to use as a mobile App.~~ |
| c. | The nutrition values calculations are based on ingredients located in API data. |
| d. | This tool would just highlight the dairy or nuts used in the meal but not any other allergy triggering information. |
| e. | This tool would not provide options for in person appointment with the nutritionists for customizing meal plan. |
| f. | Data base and website will be hosted on cloud; hence the website might not be functional due to any down time with cloud infra structure. |
| g. | Users can save their meal plan max for a week. |
| h. |  |
| i. | Website could handle only 10,000 users at a time. |

1. **Requirements (30 points)**

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| --- | --- |
| a. | As an end user I would like to find healthy meal options so I can balance my everyday diet. |
| b. | As an end user I would like to set a target weight so I can find some meal options to help me get to the target weight. |
| c. | As an end user I would like to save my meal plans for a week. |
| d. | As an end user I would like to select my favorite ingredients so the app can suggest meals relevant to the selected ingredients. |
| e. | As an end user I would like to enter the number of calories so the app can suggest meal options. |
| f. | As a Nutritionist I would like to maintain the nutrition values in the database so end users would see more updated nutrition values. |
| g. |  |

1. **Business Case and Initial Cost Estimate (20 points)**

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| --- | --- |
| a. | Business risk: No experience with food processing like calculating the nutrition values and not experienced with the scientific chemical names. |
| b. | Some of the team members would need training on SQL and database programming. |
| c. | Fee for hosting the website and database on cloud. |
| d. | Average research shows developing an app costs $40k-80k. Rates per hour vary, depending on title of individual, android, apple or both from $50-$150 an hour. |
| e. | Creating an app will be around 600-1000 hours, that includes login, profile creation, profile editing features, searches with suggestions and user management. |
| f. | The costs also include the development team with developers and designers |
| g. | Business risk: there are similar apps already created that include similar features, it is possible our app will go unnoticed. |
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1. **Identify Risks. (15 points)**

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| --- | --- |
| a. | No experience calling java program within web-based application |
| b. | Limited amount of nutritionist knowledge. |
| c. | Not sure how to calculate the nutrition values and calorie formulas |
| d. | Going over budget or experiencing issues with product or quality |
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1. **Block Diagram (5 points)**

**A close up of a map

Description automatically generated**

1. **Non-functional requirements (Often called FURPS in Rational Unified Process) (5 points)**

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| --- | --- |
| a. | Sensitive information would be encrypted when data is at rest and as well as on the GUI. |
| b. | Website could handle 10,000 people at a time. |
| c. | Users can save their meal plans up to a week. After a week the data will be deleted. |
| d. | Memory available/performance: load food menu in a couple seconds with thumbnail images, wouldn’t want to keep a hangry person waiting |
| e. | reliability; confirmation needs to be available so user is aware input was accepted |
|  |  |

**8. Glossary. (5 points)**

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| --- | --- |
| Daily Value | The amount of a nutrient (in grams, milligrams or micro grams) recommended per day for Americans 4years or older age. The nutrition fact labels lists the daily value for base 2000 calories daily diet. |
| Essential Nutrients | A vitamin, mineral, fatty acid or amino acid required for normal body functioning. |
| GUI | Graphical user interface. Interface used by users to enter and access information |
| End User | People who are performing actions or using the application. |
| Macros | Macronutrients made up of the calorie content of food. There are three divisions of **macros** which include fats, carbohydrates, and protein. |
| Calorie | Is a measure of energy in food. |