1. **food application (see food nutrition information)**

Member Group 6

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1. **Software description:**

This is an application that helps you find information about the food you are looking for, and also provides nutrition information in your diet. From there help you to regulate in eating and drinking to have good health. Especially, the application will classify the vegetarian food for you. Through the application, users can create a menu that is suitable and healthy for themselves.

In addition, user can request a new food to admin updating. This feature make application more and more diverse in food.

1. **Current business status report:**

By the internet, everything related to information becomes very easy for users: just need a computer or mobile connected to the internet and a data stream to search almost instantly ... the whole world about the problem that you interested will appear, full of information, images and even sometimes the sound if you need it. It also is development of the search for meal information around the world, significantly changing the face of eating culture, improving the quality of human meals.

Proper nutrition is the cornerstone of health and intelligence. A proper diet that meets the body's needs at different stages of the life cycle will create optimal growth and development for the fetus and young children, as well as effective prevention against the majority of diseases have a good physical strength, good health, high labor productivity and a good quality of life for all ages.

So that, we decided to implement the project "C-Food"

Requirements:

* Store information about:
  + - Food: name, nutrition, weight, id, image, categories, nutrition, ingredients, calories, protein, fat.
    - Categories: id, name
    - Request message: id, message, image, date, status, author.
    - Response messages: id, message, date.
    - Nutrition: Vitamins, Macronutrients, Minerals
    - User: id, name, email, gender, age, weight, favorite food
* Searching:
  + Food: based on name, categories, calories, favorite food…
  + User information: name, email…
  + Request: status, date
  + Vegetarian food: find all vegetarian food
* Calculate:
  + Calories: calculate calories of total food in meal, or base on weight of food.
  + Nutrition: calculate how many percent of each nutrition in food.
  + Statistic: which food is liked the most, total request message in week, month,…
* Report:
  + none

1. List of requirements for software:
   1. Functional business requirements

Division: User ID: user

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **OD** | **Function** | **Type** | **Constraint /**  **Formula code** | **Form code** | **Notes** |
| 1 | View list food | Searching |  |  |  |
| 2 | Search food | Searching | Searching by: name, calories, categories… |  |  |
| 3 | View food details | Searching |  | Food\_detail\_form | Users have to click on food for watch food detail |
| 4 | Like food | Storage | If the current food state is “unlike”, change to “like” and contrary. |  |  |
| 5 | Create meal | Storage | The food must exist on database |  |  |

***Food\_detail\_form:***

Watch detail food

|  |  |  |  |
| --- | --- | --- | --- |
| Image | | Name: … | Weight: … |
| INGREDIENTS | NUTRITIONS |
| LIKE | YES/NO | ….. | …. |
| CATEGORIES | …. |
| NOTE | Vegetarian? |
| Description |
| … |

**Division**: Manage user **ID**: manage\_user

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ID** | **Function** | **Type** | **Constraint /**  **Formula code** | **Form code** | **Notes** |
| 1 | View user info | Searching |  |  |  |
| 2 | Delete account | Storage |  |  |  |
| 3 | Modify user info | Storage |  |  |  |
| 4 | Create account | Storage |  |  |  |

**Division**: Manage food **ID**: manage\_food

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **OD** | **Function** | **Type** | **Constraint /**  **Formula code** | **Form code** | **Notes** |
| 1 | Add food | Storage | New food must no exist in database | Add\_food\_form |  |
| 2 | Delete Food | Storage | . |  |  |
| 3 | Update Food | Storage | . |  |  |
| 4 | Calculate calories, proteins, fat | Calculate | Base on weight of each food |  |  |
| 5 | Statistic food watched and liked | Calculate |  |  |  |

***Add\_food\_form:***

Add food

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Image | | Name: … | | Weight: … | | |
| INGREDIENTS | | NUTRITIONS | | |
| CATEGORIES: |  | Name | Weight: | Macronutrient | Carbs | value |
| NOTE | Vegetarian? | Proteins | value |
| Description | Fats | value |
| … | … | … | Vitamins | A | Value |
| B | value |
| C | value |
| … | … | … | … |
| Mineral | Calcium | Value |
| … | … |

**Division**: Manage message **ID**: manage\_message

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **OD** | **Function** | **Type** | **Constraint /**  **Formula code** | **Form code** | **Notes** |
| 1 | Create message | Storage |  | Message\_form |  |
| 2 | View message | Searching | . |  |  |
| 3 | Delete message | Storage | . |  |  |

***message\_form:***

Create message

|  |  |  |
| --- | --- | --- |
| Image | Date: | Dd/mm/yy |
| Title | …. |
|  | Message: | … |

* 1. Functional system requirements

|  |  |  |  |
| --- | --- | --- | --- |
| ID | Function | Description | Note |
| 1 | Permission | User: can use all feature of user division and create request message.  Admin: can use all division, exception: like food. |  |

* 1. Non-functional requirements.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | Content | Criteria | Description | Note |
| 1 | Allow user to request new food | Develop | If users cannot find food that they want, they can request for admin to update it |  |
| 2 | Speed of sending message | Performance | User and admin have to receive message immediately. |  |
| 3 | Searching with keyword | Benefit | Allow user to search with keyword or nearly correct food name. |  |
| 4 | O-Authentication | Benefit | User can use Google account to login. | Valid Google account |

1. Modeling requirements