VAQ Healthy Living Guide

Prepared for:
CSCI/CMPE 3340 Software Engineering I
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Software Engineering Code of Ethics and Professional Practice

1. Public. Software engineers shall act consistently with the public interest.
2. Client and employer. Software engineers shall act in a manner that is in the best interests of their client and employer, consistent with the public interest.
3. Product. Software engineers shall ensure that their products and related modifications meet the highest professional standards possible.
4. Judgment. Software engineers shall maintain integrity and independence in their professional judgment.
5. Management. Software engineering managers and leaders shall subscribe to and promote an ethical approach to the management of software development and maintenance.
6. Profession. Software engineers shall advance the integrity and reputation of the profession consistent with the public interest.
7. Colleagues. Software engineers shall be fair to and supportive of their colleagues.
8. Self. Software engineers shall participate in lifelong learning regarding October 1999 85 Software Engineering Code of Ethics and Professional Practice the practice of their profession and shall promote an ethical approach to the practice of the profession.

What is VAQ Healthy Living Guide?

- The VAQ Healthy Living Guide is a database driven JavaFx application that allows users quick and easy access to customizable personal information (daily diet, exercise list, calories to consume daily) that will guide them to a healthier life.

- VAQ Healthy Living Guide supports creating, editing, deleting, viewing and setting diets for users. VAQ Healthy Living Guide also allows a student to search, modify and drop a product that said student doesn't like on the diet. User can view important information such as calories per fruit, and consumable calories per day.

Who is going to use VAQ Healthy Living Guide?

- The main type of users that are going to interact with the VAQ Healthy Living Guide system are nutritionists or students who want to have a healthy life and good body shape.
- The user is able to create a profile, create and modify a dynamic diet (customizable), and manage their daily activities (exercises).
- Users should find this application simple, intuitive and familiar as the VAQ Healthy Living Guide mirrors many of the basic services offered by online portals. The VAQ Healthy Living Guide also cater to power users who will be able to create/modify/delete user accounts and add/change/delete patients.

Local and Global Impact

- Mainly Positive
  - Help reduce the risks of getting disease (e.g. diabetes)
  - Reducing chances of getting health problems can help promote a better experience at the university
  - Educate students on the importance of maintaining a healthy lifestyle
  - Spread information as application is shared
  - Provide students with a tool to track their health
- One Problems
  - Not properly implementing the system that recommends exercise routines or providing wrong nutrition information could result in the negatively impacting the user's health.

Goal

To provide students with information on how to maintain a healthy lifestyle by providing them with an application that gives them suggestions on what to eat or which exercise routines are best suited for their health.

Layered Architecture

Components of our project were divided into horizontal layers, each performing a specific role within the application.

- Presentation - responsible for presenting the user-interfaces to the end-user and getting their responses
- Persistence - responsible for the technical stuff (e.g. retrieving information from database, or sending it to the presentation layer)
- Database - responsible for organizing and containing all the information needed

Product Functions

Account Creation: The ability to create a user account to be used with VAQ Healthy Living Guide.

Login Security: Ability to authorize/deny access using a unique username and password.

Database Connectivity: The ability to connect to a database to create, modify and delete data.

Email Service: The ability to easily email diets to a designated person.

Profile Management: The ability to register a student for a personal profile, modify, and delete the profile.

Logical Database Requirements

A database (SQL) is used for the storage of information inputted to the application. The software asks for certain fields of input that match the fields in the database as rows and columns. The information is identified using the username as an identifier. Information and Images (user login, user profile, fruits, exercises, machines) are called from database and shown into the application.

Teams and Responsibilities

Team 1:

- Members:
  - Gabriel Garcia
  - Dulio Gomez
  - Edward Jones
  - Maximo Reyna
  - Yessenia Rodriguez
  - Jacob Shircliff
  - Edson Trejo Hernandez
- Responsibilities:
  - Login
  - Profile Tab
  - Exercise Tab

Team 2:

- Members:
  - Rodolfo Contreras
  - Felix Gomez
  - Ryan Gonzalez
  - Osmsr Lara
  - Giselle Razo
  - Yessica Rodriguez
  - Joseph Sauceda
  - Raymundo Vilano Reyna
- Responsibilities:
  - Diet Tab
  - Information Tab

Team 1

- Login
  - Stephen
- Profile Tab
  - Maximo
- Exercise Tab
  - Edson
- Email and Export
  - Yessenia and Jacob
- Databases
  - Edson and Dulio
- Documents/Artifacts
  - Yessenia, Stephen and Gabriel

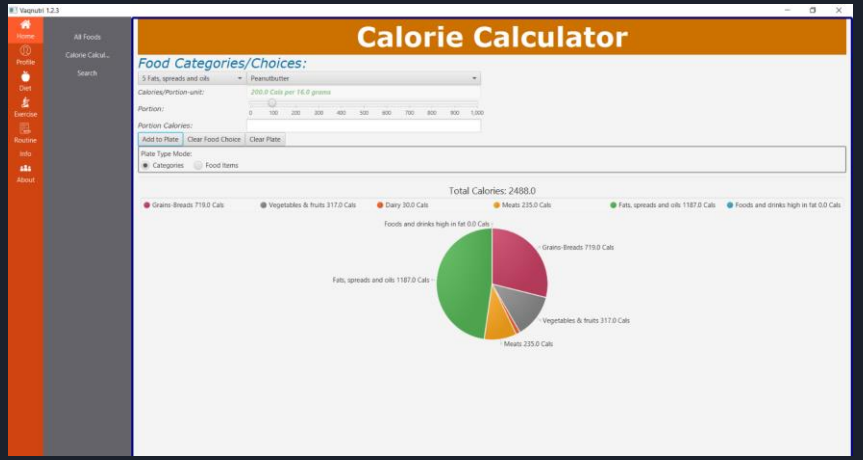
Team 2

- Nutrition Tab
  - Calories Calculator:
    - Edson
  - Item Search:
    - Yessica
  - Email and Export
    - Joseph and Ryan
  - Food Viewer
    - Rodolfo and Raymundo
- Information Tab
  - Yessica and Edson
- Databases
  - Rodolfo, Yessica, Joseph, Osmar
- Documents/Artifacts
  - Ryan and Osmar

Backlog Items

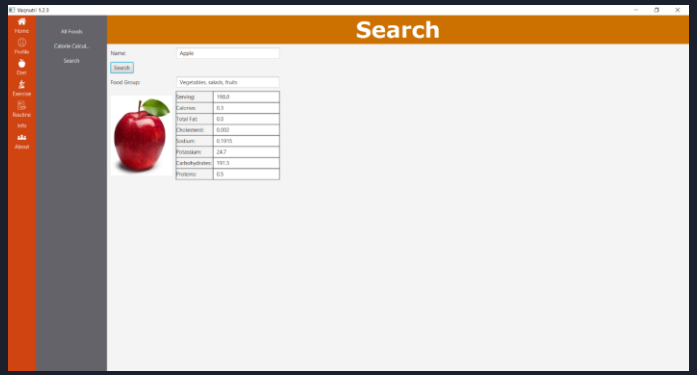
Diet Tab

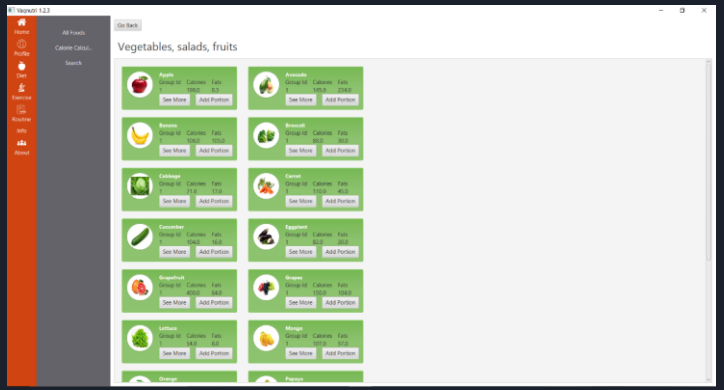
- Nutritional facts*
- Calories Calculator
  - Add items to plate
  - Keep track of calories consumed



Nutrition Facts

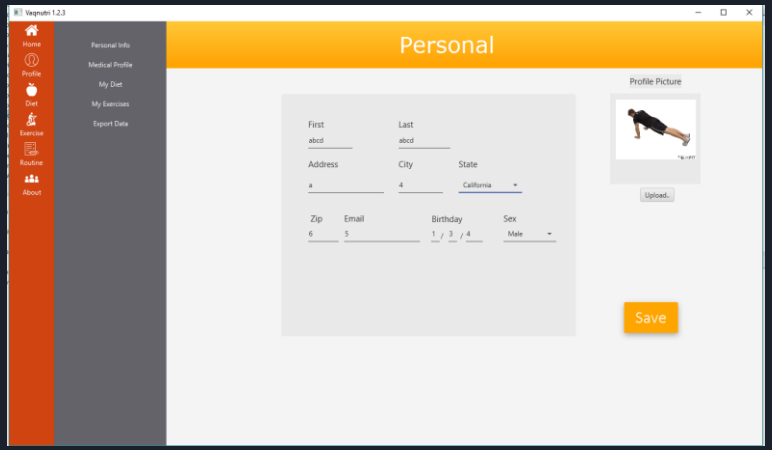
- Browse based on classification
- Search for specific item

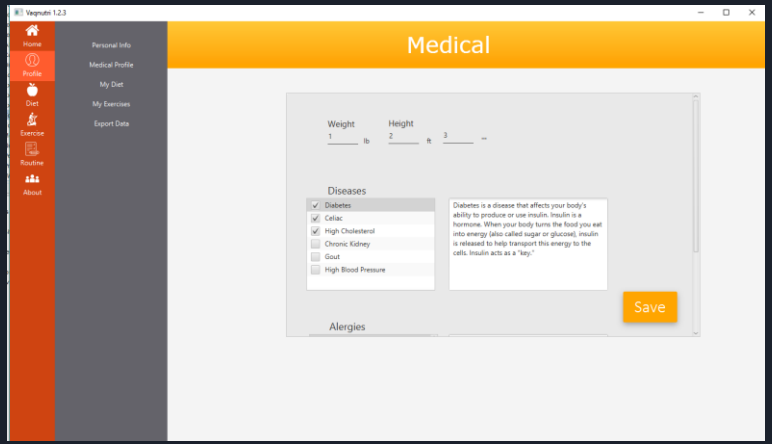




Profile Tab

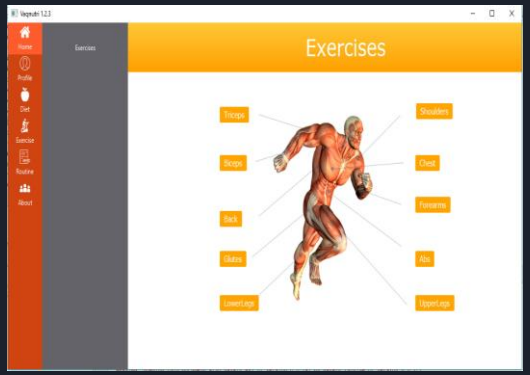
- Personal Information
  - Profile information
  - General personal information
  - Profile picture
- Medical Information
  - Weight
  - Height
  - Food allergies

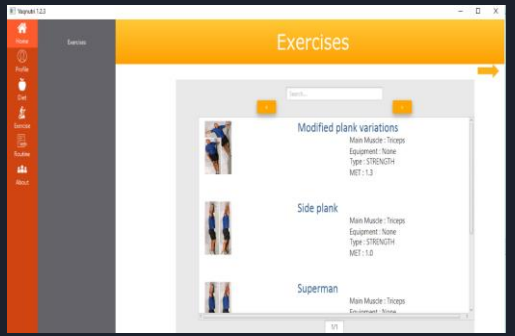




Exercise Tab

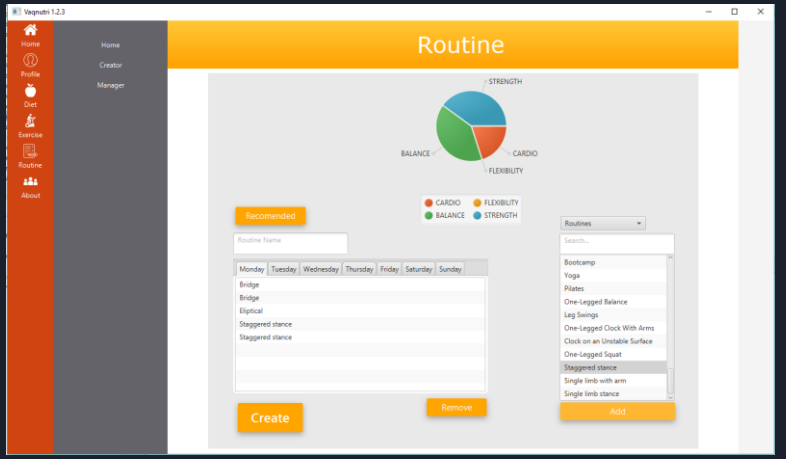
- Exercises
  - Information on them
  - Search exercise list
- Muscle Menu
- Routines*

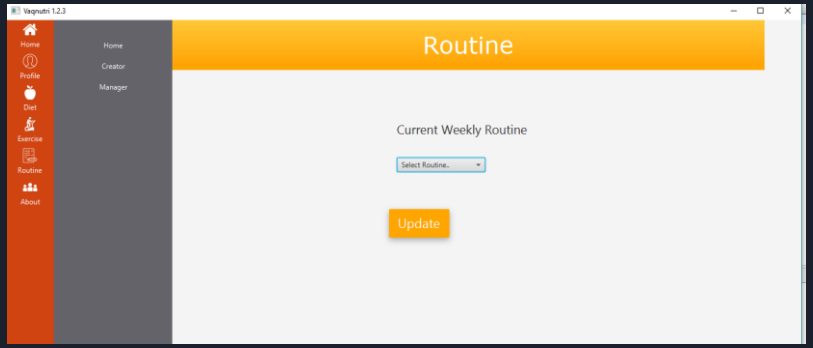


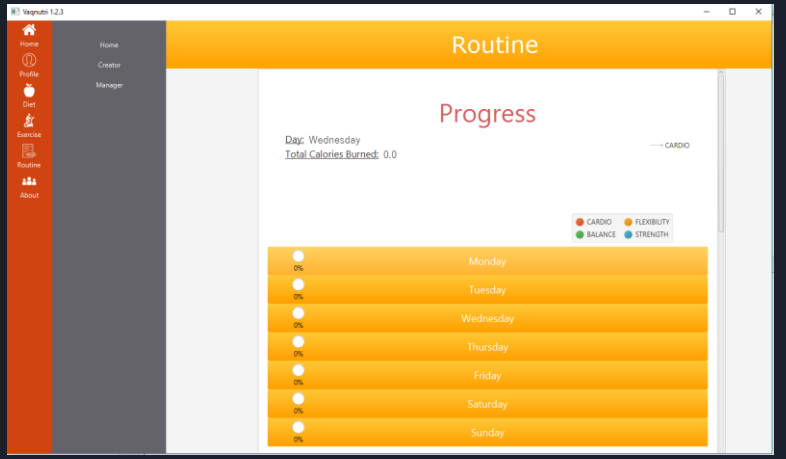


Routine

- Create weekly routine
- Manage routines
- Keep track of progress

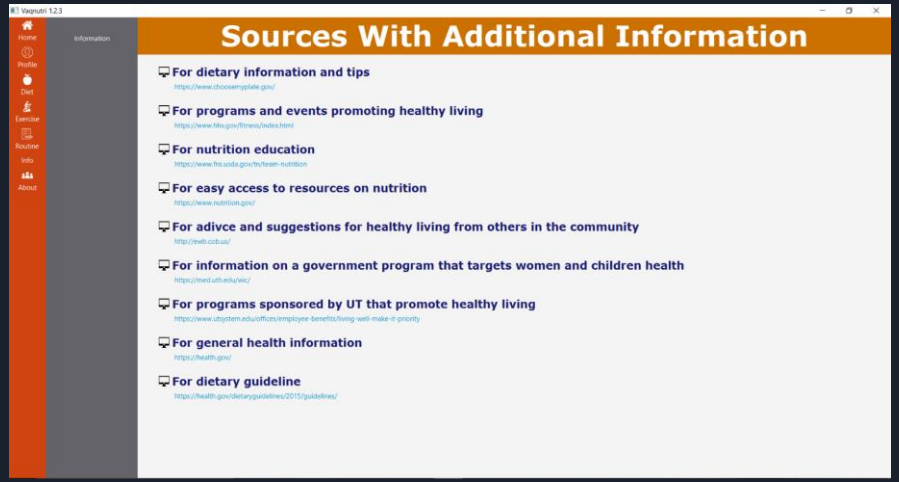






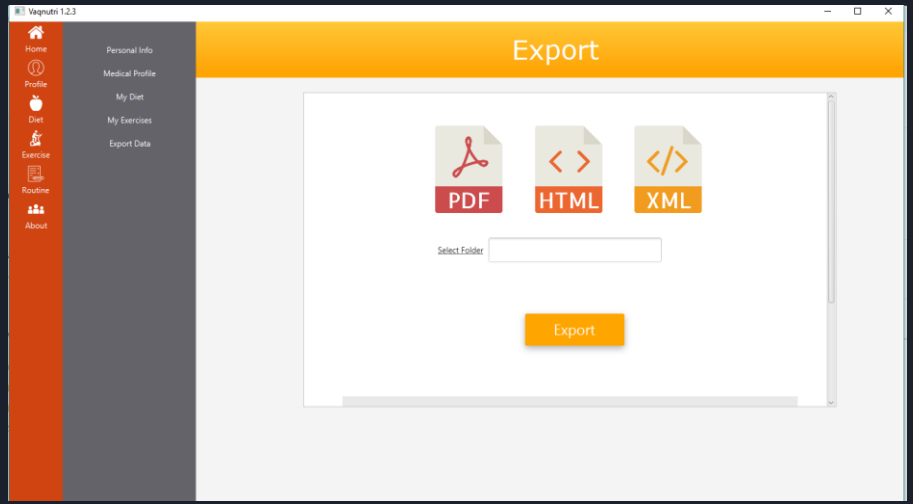
Information Tab

Links to additional websites that will further assist end-users to live a healthier live.



Email and Export

User inputs the sender email and receiver email, sending a pdf or html file with information provided, or the user can save the file on their computer.



Code Presentation

Future Improvements

- Add more items and further expand our databases
- Add more visuals to make application more appealing to users
- Allow other organizations and departments promoting health in UTRGV to post information and events
- Better organized databases
- More error checking

Conclusion

This application can greatly improve student's lives by making it easier for them to access resources that will help them lead healthier live since they will be able to find these tools in one convenient place. Nevertheless, like all software, the process does not end here. We will need to maintain and restart the software development cycle as we continue to improve this application.

Any Questions?

```
public class SoftwareEngineeringI {
    public static void main (String [] args) {
        System.out.println (“Thank You!”);
    }
}
```