# 2017

## Peace Meal

**S**onal A

**T**ausif P

**A**ngelo S

**Y**vonne K

Team 1

STAY Focused

10/10/2017

# Table of Contents

# Team Collaboration Plan

| | |
|---|---|
| **Meeting location and time** | Directly after class on Monday and Wednesday |
| **Methods of communication** | Email<br>Phone and Text<br>Messenger |
| **Technology to communicate** | Basecamp<br>Microsoft SharePoint<br>Email<br>Facebook messenger<br>AnyDesk (when simultaneously working on documents) |
| **Version Managers** | Versioning system (V1.0, V2.0)<br>Maintain versioning system in every document<br>Respond to questions within 24 hours |
| **Roles Assigned** | Yvonne Kerner---Project Manager<br>Angelo Schifilliti---Culinary & Allergy Expert<br>Sonal Agrawal---Financial Expert<br>Tausif Parkar---Research & Marketing Expert |
| **Team Members** | Sonal Agrawal: agrawasn@mail.uc.edu (513-658-8458)<br>Tausif Parkar: parkarts@mail.uc.edu (513-641-8619)<br>Angelo Schifilliti: schifiao@mail.uc.edu (917-209-3204)<br>Yvonne Kerner: kernerym@mail.uc.edu (610-401-7861) |

# Project Charter

# Description of the problem

- o People with certain ailments don't have an easy way to research and find recipes suited to their dietary restrictions.
- o This segment of the population is an ignored niche in the market. While many sites exist that allow users to submit their recipes, there are very few sites tailored to people with a variety of specific dietary restrictions that allows recipe ratings and communication amongst users.
- o The Peace Meal recipe site will be a destination for people with specific dietary requirements and restrictions that helps them improve their diet and network with others experiencing the same dietary issues.

# Value/benefit of the system

- o The system will allow users to easily upload and share recipes and thus, better manage their diets
- o The system will make it easy for users with similar dietary restrictions to collaborate on foods and recipes.

# Primary audience/consumer

- o People with food allergies or physical ailments that can be helped with dietary changes.

# Key assumptions

- o People have difficulty finding, or lack the time to find, recipes catered to their restrictions and tastes.
- o People are willing to connect with others who have similar issues.

X_____        X_____
Sonal Agrawal                              Tausif Parkar

X_____        X_____
Angelo Schifilliti                           Yvonne Kerner

# Scope Statement

Our system is an **easy-to-use website and phone application** that allows people with **dietary restrictions to find recipe catered to their needs**.

- **In phase one** customers will be able to **search for recipes**, download **helper guides**, use our **conversion calculators** and. **collaborate with other users** so they can give user feedback on what recipes work best for their condition(s).

- **In phase two** we will be advertising for **Amazon** to have the ingredients for the recipes delivered to the customer's home within **two days**.

- **In phase three** we will be **partnering with companies like Shipt and Amazon Prime Now** to have items arrive within **two hours.** We will also be adding the ability to **discover local restaurants with dishes catered to their diets** and give user feedback on what works best for their condition(s).

The project will **deliver recipes**, a **discussion board** and **in-app messenger** functionality. The interface will be easy to use and the **recipe search engine** will account for the individual users' dietary restrictions when returning results.

This system will create value for our customers because they will be able to collaborate with each other based on food allergies or dietary restrictions that they have in common. For many people with food-related restrictions it is a frustrating and lengthy process to find recipes that appeal to them and fit within their dietary guidelines. **This app will make/take the guesswork out of menu planning and, with an abundance of recipes catered just to them, make meal prep something to look forward to**. It will also free up personal time they previously spent researching recipes and allow them to easier plan social gatherings.

# System Requirements Document

# Survey Results (see appendix 1)

## Summary

During our analysis we created a **survey to find out what people want in a recipe application**. This section goes over the results of that survey. Our survey results are important for the system as it will guide the decisions made by the business analysts, system architects and developers, into creating the best possible user friendly site.

- The **Peace Meal survey took place on 9/10/2017**.
- We saw responses from over 50 people.
- Around 73% of the survey sample consisted people of age mostly 24-34.
- 40% of the respondents were single, male and working.
- **48%** of the respondents has some kind of **dietary restrictions**/requirements.
- **92%** of the respondents were positive about having **access to healthy recipes**.
- **82.35%** of the respondents **enjoyed cooking**.
- **72.55%** of the respondents browsed their **recipes online.**
- 72.55% of the respondents are particular about the ingredients they add to the meal.
- **45%** of the people find it difficult **to find recipes online catered to their needs**.
- Survey listed 14 different dietary/dietary-related requirements/diseases.
- **64%** of the respondents **know someone with dietary-related requirement**/disease.
- Some of the people have cancer, ulcers, and are considered to be severe ailments.
- Some of the people felt left-out as few websites cater to their specific dietary needs.
- People strongly prefer having a dietician online rather than in person.
- Users would love to connect with people that have the same dietary restrictions.
- Users want to share recipes.
- Users want to use the website for healthier living.
- **47%** of the people believe they would **benefit from such website**.

# Benchmarking

| FEATURES | Epicurious | Allrecipes.com | Allergicliving | Eatingwithfoodallergies | Enjoylifefoods | Peacemeal |
|---|---|---|---|---|---|---|
| Search For Recipes | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Search For Recipes/By Allergy | ✓ | ✓ | ✓ | X | ✓ | ✓ |
| Advice from Food Science Experts | X | X | ✓ | ✓ | X | ✓ |
| Community Boards/Discussionsabout allergies | X | X | X | ✓ | X | ✓ |
| Upload Your Own Recipes | ✓ | X | X | X | X | ✓ |
| Deliver Food | X | X | X | X | X | ✓ |

In an effort to improve our operational performance and drive competitive advantage in the marketplace we will take the main focuses of our competitors and incorporate them into an easy-to-use interface. **Think of this as a curated version of Epicurious meets Amazon Fresh**. By adding a layer of dietitian and nutritionist guidance and expertise we can incrementally improve our product as time progresses. Constant **surveying of our population of users will help us identify and implement new features that our core users desire**… quickly and in a cost-effective manner. The **initial surveys indicate that our population is interested in cooking, websites and apps that can aid in this experience**. They wish to be connected to each other in some form and they feel as if they could benefit from interacting with dietitians.

In our table, the first point noted is that our competitors all offer similar functionality in terms of searching for recipes. Where they are failing is where one of our greatest competitive advantages is: the combination of these features all directed to a wider range of dietary restrictions. These findings are easily replicated with basic search parameters across these platforms. Next, we can see that few of our competitors focus on delivering food and advice from health science experts. These recipe sites focus on a traditional chef motto of Fat = Flavor = Good. This clearly is not the best combination where health is concerned. Next, we can see our competitors are all failing at what we see as our most important attribute: **the ability to connect a community of people with similar restrictions.** Expanding on this we can see that most of our competitors are not operating in the same space as us, as we have positioned ourselves to dominate this segment of the market. Our primary focus is recipes that are catered to each person's individual needs**. We have the valued added benefit of uploading recipe pictures and instructional videos, along with collaborating with people that have the same dietary restrictions and getting advice from dieticians for weekly meal planning**.

# Outcome analysis

Our site aims to reduce information overload for our customers as it pertains to finding recipes to cook. We plan to make it easy to organize recipe information by letting customers add recipes to a favorites list. We will enable people to connect to others that have the same ailments or dietary restrictions. **We have found that lots of people have food allergies or restrictions and can be helped by making dietary changes**. Our ChatBot will be programmed to answer the FAQ's from users.

| Functional Requirements | Nonfunctional Requirements |
|---|---|
| **1.0 Manage Profile**<br><br>**1.1** Customer creates login<br><br>**1.2** Customer creates their profile<br>- Name<br>- Address<br>- Phone<br>- Email<br>- Allergies<br><br>**1.3** Create, Read, Update and Delete functionality | **1.0 Operational**<br><br>**1.1** The system will be available online<br><br>**1.2** The application should also be available as a downloadable app<br><br>**1.3** The system should be maintained by Azure<br>- Includes backup of database<br>- Includes server maintenance<br><br>**1.4** The system should have messenger capabilities<br><br>**1.5** The site should be approved for donations<br><br>**1.6** The site should have helper sheets<br><br>**1.7** The site should have a Chatbot to answer FAQ<br><br>**1.8** The site should be approved for affiliate marketing<br><br>**1.9**  The system should be able to work with any web browser. |
| **2.0 Manage Recipe**<br><br>**2.1** Can create, read, update & delete recipes<br><br>**2.2** Customer can search recipes | **2.0 Performance**<br><br>**2.1** The system should be available 24 hours a day 7 days a week<br><br>**2.2** All web pages should load within 2 seconds |
| **3.0 Manage Contacts**<br><br>**3.1** User can keep an address book with family & friends<br>- Includes a list of allergies of their contacts<br><br>**3.2** User can keep a favorites list of users/same food restrictions<br><br>**3.3** Can create, read, update & delete contacts | **3.0 Security**<br><br>**3.1** Users can only delete or change their own recipe<br><br>**3.2** Users can only see their own address book<br><br>**3.3** Users must be logged in to see any recipes<br><br>**3.4** All passwords must be hashed |
| **4.0 Manage Donations**<br><br>**4.1** Customer can donate to the site | **4.0 Cultural & Political**<br><br>**4.1** The system should be able to convert all donations into US currency<br><br>**4.2** The system should provide cuisine from many cultures<br>- French<br>- German<br>- Indian<br>- Chinese<br>- American …. etc |
| **5.0 Helper Guides**<br><br>**5.1** Customer can view measurement sheets<br><br>**5.2** Customer can use conversion calculators | |
| **6.0 Communicating on the site**<br><br>**6.1** Customer can ask a ChatBot questions<br><br>**6.2** Customer can ask another user a question<br><br>**6.3** Customer can ask advice from dietician | |

# Project Plan

# Work Breakdown Structure & Scheduling

| Task Name | Duration | Start | Finish | Pre |
|-----------|----------|-------|--------|-----|
| Select Project Team | 1 day | Fri 9/1/17 | Fri 9/1/17 | |
| Select Project / Name | 1 day | Mon 9/4/17 | Mon 9/4/17 | 1 |
| Buy Domain Name | 1 day | Tue 9/5/17 | Tue 9/5/17 | 2 |
| Create Splash Page | 1 day | Wed 9/6/17 | Wed 9/6/17 | 3 |
| Create Logo | 12 days | Wed 9/6/17 | Thu 9/21/17 | |
| Create Photos for site | 12 days | Wed 9/6/17 | Thu 9/21/17 | |
| Team Collaboration Plan | 12 days | Wed 9/6/17 | Thu 9/21/17 | |
| Project Charter | 14 days | Wed 9/6/17 | Mon 9/25/17 | |
| Scope Statement | 14 days | Wed 9/6/17 | Mon 9/25/17 | |
| System Requirement Document | 14 days | Wed 9/6/17 | Mon 9/25/17 | |
| Project Plan | 14 days | Wed 9/6/17 | Mon 9/25/17 | |
| Work Breakdown Structure & Scheduling | 14 days | Wed 9/6/17 | Mon 9/25/17 | |
| Feasibility Analyses | 14 days | Wed 9/6/17 | Mon 9/25/17 | |
| Human resource management /staffing/collaboration plan | 14 days | Wed 9/6/17 | Mon 9/25/17 | |
| Create Homepage for website | 15 days | Tue 9/12/17 | Mon 10/2/17 | |
| Create Login for customers | 30 days | Tue 10/3/17 | Mon 11/13/17 | 15 |
| Create Recipe page | 15 days | Tue 11/14/17 | Mon 12/4/17 | 16 |
| Create Search Functionality | 30 days | Tue 12/5/17 | Mon 1/15/18 | 17 |
| Create About page | 10 days | Tue 1/16/18 | Mon 1/29/18 | 18 |
| Create Contact page | 10 days | Tue 1/30/18 | Mon 2/12/18 | 19 |
| Create a chatbot | 30 days | Tue 2/13/18 | Mon 3/26/18 | 20 |
| Create a donations page | 10 days | Tue 3/27/18 | Mon 4/9/18 | 21 |
| Get approved for Affiliate marketing | 30 days | Tue 4/10/18 | Mon 5/21/18 | 22 |
| Create an iPhone app to match site | 90 days | Tue 2/13/18 | Mon 6/18/18 | 20 |
| Create an Android app to match site | 90 days | Tue 2/13/18 | Mon 6/18/18 | 20 |
| Advertise site/ Application | 14 days | Tue 6/19/18 | Fri 7/6/18 | 25 |
| Sites are up and running and advertised | 0 days | Fri 7/6/18 | Fri 7/6/18 | 26 |

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# Feasibility Analysis

## Executive Summary

Peace Meal is considering a move to create and provide an online platform for users with specific food requirements or restrictions to access as well as share recipes. Until now no other similar recipe sites have **offered the consultation of dietitians** or nutritionists to users. Unlike other sites, this platform will also allow people with the same dietary restrictions within a range of 50 miles to share their information and directly connect with one another. Additionally, there will be an option on the portal to source restaurants with menus friendly to specific restrictions that have been recommended by other users.

## Technology Considerations

- The site will guarantee **security of user data**.
- Users will need to be able to **solicit advice from dieticians** or known nutritionists.
- Online marketing functionality must be enhanced to target potential customers through methods such as email lists, promotional advertisements, and loyalty discounts.
- Peace Meal will maintain an account with Azure that has a high-speed internet connection and web server and works with latest available software.

## Product/Service Marketplace

- While other websites in the market provide **filters to categorize recipes by allergy, cuisine, meal period, holidays and technique**, there are none providing a forum to connect with people sharing similar dietary requirements and restrictions.

## Marketing Strategy

- Customers will have the ability to personalize the name of their recipe.
  - o **Users can only modify their own recipes.**
- Peace Meal will implement a customer email list to send sales advertisements and other special offerings to its customers and will primarily use electronic marketing communications.
- Peace Meal will also **maintain a customer database** to segment target groups by dietary requirements/restrictions and geographical region.

## Financial Projections

The financial projections for the addition of an online recipe platform for Peace Meal are highlighted in the table below. These figures account for projected phone app sales, staffing requirements, insurance costs, contract support for IT, training needs and web server and hosting costs etc.

The assumptions for these projections are as follows:

• All milestones are performed in accordance with the schedule.

• All transactions are closed yearly with no carry-over to subsequent years.

• Transaction for 3rd year includes value-added services planned for updated version of website.

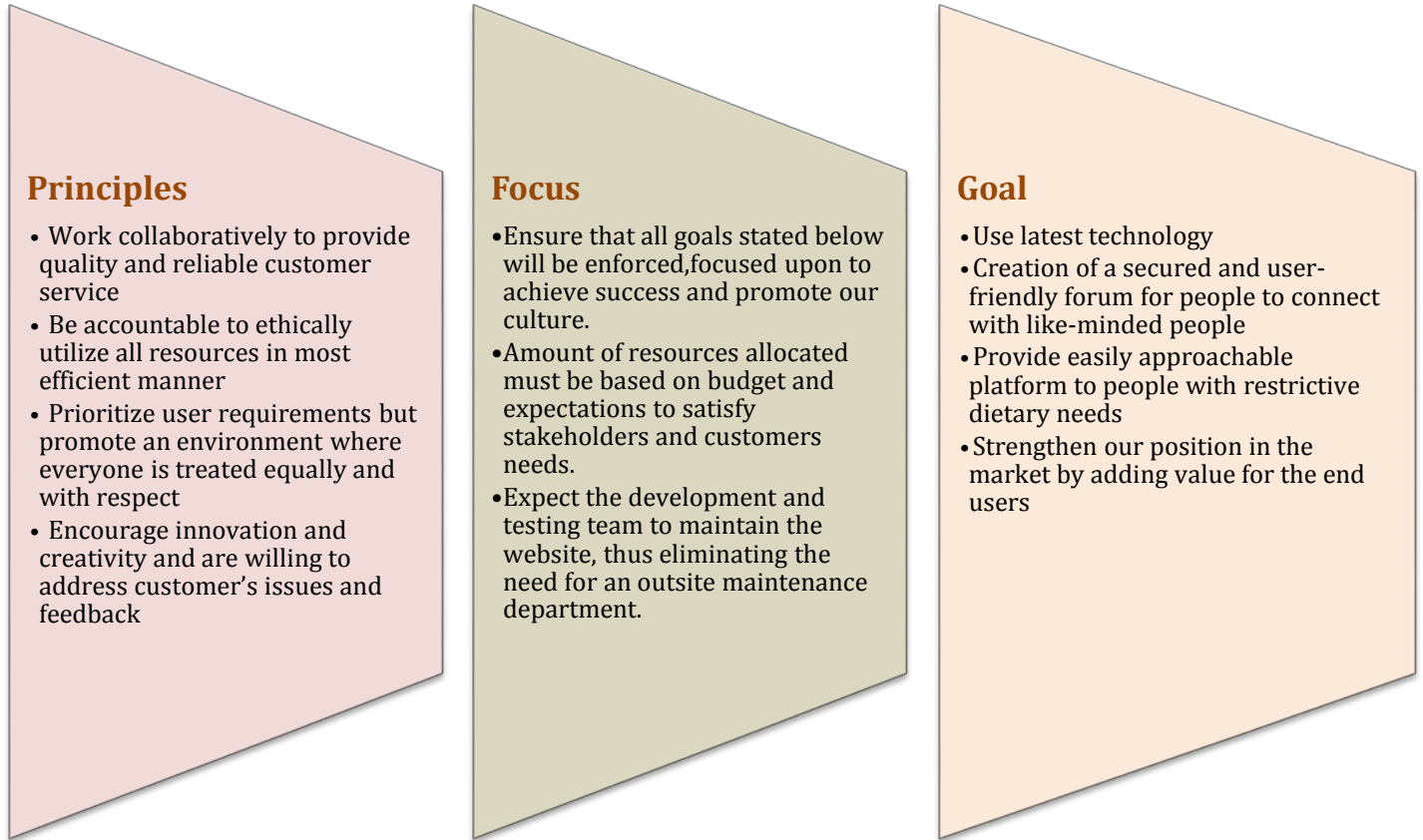| Measure | Year 1 | Year 2 | Year 3 | 3 Year Total |
|---|---|---|---|---|
| Online Sales Projections | $200,000 | $350,000 | $500,000 | $1,050,000 |
| Staffing Costs | $120,000 | $200,000 | $300,000 | $620,000 |
| Insurance Costs | $36,000 | $36,000 | $36,000 | $108,000 |
| Web Server and IT Hosting/Maintenance | $25,000 | $50,000 | $75,000 | $150,000 |
| Advertising/Marketing Costs | $15,000 | $20,000 | $25,000 | $60,000 |
| Office Lease | $25,000 | $25,000 | $25,000 | $75,000 |
| Net Profit | -$21,000 | $19,000 | $39,000 | $37,000 |

## Findings and Recommendations

Based on the information presented in this feasibility study the findings show that this initiative will be highly

beneficial to people and has a high probability of success. Key findings are as follows:

**Technology**

- Will utilize existing technology which lowers project risk
- E-commerce infrastructure will be contracted out to a vendor
- Once in place, this is simple to operate and maintain for a relatively low cost

**Marketing**

- Will reach large number of target groups electronically at a low cost.
- Will expand customer base and will sign contracts with stores who provide ingredients in the geographic areas based on our customers current location.
- Will differentiate us from our competitors by utilizing incentive programs to target new consumers.

**Organizational**

- Minimal increases in external staff are required with some increase in budget.
- New facilities or capital investments are required at launch
- Will not require additional funds for daily operating expenses in the first year. (due to angel investor)

**Financal**

- Three-year projections show online sales on track to reaching a profit in year two.
- Peace Meal will be in a position to capture greater market share by maintaining, increasing online presence and visibility
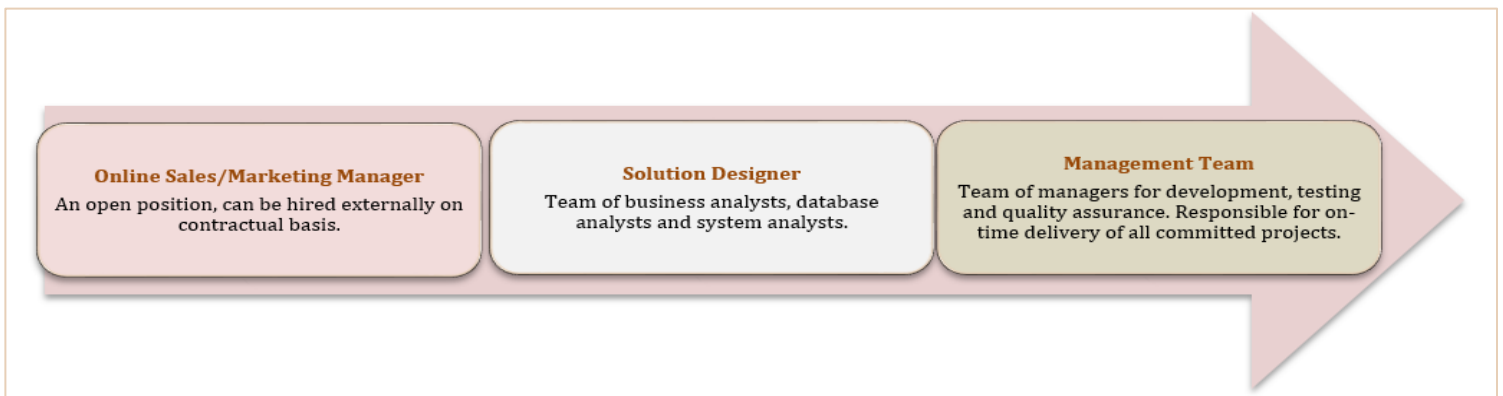
# Human resource management/staffing/collaboration plan

Goal of the project, role statement, and guiding principles which provide the roadmap on how the project will be designed and worked on is mentioned below

## Principles

• Work collaboratively to provide quality and reliable customer service
• Be accountable to ethically utilize all resources in most efficient manner
• Prioritize user requirements but promote an environment where everyone is treated equally and with respect
• Encourage innovation and creativity and are willing to address customer's issues and feedback

## Focus

• Ensure that all goals stated below will be enforced,focused upon to achieve success and promote our culture.
• Amount of resources allocated must be based on budget and expectations to satisfy stakeholders and customers needs.
• Expect the development and testing team to maintain the website, thus eliminating the need for an outsite maintenance department.

## Goal

• Use latest technology
• Creation of a secured and user-friendly forum for people to connect with like-minded people
• Provide easily approachable platform to people with restrictive dietary needs
• Strengthen our position in the market by adding value for the end users

## Organization and Staffing

The organization and staff structure at Peace Meal will include managers for development, testing and analysis. Several staffing additions might be required to successfully implement the online sales campaign. This could be done using outside agencies.
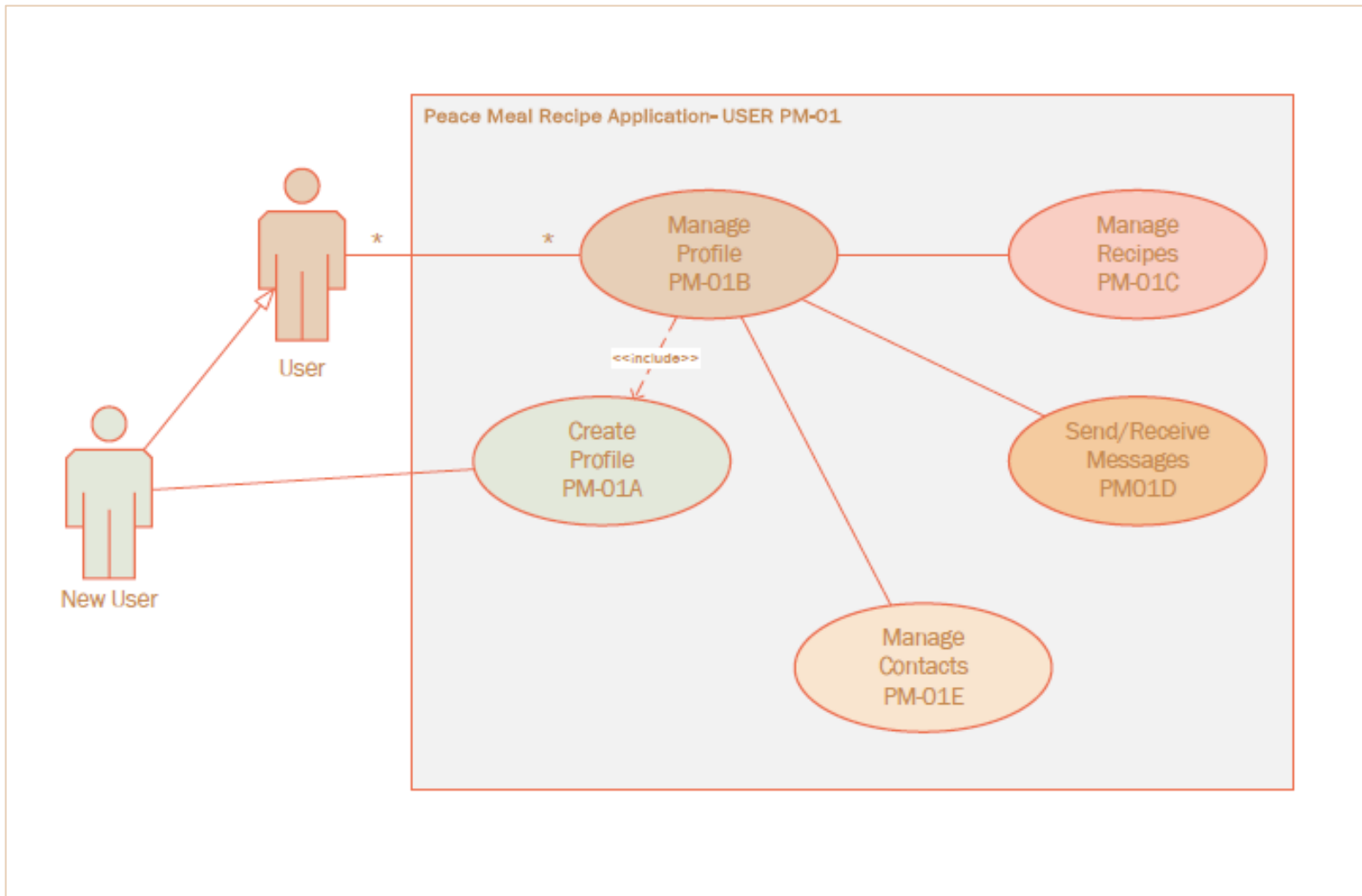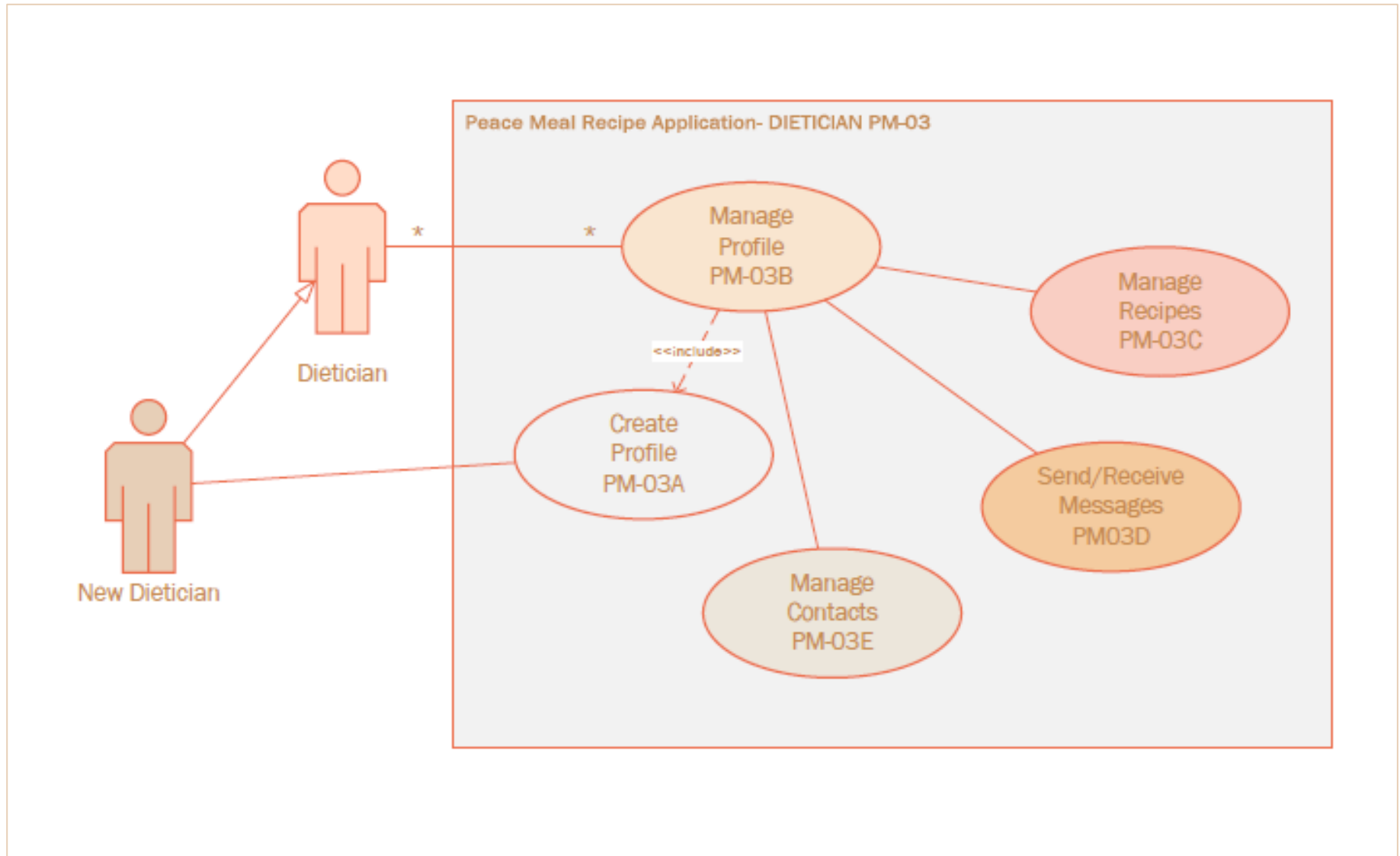
**Online Sales/Marketing Manager**
An open position, can be hired externally on contractual basis.

**Solution Designer**
Team of business analysts, database analysts and system analysts.

**Management Team**
Team of managers for development, testing and quality assurance. Responsible for on-time delivery of all committed projects.

**Resource Allocation:**

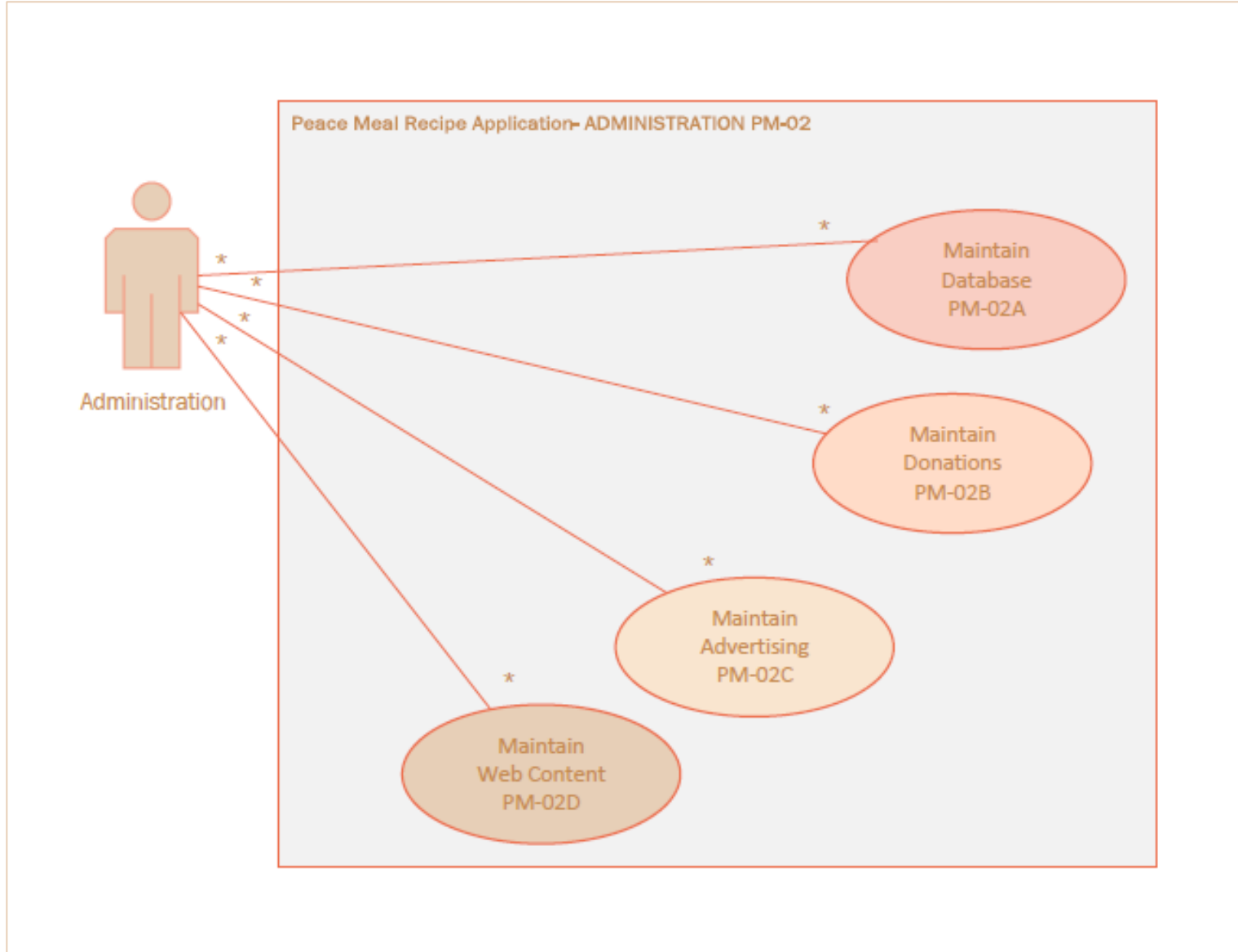| Positions | Role | No Of Resources | Phases | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Requirement Gathering | Planning | Design | Development | Testing | Maintenance |
| **Solution Designers** | Team of all analysts to convert business requirements into a feasible technical solution . | | | | | | | |
| Business Analysts | Develop technical solutions to business problems & create documents | 1 | | | | | | |
| Database Analysts | Maintains data storage and access by designing physical databases | 1 | | | | | | |
| System Analysts | Solve problems related to computers both hardware and software and takes care of computer productivity | 1 | | | | | | |
| **Management** | Set of people who manage the team. | | | | | | | |
| Development Manager | Manager of development team, responsible for on time delivery of all deliverables | 1 | | | | | | |
| Test Manager | Manager of test team, responsible for on time reporting of bugs to development team in case any | 1 | | | | | | |
| Security manager | Manager of security team, takes care of all concerns related to security, encryption of data and network | 1 | | | | | | |
| **Development Team** | Team of people who are responsible for the development of the technical modules. | | | | | | | |
| UI Developers | Team members responsible for development of User Interface | 1 | | | | | | |
| Backend Developer | Team Members responsible for development of back end services to retrieve, insert, update or delete data in database | 2 | | | | | | |
| **Testing Team** | Team of people who are responsible for the testing of the technical modules. | | | | | | | |
| Integration Tester | Team members responsible for testing modules whose system testing is done, aggregates them and test the integrated output | 2 | | | | | | |
| System Tester | Team members responsible for testing software and identifying bugs in it & send this response to developers in case of issues | 1 | | | | | | |
| Performance Tester | Team members responsible for creation of final reports consisting analysis of performance of all deliverables | 1 | | | | | | |
| **Quality Assurance Team** | Team of people who are responsible for quality assurance. | | | | | | | |
| Code Quality Checker | Team member who check the code quality and is responsible to maintain it throughout the project tenure | 1 | | | | | | |

# Use Case Diagrams

# User



The diagram shows a bounding box labeled "Peace Meal Recipe Application– USER PM-01" containing the following use cases:

- Manage Profile PM-01B
- Manage Recipes PM-01C
- Create Profile PM-01A
- Send/Receive Messages PM01D
- Manage Contacts PM-01E

Actors: User, New User. The User actor connects to Manage Profile with a `*` to `*` multiplicity. Manage Profile includes Create Profile (`<<include>>`). New User connects to Create Profile, and a generalization arrow points from New User to User.

# Dietician (phase 3)

# Administration

# Use Case Descriptions

| Use Case ID: | PM-01A | | |
|---:|:---:|:---:|:---:|
| Use Case Name: | **Create Profile** | | |
| Created By: | Tausif Parkar | Last Updated By: | Yvonne Kerner |
| Date Created: | 9/20/2017 | Date Last Updated: | 10/8/2017 |
| Actor: | User | | |
| Description: | This use case shows how to create a user profile. | | |
| Preconditions: | The user must be a registered member of the website. | | |
| Postconditions: | The user will be able to update/delete their profile | | |
| Priority: | High | | |
| Frequency of Use: | Can be updated daily (but does not have to be) | | |
| Normal Course of Events: | 1. The user must give their email address<br>2. The user must give a password<br>3. The system creates a login for the user. | | |
| Alternative Courses: | The person could decide not to create a login and leave the site. | | |
| Exceptions: | None | | |
| Includes: | Manage Profile PM-01B | | |
| Special Requirements: | They must not already exist in the system with that email address. | | |
| Assumptions: | The user wants to create a login to use the site. | | |
| Notes and Issues: | This is an include and precondition for all other user use cases.<br>If the person already exists in the system, they will get an error message telling them they have already created a login. | | |

| Use Case ID: | PM-01B | | |
|---:|:---:|:---:|:---:|
| Use Case Name: | **Manage Profile** | | |
| Created By: | Tausif Parkar | Last Updated By: | Yvonne Kerner |
| Date Created: | 9/20/2017 | Date Last Updated: | 10/8/2017 |
| Actor: | User | | |
| Description: | It provides the capability for the user to edit /delete their *member profile* | | |
| Preconditions: | The system is functioning properly.<br>The user already has a login created (PM-01A) | | |
| Postconditions: | The *member profile* was successfully updated to the *user database.*<br>*user sent email to confirm changes* | | |
| Priority: | High | | |
| Frequency of Use: | Whenever the user needs to update their personal information<br>• Address<br>• Phone<br>• Email<br>• Allergies | | |
| Normal Course of Events: | 1. The user logins to their profile **(Validate login)**<br>2. The system displays the user's *profile* and prompts the user to update it.<br>3. The user updates their profile.<br>4. The system validates that the correct type of information is entered into each field. **(Validate Information)**<br>5. The system prompts the user to confirm the information change.<br>6. The user confirms the new information is correct.<br>7. The system updates the users profile in the database **(Profile Changed)**<br>8. The system now shows the updated profile. | | |
| Alternative Courses: | If (**Validate login/ Information**) comes back invalid...user prompted to correct information. | | |
| Exceptions: | None | | |
| Includes: | Create Profile (PM-01A) | | |
| Special Requirements: | Login must already exist | | |
| Assumptions: | The user is aware of the steps required to update their profile. | | |
| Notes and Issues: | User should not have a duplicate profile. | | |

| | |
|---|---|
| Use Case ID: | PM-01C |
| Use Case Name: | **Manage Recipes** |

| | | | |
|---|---|---|---|
| Created By: | Tausif Parkar | Last Updated By: | Yvonne Kerner |
| Date Created: | 9/20/2017 | Date Last Updated: | 10/8/2017 |

| | |
|---|---|
| Actor: | User |
| Description: | User wants to create, read, update, or delete a recipe. |
| Preconditions: | • The recipe screen is displayed**. (to Add)**<br>• User has already used the search function to display the recipe he wants to modify in the main screen **(to Update)**<br>• User has already used the search function to display the recipe he wants to delete in the main screen **(To Delete)** |
| Postconditions: | User had created a recipe.<br>User had updated a recipe.<br>User had deleted a recipe. |
| Priority: | High |
| Frequency of Use: | Any time the user wants to CRUD a recipe. |
| Normal Course of Events: | ***Add Recipe:***<br>　1. User navigates to the "Modify/Create Recipe Screen" by clicking "Add" from the main screen.<br>　2. User selects a category for the recipe from a drop-down list[E1].<br>　3. User pens in a name and brief description for the recipe.<br>　4. User pens in an ingredient name[E1]<br>　5. User repeats step 4 for each ingredient in the recipe.<br>　6. If desired, user pens in step-by-step instructions for preparing the recipe.<br>　7. User presses OK.<br>　8. System switches to the "Main Screen", where the new recipe is displayed.<br><br>***Modify Recipe***<br>　1. User presses Edit button.<br>　2. System switches to "Edit" mode—all recipe data is now editable on the screen.<br>　3. User uses stylus to make desired modifications to the recipe. User can add a new ingredient to the recipe by scrolling down to the end of the list of ingredients. [E2]. User can delete an ingredient from the list by blanking out its name.<br>　4. User taps the OK button.<br>　5. System saves the changes and displays the modified recipe in the Main Screen.<br><br>***Delete Recipe***<br>　1. User presses Delete button.<br>　2. System displays dialog box to ask user if he is sure he wants to delete the recipe.<br>　3. User selects "Yes" [E3].<br>　4. System removes the recipe from the database, displays the next recipe in the main screen. |
| Alternative Courses: | None |
| Exceptions: | None |
| Includes: | None |
| Special Requirements: | User can read in English and has the ability to click on the word recipes. |
| Assumptions: | User is logged in and recipe page is displayed. |
| Notes and Issues: | Users can only delete their own recipes. |

| Use Case ID: | PM-01D | | |
|---:|:---:|:---:|:---:|
| Use Case Name: | **Send/Receive Messages** | | |
| Created By: | Tausif Parkar | Last Updated By: | Yvonne Kerner |
| Date Created: | 9/20/2017 | Date Last Updated: | 10/8/2017 |

| | |
|---:|:---|
| Actor: | User |
| Description: | User sends a message to another user or dietician |
| Preconditions: | <ul><li>User is logged in</li><li>User is a member of the group</li><li>Messenger app is working properly</li></ul> |
| Postconditions: | User sends message/another user receives message |
| Priority: | Medium |
| Frequency of Use: | Any time a user wants to send a message |
| Normal Course of Events: | 1. User opens the messenger app.<br>2. User picks the person they want to send a message to<br>3. User types the message<br>4. User clicks enter to send the message. |
| Alternative Courses: | User can add a person to their friends group |
| Exceptions: | None |
| Includes: | None |
| Special Requirements: | User must be logged in. |
| Assumptions: | That user wants to send someone a message. |
| Notes and Issues: | None |

| Use Case ID: | PM-01E | | |
|---:|:---:|:---:|:---:|
| Use Case Name: | **Manage Contacts** | | |
| Created By: | Tausif Parkar | Last Updated By: | Yvonne Kerner |
| Date Created: | 9/20/2017 | Date Last Updated: | 10/8/2017 |

| | |
|---:|:---|
| Actor: | User |
| Description: | User wants to add, delete, modify contacts |
| Preconditions: | User has logged into the site. |
| Postconditions: | User has viewed, modified, added or deleted a contact |
| Priority: | Medium |
| Frequency of Use: | Any time the user wants to CRUD a contact. |
| Normal Course of Events: | **Add Contact:**<br>1. User navigates to the "Modify/Create Contact Screen" by clicking "Add" from the main screen.<br>2. User pens in a name and other details.<br>3. User presses OK.<br>4. System switches to the "Main Screen", where the new contact is displayed.<br>**Modify Recipe**<br>6. User presses Edit button.<br>7. System switches to "Edit" mode—all contact data is now editable on the screen.<br>8. User uses stylus to make desired modifications to the contact<br>9. User taps the OK button.<br>10. System saves the changes and displays the modified contact in the Main Screen.<br>**Delete Recipe**<br>5. User presses Delete button.<br>6. System displays dialog box to ask user if he is sure he wants to delete the contact<br>7. User selects "Yes".<br>8. System removes the contact from the database. |
| Alternative Courses: | None |
| Exceptions: | None |
| Includes: | None |
| Special Requirements: | User must be logged in.<br>User can only see their own contacts. |
| Assumptions: | User knows how to navigate to the Contacts page. |
| Notes and Issues: | Check for duplicate contacts. |

| | |
|---:|:---|
| Use Case ID: | PM-02A |
| Use Case Name: | **Maintain Database** |

| | | | |
|---:|:---|:---|:---|
| Created By: | Tausif Parkar | Last Updated By: | Tausif Parkar |
| Date Created: | 9/20/2017 | Date Last Updated: | 10/8/2017 |

| | |
|---:|:---|
| Actor: | Administration |
| Description: | This use case describes how the administrator of the system can add and delete items from the catalog and also manage the system users. |
| Preconditions: | Administrator must be logged into the system. |
| Postconditions: | Administrator will have modified the database. |
| Priority: | High |
| Frequency of Use: | Anytime information needs to be updated in the database. |
| Normal Course of Events: | <ul><li>The system prompts the user to select one of the following two options:<ul><li>Manage Recipes</li><li>Manage Users</li></ul></li><li>If the user selects the "**Manage Recipes**" option, the system prompts the user to select one of the following two options:<ul><li>Add new item.</li><li>Modify existing item, i.e., update or remove item.</li></ul></li><li>If the user selects the "*Add new item*" option.<ul><li>2a. The system prompts the user to select an appropriate category and product (or create a new category/product if one does not exist) to place the item)</li><li>2b. The user selects the appropriate category and product.</li><li>2c. The system prompts the user to enter the item details like Item Name, Quantity Available, Price and Item Image.</li><li>2d. The user keys in the requested item details and clicks "Submit".</li><li>2e. The system updates the item in the selected category/product in the database.</li></ul></li><li>If the user selects the "*Modify Existing Item*" option.<ul><li>2a. The system prompts the user to navigate to the appropriate item.</li><li>2b. The user navigates to the item that he wants to modify.</li><li>2c. The user either removes the item from the catalog by clicking "Remove Item" or modifies the Item Name, List Price, Quantity or Item Image and clicks Update.</li><li>2d. The system updates the information in the database.</li></ul></li><li>If the user selects the "**Manage Users**" option, the system prompts the user to select one of the following two options:<ul><li>Add User</li><li>Modify User</li></ul></li><li>If the user selects the "**Add User**" option,<ul><li>3a. The system displays the "Add new user" page to the user.</li><li>3b. The user enters the user details like name, address, etc and selects the access right (normal user/ administrator) of the user and clicks Submit.</li><li>3c. The system updates the new user details in the database.</li></ul></li><li>If the user selects the "**Modify User**" option,<ul><li>3a. The system prompts the admin to search for the user.</li><li>3b. The user searches for the user he wants to modify.</li><li>3c. The system displays the user details to the admin.</li><li>3d. The admin modifies any of the user details like name, address, card details, access rights and clicks Update.</li><li>3e. The system updates the details in the database.</li></ul></li></ul> |
| Alternative Courses: | None |
| Exceptions: | None |
| Includes: | None |
| Special Requirements: | User has the admin password and the authority to make changes. |
| Assumptions: | The admin is familiar with database administration. |
| Notes and Issues: | None |

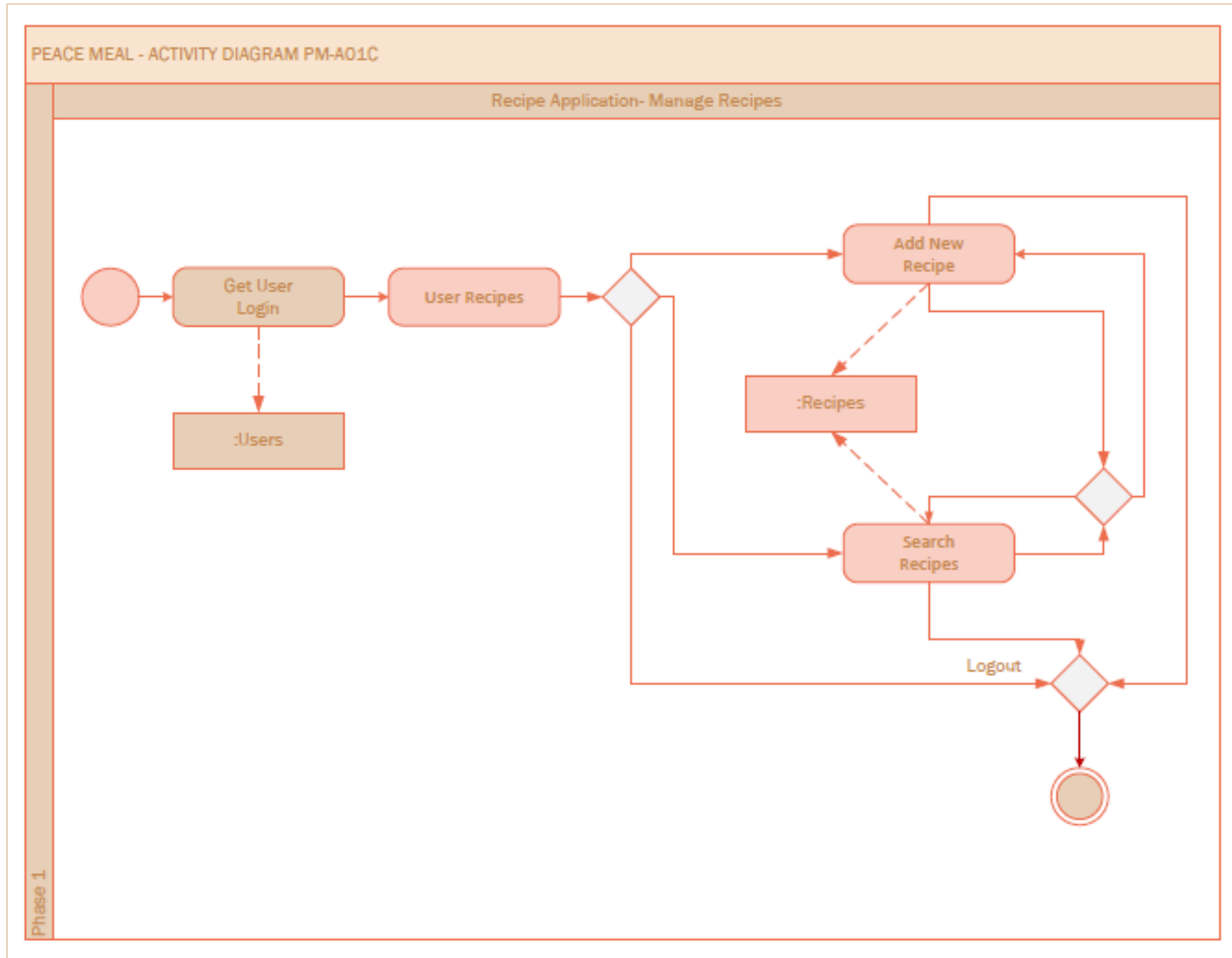| Use Case ID: | PM-02B | | |
|---|---|---|---|
| Use Case Name: | **Maintain Donations (Cryptocurrency)** | | |
| Created By: | Tausif Parkar | Last Updated By: | Yvonne Kerner |
| Date Created: | 9/20/2017 | Date Last Updated: | 10/8/2017 |

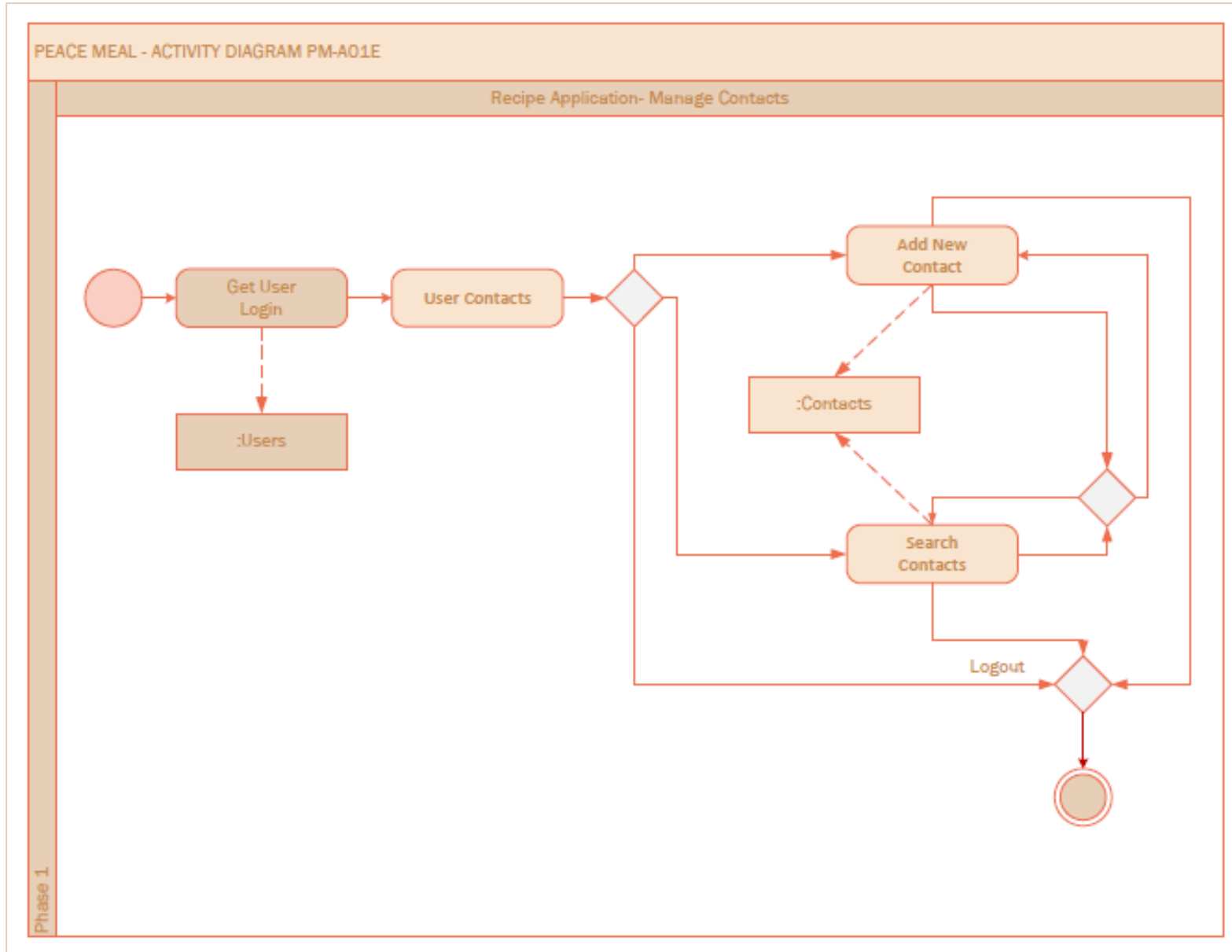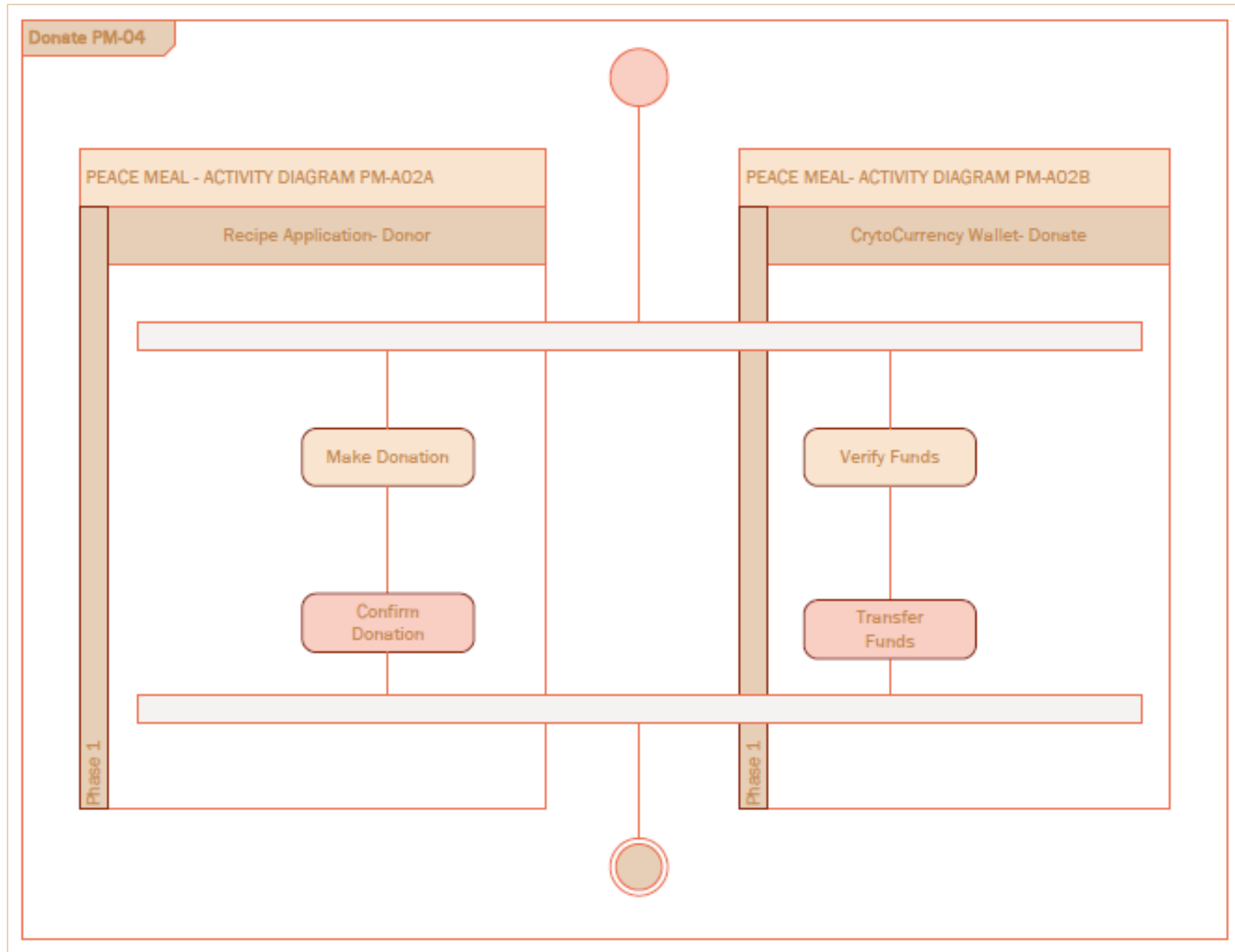| Actor: | Administration |
|---|---|
| Description: | User can make cryptocurrency donations to site online. Phase One |
| Preconditions: | User must have a Bitcoin, Ethereum, or Litecoin cryptocurrency wallet. |
| Postconditions: | User will have donated cryptocurrency to Peace Meal. |
| Priority: | High |
| Frequency of Use: | Any time a user wants to donate. |
| Normal Course of Events: | <ul><li>User clicks on the Donate link.</li><li>The user is directed to coinbase.com and one of our empty wallets to deposit funds into.</li><li>The user then enters the address of their cryptocurrency wallet that they want to donate from.</li><li>The user then enters the amount of currency they want to donate.</li><li>The user then clicks send and goes through their wallet verification process.</li><li>The funds are transferred into our wallet and the donation is complete.</li></ul> |
| Alternative Courses: | None |
| Exceptions: | None |
| Includes: | None |
| Special Requirements: | That the user has a cryptocurrency wallet with currency in it to donate. |
| Assumptions: | User is aware of cryptocurrency wallets and how they work. |
| Notes and Issues: | None |

# Activity Diagrams

# User- Manage Profile



PEACE MEAL - ACTIVITY DIAGRAM PM-01A B

Recipe Application- User Manage Profile
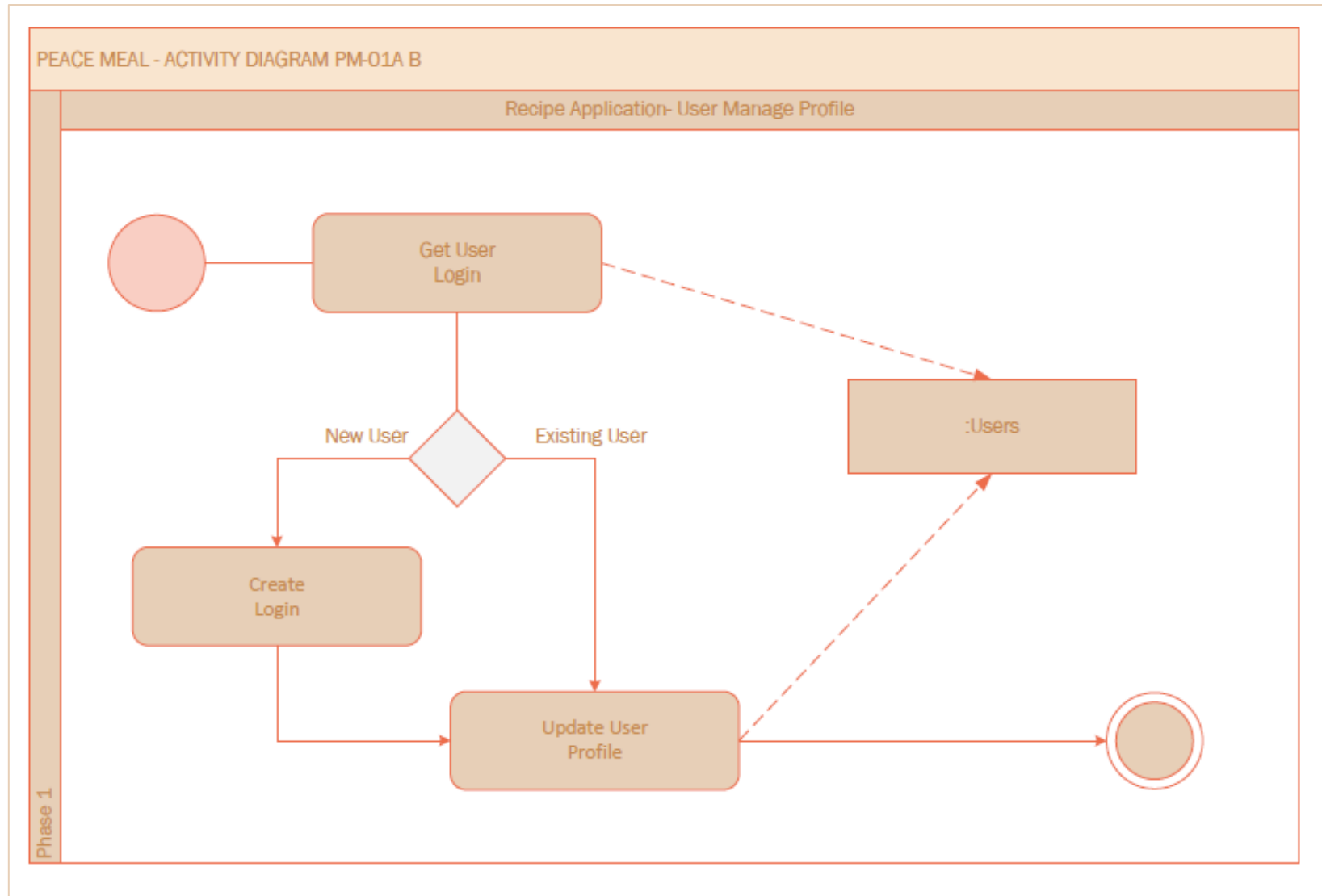
# User- Manage Recipes

# User-Manage Contacts



PEACE MEAL - ACTIVITY DIAGRAM PM-A01E

Recipe Application- Manage Contacts

Get User Login

User Contacts

:Users

Add New Contact

:Contacts

Search Contacts

Logout

Phase 1

# Donor- Make Donation

# Class Diagram

## Database



PeaceMealDatabase PM-01B C E

**Users**
- -username
- -password
- -firstname
- -lastname
- -city
- -zipcode
- -email
- -phonenumber
- dateofbirth
- -state
- -allergy
- +create profile
- +update profile
- +delete profile

**Contacts**
- -username
- -password
- -firstname
- -lastname
- -city
- -zipcode
- -email
- -phonenumber
- dateofbirth
- -state
- -allergy
- +add new contact
- +update contact info
- +delete contact Info

**Recipes**
- -username
- -recipeid
- -cuisine
- -allergy
- +name
- +ingredients
- +calories
- +serves
- +costtomake
- +category
- +preptime
- +image
- +description
- +add new recipe
- +update recipe
- +delete recipe

1..*      has      0..*

1..1      created      0..*

# Sequence Diagrams

## Manage Profile
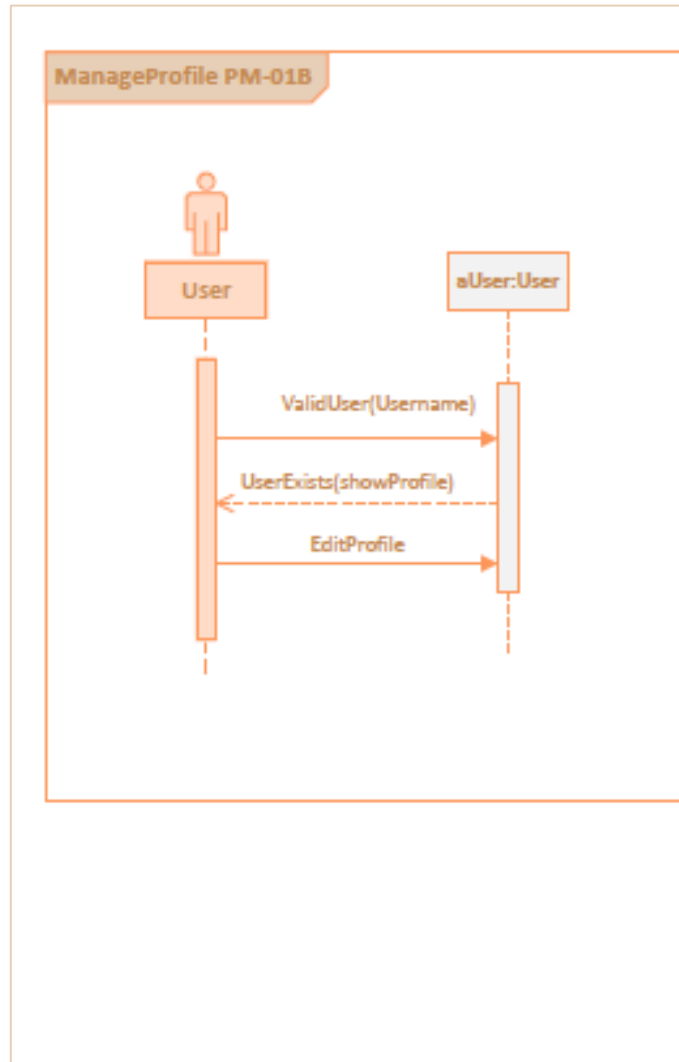
## Manage Recipes
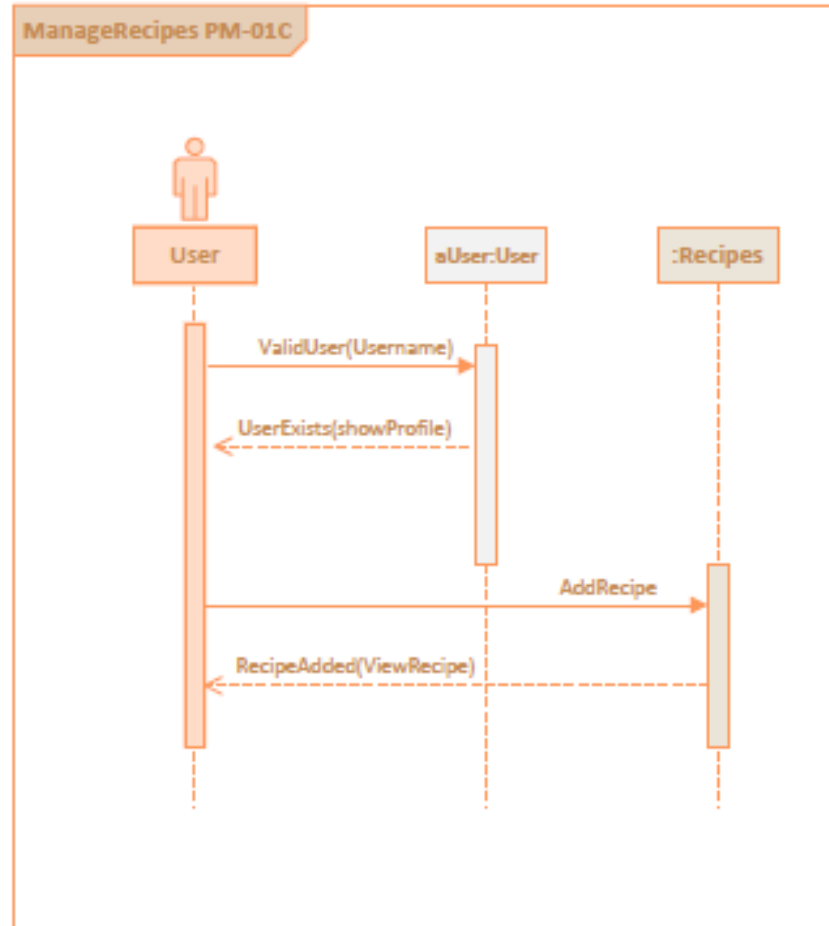
# Communication Diagrams

**User- Mange Profile**

**User- Manage Recipes**
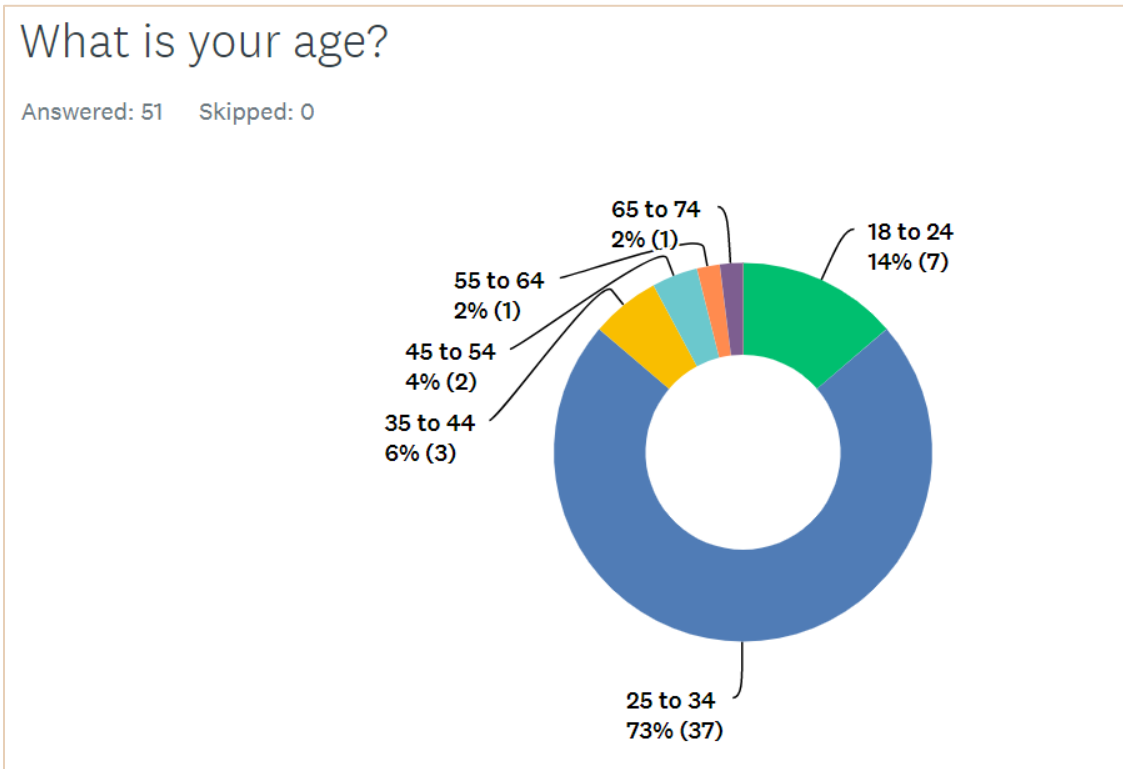
# Behavioral State Diagram

## User-Update Contacts
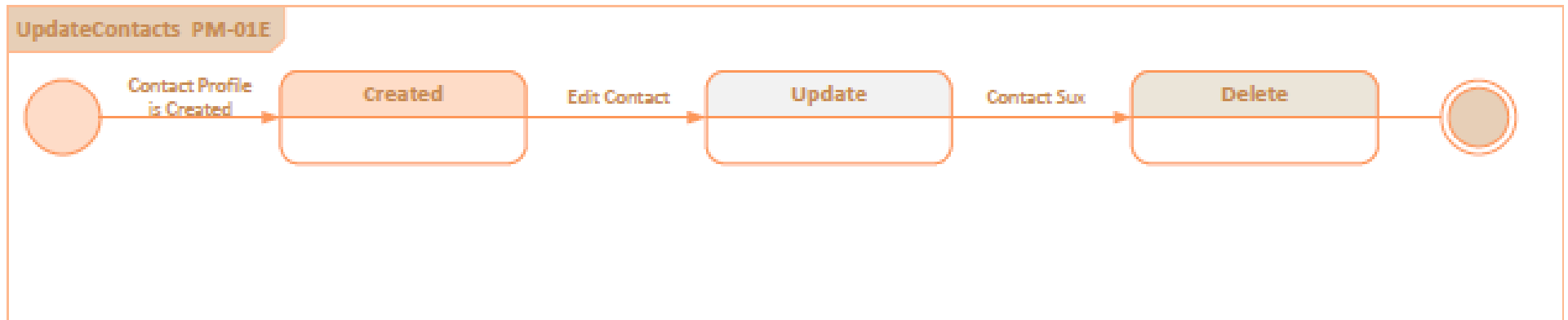
# Presentation Diagram (overview)
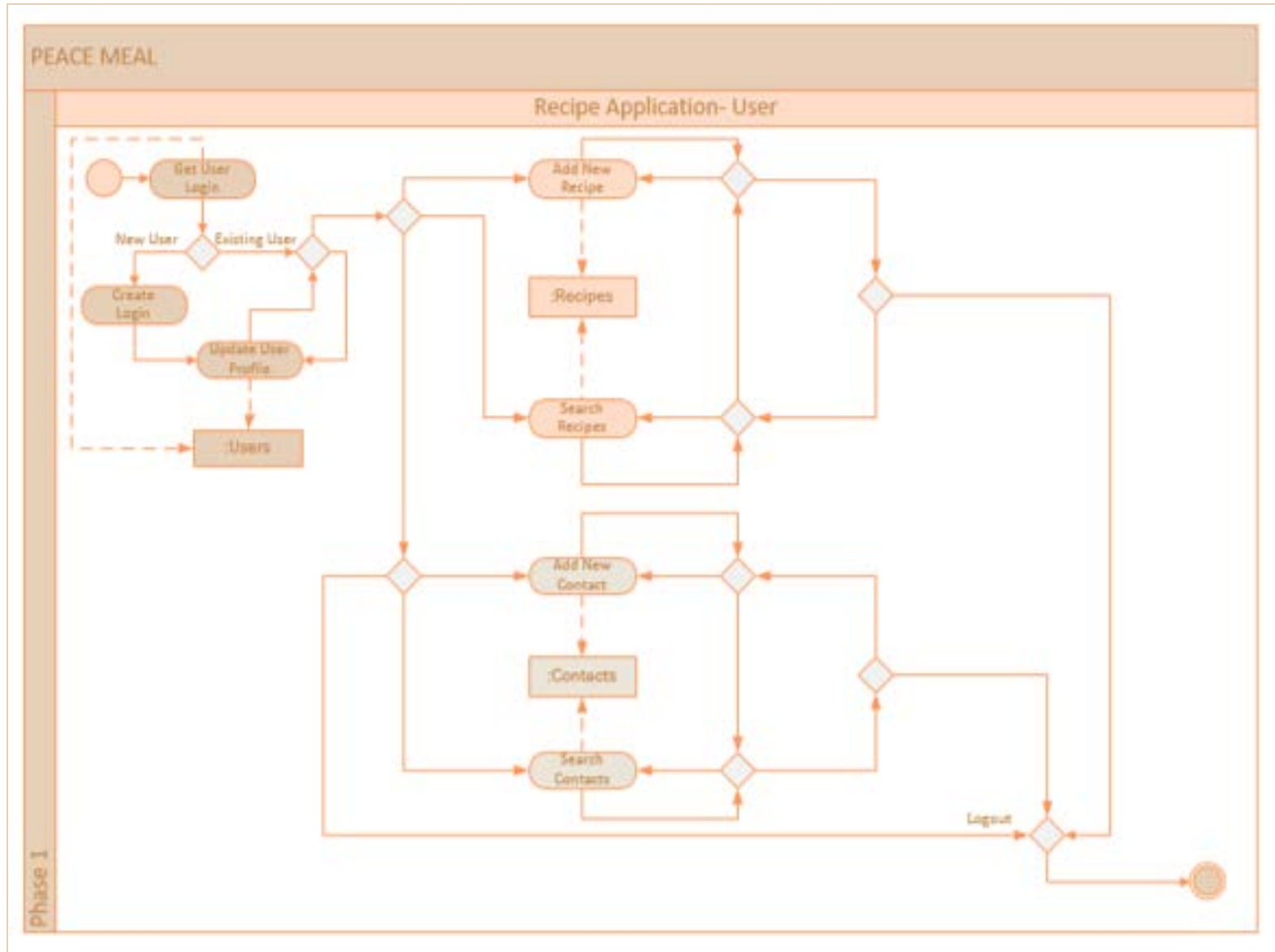
# APPENDIX 1---Survey Results

## What is your age?



What is your age?

Answered: 51    Skipped: 0

65 to 74
2% (1)

55 to 64
2% (1)

45 to 54
4% (2)

35 to 44
6% (3)

18 to 24
14% (7)

25 to 34
73% (37)

## Which demographic group do you belong to?



Select more than one if applicable

Answered: 51    Skipped: 0

Student, Male | Student, Female | Working, Male | Working, Female | Single, Male | Single, Female | Married, Male | Married, Female

## How often do you cook?

How often do you cook?
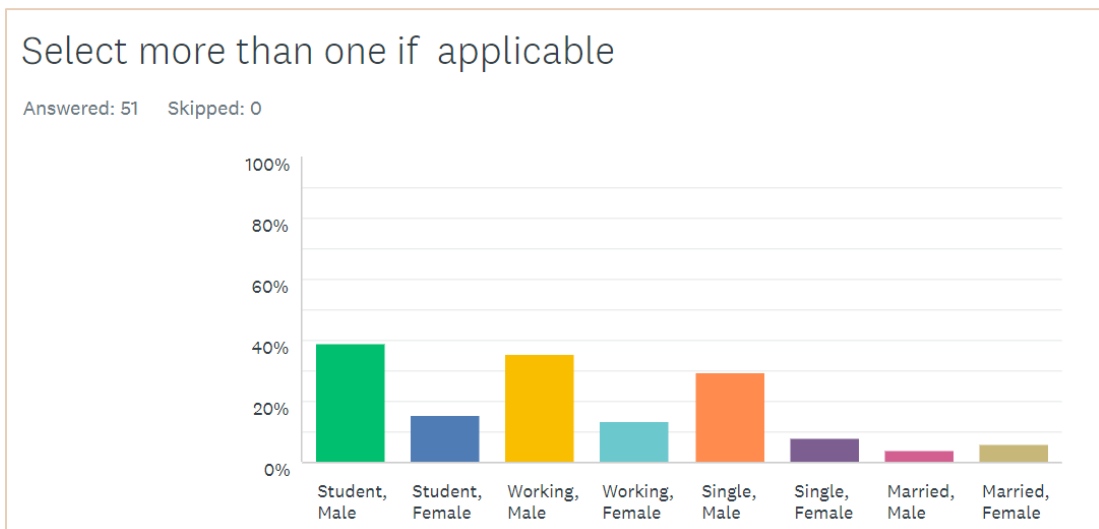
Answered: 51    Skipped: 0
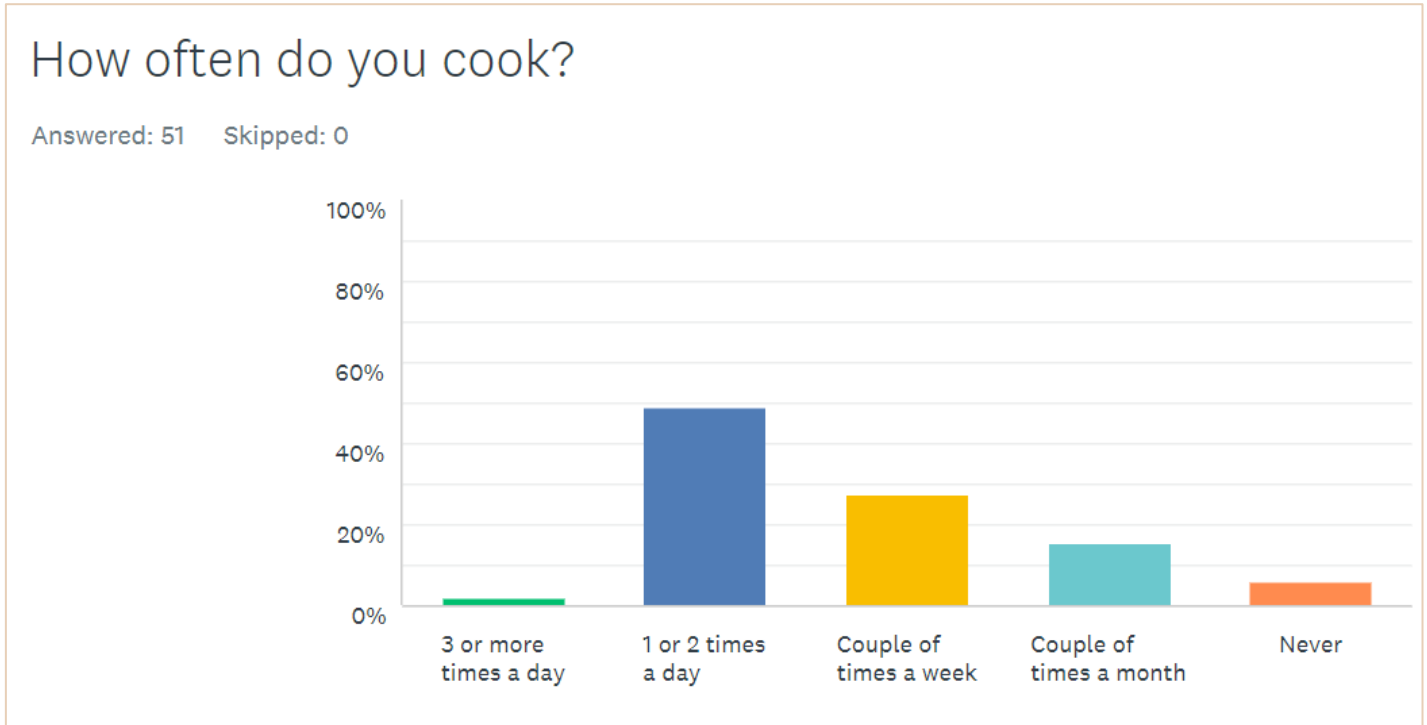


## Does anyone in your family have a dietary restriction?

Do you or your family member/friends have specific dietary requirements?

Answered: 50    Skipped: 1
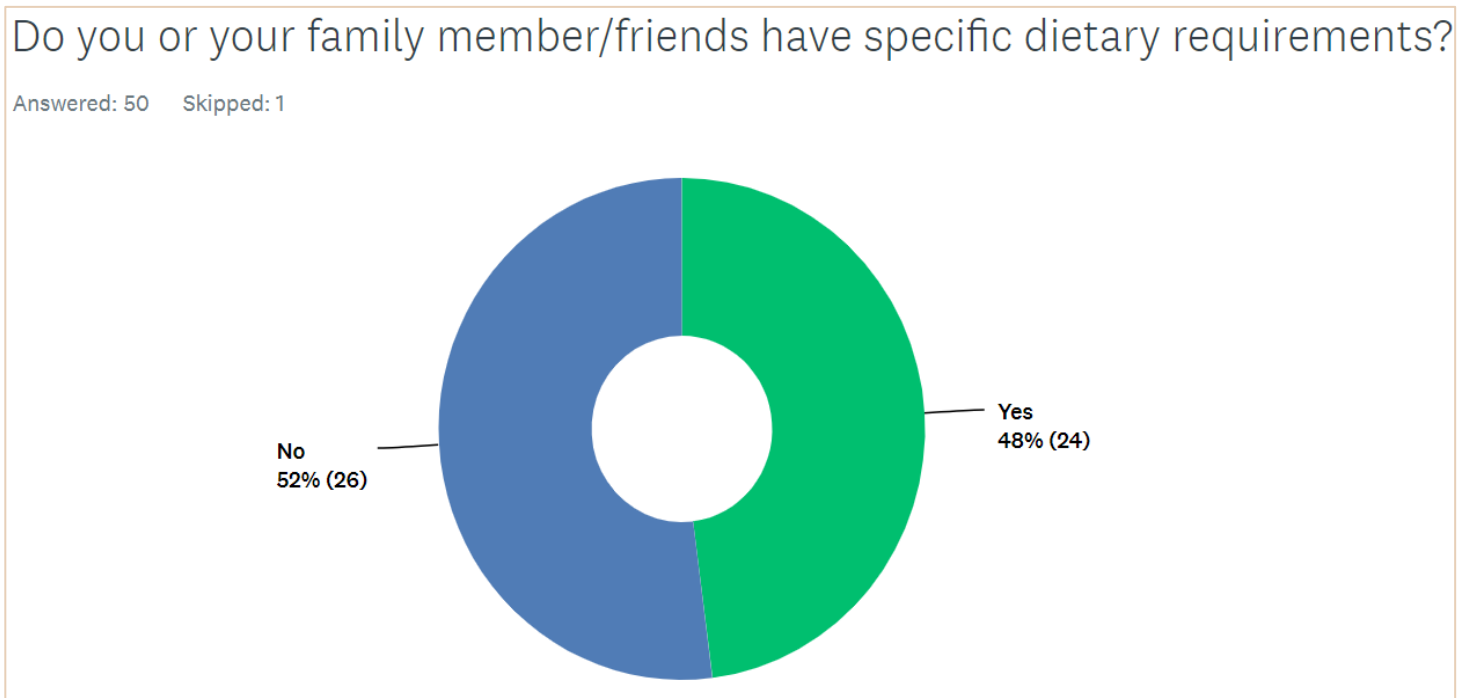
# How do you feel about health and cooking?

Answered: 51    Skipped: 0
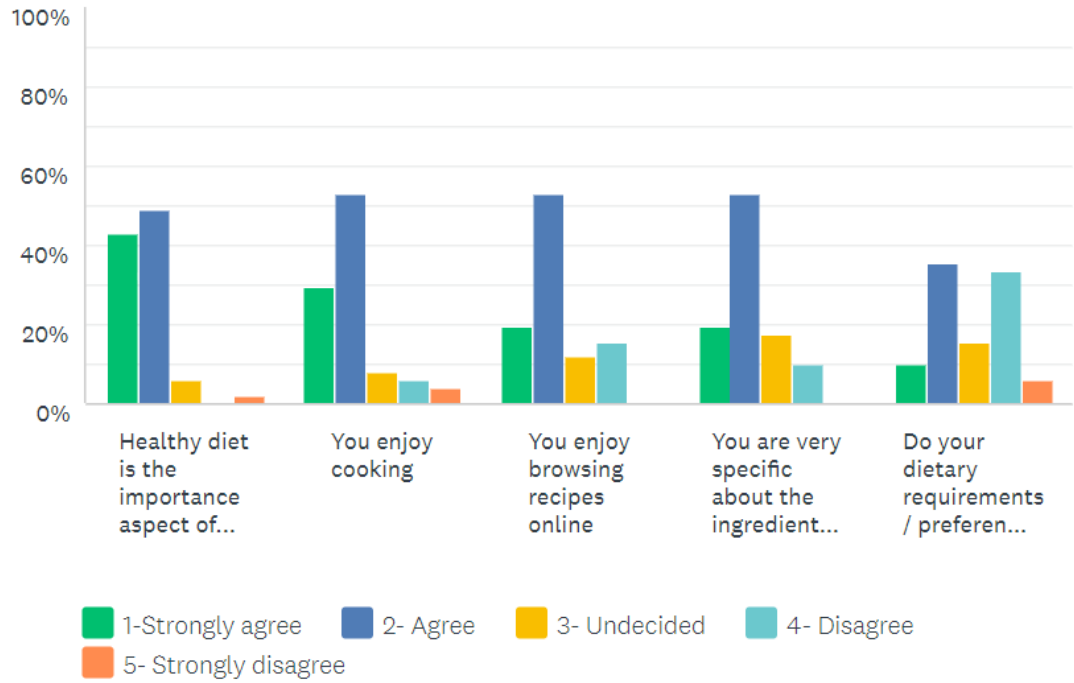


| | 1-STRONGLY AGREE | 2- AGREE | 3- UNDECIDED | 4- DISAGREE | 5- STRONGLY DISAGREE | TOTAL |
|---|---|---|---|---|---|---|
| Healthy diet is the importance aspect of your meal | 43.14% 22 | 49.02% 25 | 5.88% 3 | 0.00% 0 | 1.96% 1 | 51 |
| You enjoy cooking | 29.41% 15 | 52.94% 27 | 7.84% 4 | 5.88% 3 | 3.92% 2 | 51 |
| You enjoy browsing recipes online | 19.61% 10 | 52.94% 27 | 11.76% 6 | 15.69% 8 | 0.00% 0 | 51 |
| You are very specific about the ingredient you add to your meal | 19.61% 10 | 52.94% 27 | 17.65% 9 | 9.80% 5 | 0.00% 0 | 51 |
| Do your dietary requirements / preferences sometimes make it difficult for you to find recipes? | 9.80% 5 | 35.29% 18 | 15.69% 8 | 33.33% 17 | 5.88% 3 | 51 |

## Which of these dietary restrictions do you or someone you know have?
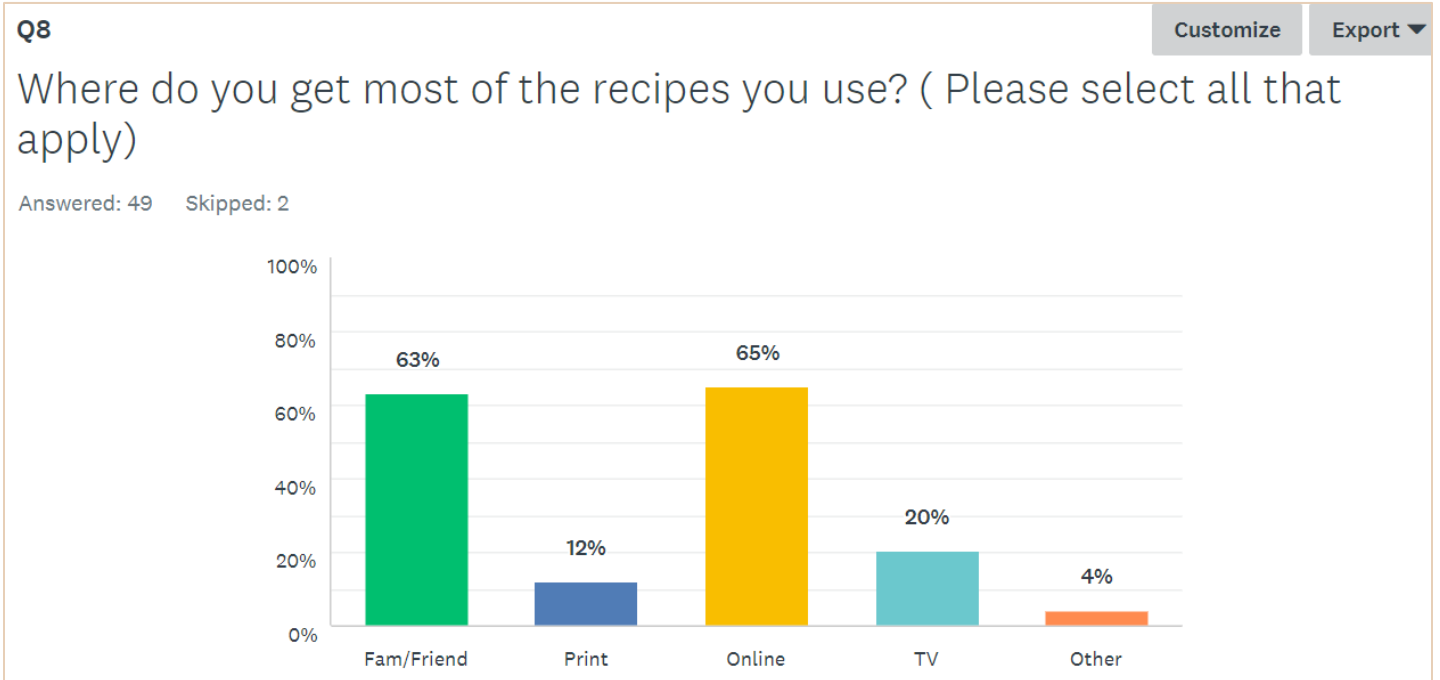
Do you/anyone you know follow/have any of the these dietary restrictions/dieases? (Please select all that apply.)
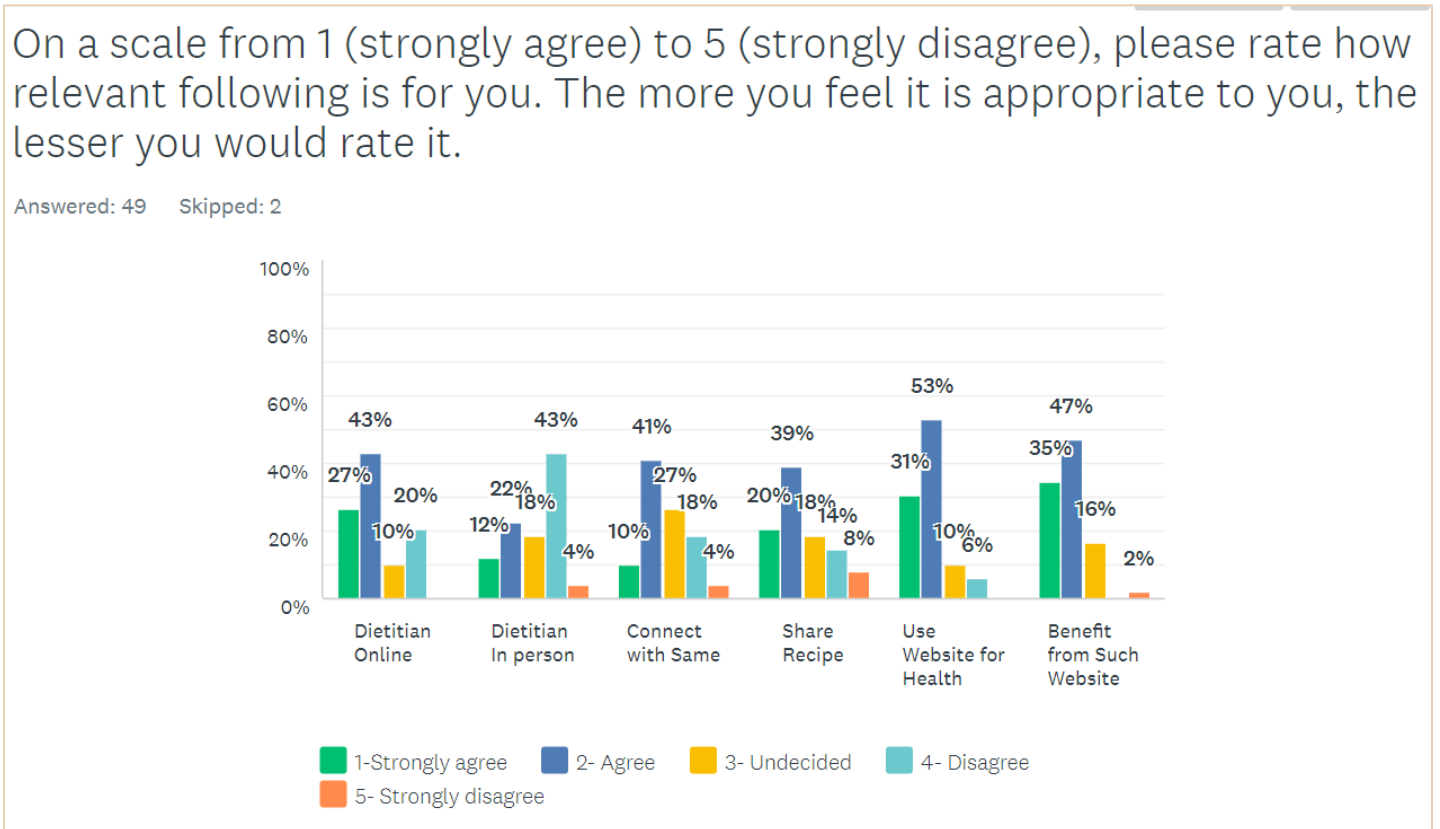
Answered: 50     Skipped: 1
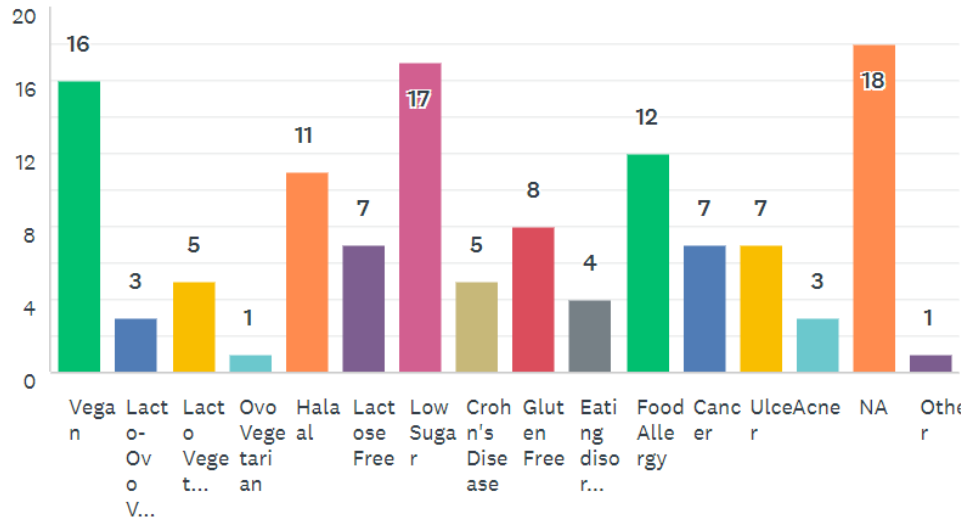


| ANSWER CHOICES | RESPONSES | |
|---|---|---|
| Vegan (1) | 32.00% | 16 |
| Lacto-Ovo Vegetarian (2) | 6.00% | 3 |
| Lacto Vegetarian (3) | 10.00% | 5 |
| Ovo Vegetarian (4) | 2.00% | 1 |
| Halaal (5) | 22.00% | 11 |
| Lactose Free (6) | 14.00% | 7 |
| Low Sugar (7) | 34.00% | 17 |
| Crohn's Disease (8) | 10.00% | 5 |
| Gluten Free (9) | 16.00% | 8 |
| Eating disorders | 8.00% | 4 |
| Food Allergy | 24.00% | 12 |
| Cancer (12) | 14.00% | 7 |
| Ulcer (13) | 14.00% | 7 |
| Acne (14) | 6.00% | 3 |
| NA | 36.00% | 18 |
| Other               Responses | 2.00% | 1 |
| **Total Respondents: 50** | | |

## Where do you get the recipes you use from?



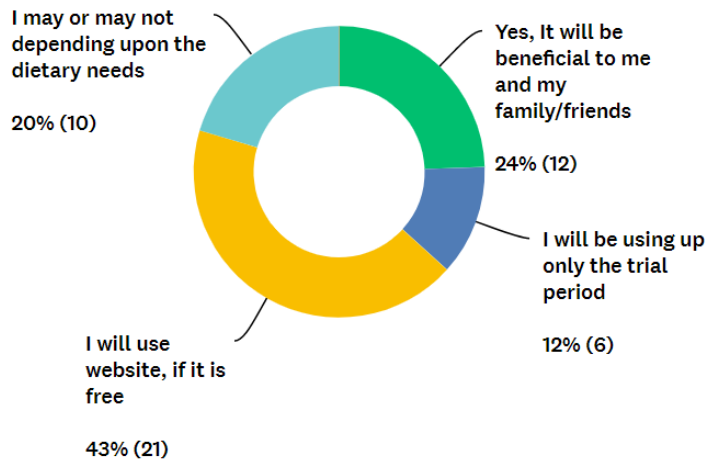Q8                                                                    Customize    Export ▼

## Where do you get most of the recipes you use? ( Please select all that apply)

Answered: 49    Skipped: 2

Bar chart showing: Fam/Friend 63%, Print 12%, Online 65%, TV 20%, Other 4%

## How relevant is a dietician or online recipes to you?



On a scale from 1 (strongly agree) to 5 (strongly disagree), please rate how relevant following is for you. The more you feel it is appropriate to you, the lesser you would rate it.

Answered: 49    Skipped: 2

Grouped bar chart with categories:
- Dietitian Online: 27%, 43%, 10%, 20%
- Dietitian In person: 12%, 22%, 18%, 43%, 4%
- Connect with Same: 10%, 41%, 27%, 18%, 4%
- Share Recipe: 20%, 39%, 18%, 14%, 8%
- Use Website for Health: 31%, 53%, 10%, 6%
- Benefit from Such Website: 35%, 47%, 16%, 2%

Legend:
- 1-Strongly agree
- 2- Agree
- 3- Undecided
- 4- Disagree
- 5- Strongly disagree

34

## Would you pay for a recipe website?

Would you be willing to pay for services which offers you dietary requirement specific recipes and provide you a forum to connect with people with similar requirement?

Answered: 49    Skipped: 2

I may or may not depending upon the dietary needs

20% (10)

Yes, It will be beneficial to me and my family/friends

24% (12)

I will be using up only the trial period

12% (6)

I will use website, if it is free

43% (21)

## Would you pay to use a recipe phone app?

Would pay for a recipe phone app?

22%

78%

- Would pay to use recipe phone app
- Would NOT pay to use recipe phone app
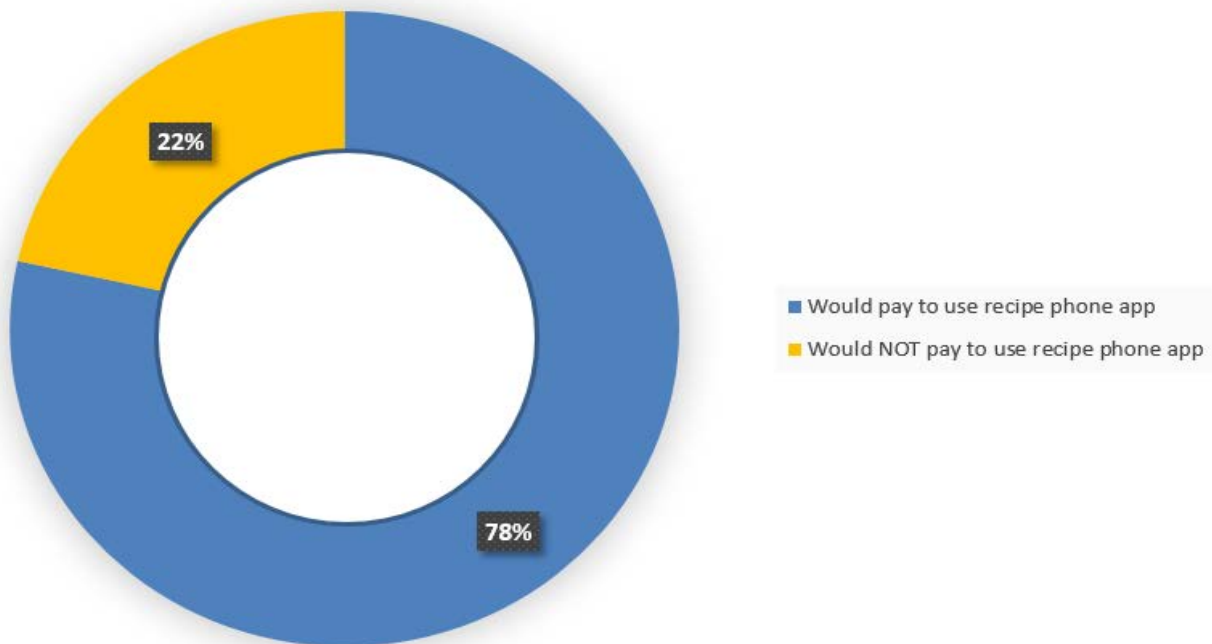
# Appendix II---PowerPoint Slides



# Appendix III---Presentation Video



# Appendix IV---Who did what?

| STUDENT | PROJECT SECTION |
|---|---|
| All Four | Team Collaboration Plan |
| All Four | Project Charter |
| All Four | Scope Statement |
| All Four | Presentation |
| Tausif | System Requirements Document |
| Angelo | Benchmarking |
| Yvonne | Outcome Analysis |
| Yvonne | Work Breakdown Structure & Scheduling |
| Sonal | Feasibility Analysis |
| Sonal | Human Resource Management |
| Yvonne | All diagrams |
| Tausif | Use Case Descriptions |
| Yvonne & Angelo | Video Presentation |
| Angelo | Frequently Asked Questions |
| Yvonne & Angelo | Information Sheet |
| Yvonne | Color Scheme |
| Tausif | Survey Charts |
| Angelo | Edit & Give work ONE VOICE |

# Appendix V---Frequently Asked Questions

| Questions | Answers |
|---|---|
| **What makes Peace Meal different?** | • Peace Meal's differentiator is providing allergy sufferers with an easy-to-use website to search and connect with other users undergoing similar struggles with their dietary restrictions. The amount of information available to those with allergies or ailments can be overwhelming; Peace Meal simplifies the experience.<br>• The organization of the recipes by the sites creators demonstrates the focus on making it a useful tool. The recipes are displayed in a typical fashion as other website, with one huge caveat: they've been adjusted by allergy type and assorted according to meal period: breakfast, lunch and dinner.<br>• The majority of the content found at Peacemeal.net is created by its subscribers. Recipes from members, advice from certified dietitians and a forum for questions are all easily accessed on the site. Peace Meal emphasizes content and above all, community. |
| **Why did the creators decide to make Peace Meal?** | • Peace Meal started as a way to keep the peace in the family, by providing an easy way for everyone to share the family recipes.<br>• The founders knew there was a better way to manage recipes, nutrition and allergies than the current hodgepodge of online resources available. They figured why not them? They believed that with their level of expertise they could do it better, and they were right!<br>• The science and research has shown that when people have access to recipes, food and nutrition they can improve their quality of life.<br>• As with many great entrepreneurial ideas, the concept was born out personal experience and need. Having been interested in nutrition, coupled with experience of having to collect and maintain recipes for friends and family members, many of whom had allergies, a spark was lit that inspired a passion for healthy living. |
| **What technologies does Peace Meal use?** | Peace Meal uses and will continuously use the latest technologies available to develop the brand and deliver solutions for its users. Currently Peace Meal is using a wide range of technologies including:<br>• C#<br>• HTML<br>• XML<br>• Json<br>• JavaScript<br>• Database technologies (SQL, SQL Server, Azure) |
| **What does the current research on allergens say?** | Currently the FDA has undergone significant research to establish "safe thresholds" for the top 8 most common food allergies. The FDA continues to define what constitutes a food allergy and size of the population affected. Armed with this information, Peace Meal delivers a comprehensive solution for food allergy sufferers. |
| **What is anaphylaxis?** | Anaphylaxis is a severe allergic reaction that moves rapidly and could in some cases cause death. It can result in: hives/skin irritations, throat, tongue and facial swelling, shortness of breath, nausea, vomiting, diarrhea, and in the most severe cases, heart attack! |
| **How do I know what foods to avoid?** | Consult Peace Meal for a handy guide outlining an allergen avoidance list and peruse recipes to find delicious foods you are interested in. We also provide dieticians that you can collaborate with to get a meal plan catered to your specific dietary needs. |
| **How do I search for recipes?** | You can search the entire recipe database using specific search options based on allergy type and meal type/period. |
| **Are there menus/recipes for holiday entertaining?** | Yes, Peace Meal provides comprehensive menus catered to specific holiday periods throughout the year. Check back often, as more users join the site, more holiday recipes will be introduced! |
| **Can I purchase food through Peace Meal?** | Yes, we are currently linked through our partner's websites where you can search and purchase food directly on Peace Meal and have it delivered to your home within two days. (two hour will be in phase 3) |
| **How does Peace Meal make money and stay open for business?** | Peace Meal is a free web-based service. We do, however, offer advertising and a handy mobile app which is available for purchase. As Peace Meal continues to expand and build on the brand through word of mouth, PR, marketing and social media, we will continue to gain loyal customers. We also accept donations, if you are so willing? |
| **How did you determine the price to charge for the mobile app?** | Through market research and surveys asking what people would be willing to pay coupled with a slight mark-up to generate a profit, we determined the price of the mobile app. Most access to our database and certified dietitian will continue to be free as we feel it is necessary and worthy to help those in need. |

# Appendix VI---Information Sheet

*Recipes Catered to YOUR Dietary Needs*
*www.peacemeal.net*

Peace meal is a recipe application that is being designed to provide recipes and support for people with allergies and physical ailments that can be helped with dietary changes.

- Over 15 MILLION people have food allergies.
- Over 200 people die each year from an allergic reaction to food.
  - This may not seem like a lot...unless it is someone YOU know and care about.
- There is NO CURE for food allergies.
- Food allergies cost about $25 BILLION each year.
  - EpiPens cost over $600 for a single use pen.
  - People visit the emergency room about 200,000 times each year because of food allergies. That is one person every 3 minutes!
  - Almost 10,000 people stay in the hospital each year because of food allergies
- You or a family member can become allergic to any food at any given time.

In order to make our presentation a little more interactive we have included a few QR codes. (if your phone has the capability...feel free to figure out what they say)

| PHASE | PHASE ONE | PHASE TWO | PHASE THREE |
|---|---|---|---|
| TIME FRAME | Less than one year | Two to three years | Three to five years |
| FUNCTIONALITY | **Profile**<br>• Create<br>• Update<br>• Delete | Add the functionality to have a favorite friends group in profile. | Add the functionality to choose your preferred dietician and restaurants. |
| | **Chatbot** – automated with questions and answers that people ask.<br>**Messenger**-Contact people with same dietary restrictions | **Discussion board** collaborate/people with the same dietary restrictions. | Partner with **dieticians** personal consults on recipes and meal planning. |
| | **Donations**<br>• Bitcoin<br>• Ethereum<br>• Litecoin | Accept donations<br>• Visa<br>• MasterCard | Accept Donations<br>• Discover<br>• American Express |
| | **Recipes**<br>• Upload<br>• Print<br>• Share via email | Add the functionality to upload pictures of recipes. | Add the functionality to upload videos of recipes. |
| | **Search Functionality**<br>• Name of dish<br>• Cuisine<br>• Allergy | Add the functionality to search for people with the same dietary restrictions. | Partner with local restaurants to have meals catered to your needs ...and delivered to your home. |
| | **Affiliate Advertising**<br>• Amazon<br>• Coupons.com | Amazon Web Store on our site. (this would be a two day delivery window) | Partner with Shipt and Amazon Prime now food delivery. (two hour delivery window) |
| | **Application Created**<br>• Web<br>• Android<br>• IPhone | Add phase two functionality to the web and phone apps. | Add phase three functionality to the web and phone apps. |

http://www.aafa.org/page/allergy-facts.aspx

https://www.foodallergy.org

# Appendix VII---Color Scheme

# Appendix VIII---Extra Use Case Description

| Use Case ID: | PM-02B2 | | |
|---|---|---|---|
| Use Case Name: | **Maintain Credit Card Donations** | | |
| Created By: | Tausif Parkar | Last Updated By: | Tausif Parkar |
| Date Created: | 9/20/2017 | Date Last Updated: | 10/7/2017 |

| | |
|---|---|
| Actor: | Administration |
| Description: | User should provide donations online |
| Preconditions: | User: Wants better payment options.<br>Wants to pay for the donations online.<br>Company: Wants to satisfy user interests. |
| Postconditions: | - User is able to pay online successfully.<br>- A Confirmation Id is generated by the system.<br>- Confirmation e-mail is sent by the system to the User. |
| Priority: | High |
| Frequency of Use: | As and when user wants to donate |
| Normal Course of Events: | 1.User clicks on "Financing link".<br>2. System displays the "Financing" main page.<br>3. User clicks on 'Make Payments' link in the Screen.<br>4. System displays the 'Payment Screen'.<br>5. User enters the following information.<br>        Applicant Information:<br>          - First Name<br>          - Last Name<br>          - Mode of Payment<br>      If mode of payment debit/credit card<br>          - Credit card number<br>          - Credit expiry Date<br>          - Card Type<br>      If mode of payment is check<br>          - Check Number<br>          - Routing Number<br>          - Bank Name<br>          - Account Number<br>6. User clicks on 'Submit' button.<br>7. System displays 'Confirm the payment information again' to the User.<br>8. User click on 'Confirm'.<br>9. System sends a confirmation e-mail to the User. |
| Alternative Courses: | None |
| Exceptions: | None |
| Includes: | User login |
| Special Requirements: | 1. If payment is done through the credit/debit card, there is a requirement of consulting the credit/debit company for confirming the account and payment. |
| Assumptions: | User is aware of the banking system |
| Notes and Issues: | None |