Team Project - D.2 Requirements

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Nosh

https://github.com/clockian-NAU/Nosh

CS 386 - Software Engineering

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Positioning

Problem Statement

The problem of making the best and healthiest meal with limited ingredients affects people who can't cook well enough to improvise on the fly; the impact of which is spending more time searching effectively for recipes to make or even giving up on cooking altogether.

Product Position Statement

For everyone who lacks the ability and cooking knowledge to improvise at a whim, Nosh is a recipe website that allows the user to search by ingredients, time to prepare, dietary restrictions, or materials needed to prepare the food; unlike Allrecipes, our product allows the user to more thoroughly specify what ingredients to allow in their search.

Value Proposition

Nosh is a recipe search website that allows people who have limited knowledge of cooking or ingredients to better find recipes that they can cook by giving them a search function that allows for greater specificity on what recipes to look for then what is currently out on the internet.

Stakeholders

- Users - people using Nosh to look for recipes.
- Contributors - people who submit recipes to Nosh.
- Moderators - people who ensure recipes and community interactions contribute to Nosh positively.
- Developers - people who continuously work on implementing and improving the features of Nosh.

Functional Requirements

1. Working website that people can access online
2. Being able to pull up recipes
3. Search bar
4. Specify limitations (time, ingredients) to search
5. Search results page
6. Recipe page/recipe template page
7. Rating system

Non-Functional Requirements

1. Usability - 8 out of 10 testers are able to navigate site without developer help or advice not available on Nosh itself.
2. Speed - 8 out of 10 testers are comfortable with the speed of the site.
3. Security (if accounts are implemented) - 8 out of 10 testers are satisfied with our proposed security measures.
4. Accessibility - Includes captions for any audio aids, is colorblind friendly and friendly to a variety of lifestyle choices or needs.
5. Performance - Receives at least all B's from this site. (https://www.webpagetest.org/)
6. Quality code - 8 out of 10 people with coding experience (other than original Nosh developers) are satisfied with the readability of the code in terms of future changes and understanding what the code does.
7. Readability - 8 out of 10 testers are satisfied with the readability of the site.
8. Reliability - Will use a trusted server that will ensure 9 out of 10 users can reach the website at any given time
9. Resource Constrained - Any webpage on the site is less than 4mb.

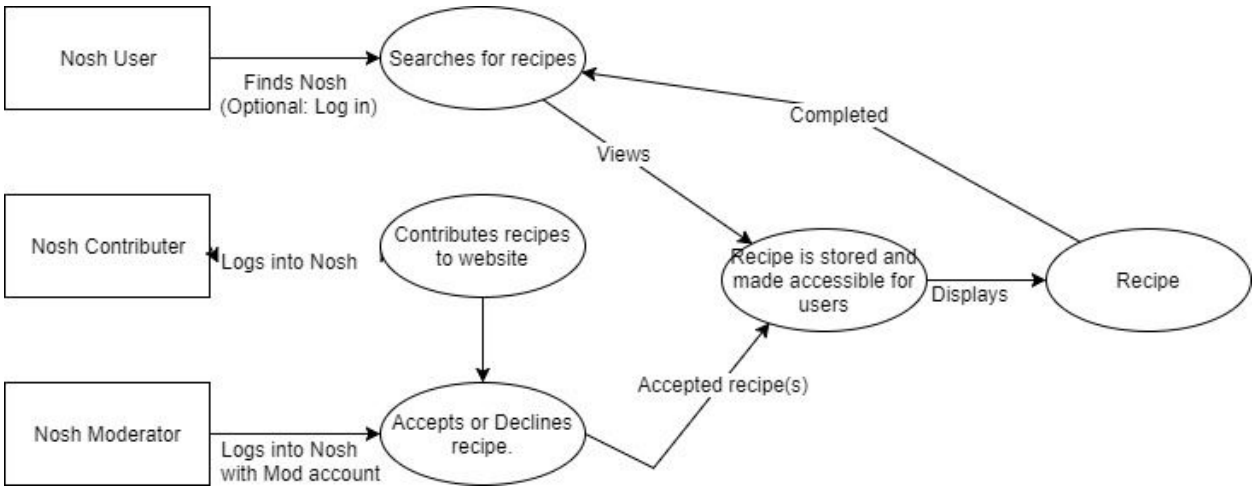
Minimum Viable Product

A website that allows the user to search for recipes by a set of search criteria. This search criteria can be ingredients in the recipe, ingredients excluded from the search, the amount of time the recipe takes, or if the recipes fits a dietary restriction, like vegetarian. When the criteria is entered and a search button is clicked, the website displays a list of recipes and pictures of their final product that fit that search criteria. The user may click on one of these recipes to get the full recipe to prepare the meal.

A user that wishes to contribute to the website and add a recipe would log into Nosh and click a button to bring a form to fill out with the recipe details. The recipe would then be displayed on the website.

These features will be validated by seeing if a user is able to go through the above process correctly with the software.

Use Case Diagram



Use Cases

Use Case: Searching Feature

1. **Brief Description**

   This feature allows the user to enter a list of search terms to specify what recipes they want to see. This feature should be able to search for recipes using an arbitrary number of search terms.

2. **Actor Brief Descriptions**

   Everyone who visits the website should be able to use this feature and specify what they do and do not want to include in the search.

3. **Preconditions**

   The user, arriving to the website by Google, entering by the home page or any arbitrary recipe or page, must have access to the search bar in some form on that page.

4. **Basic Flow of Events**

   1. The user arrives at the website, clicks on the search bar
   2. Search bar changes color slightly to indicate that the user has clicked on it
   3. The user types in the search criteria
   4. The search bar recommends words that are similar to what the user is typing in
   5. The user runs out of room in the search bar
   6. The search bar word wraps and grows in size by one line going down
   7. When all search terms are entered, the user clicks on a search button
   8. The searching mechanism then uses the given terms to find recipes that fit the given criteria

5. **Subflows**
   a. The user may enter a plus symbol or no symbol next to any ingredient
   b. A plus or no symbol will include the ingredient in the search
   c. The user may enter a minus symbol next to any ingredient
   d. A minus symbol will exclude the ingredient from the search
   e. The user may enter a dietary restriction, like vegetarian
   f. The system will recognize those key words and limit the search to those keywords
   g. The user may enter a time, like 15

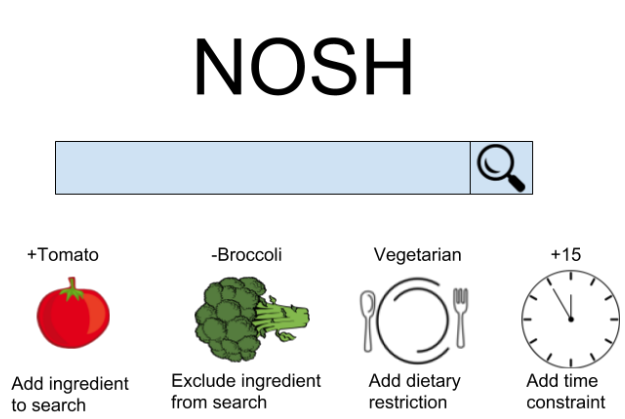
h. The system will interpret any number as minutes, unless otherwise specified by the user with an hour(hr) or second(sec) next to the number

6. Post Conditions

The user is removed from the landing page or other page and is moved to a new page displaying the results of their query.

7. Example Picture

Home Page



Top of Every Web Page Except Home Page

Rest of the website down here

Use Case: Recipe Submission

1. Brief Description

This use case describes how a user submits a recipe to the website.

2. Actors

2.1. Account User
2.2. Nosh

3. Preconditions

User has an account.

Nosh is available and the user has internet access.

4. Basic Flow of Events

1. The use case begins when the Account User arrives at the website.
2. Nosh prompts the user to log in or sign up.
3. Account User logs in.
4. Nosh redirects Account User to their account homepage.
5. Account User selects the “submit a recipe” button.
6. Nosh prompts the Account User to name the recipe.
7. Account User enters a name and clicks “ok”.
8. Nosh generates a blank recipe template page with the submitted name.
9. Account User fills out the template and clicks “submit”.
10. Nosh checks if template is complete/incomplete and proceeds if complete.
11. Nosh assigns the current date and time to the recipe and saves it to the Account User’s library.
12. Nosh makes the recipe public to the website.
13. Nosh asks the Account User if they want to submit another recipe or return to their homepage.
14. Account User selects option.
15. Nosh directs Account User to desired location.
16. The use case ends successfully.

5. Alternative Flows

5.1 Invalid User

If in step 3 of the basic flow the Account User does not sign in successfully, then

1. The use case ends with a failure condition.

5.2 Unnamed Recipe

If in step 7 the Account User fails to enter something in the name text box, then

1. The use case returns to step 6 and tries again.

5.3 Incomplete Recipe

If in step 10 Nosh determines the recipe to be incomplete, then

1. Nosh prompts Account User to fill out missing required fields.
2. The use case returns to step 9.

6. Post-conditions

6.1 Successful Completion

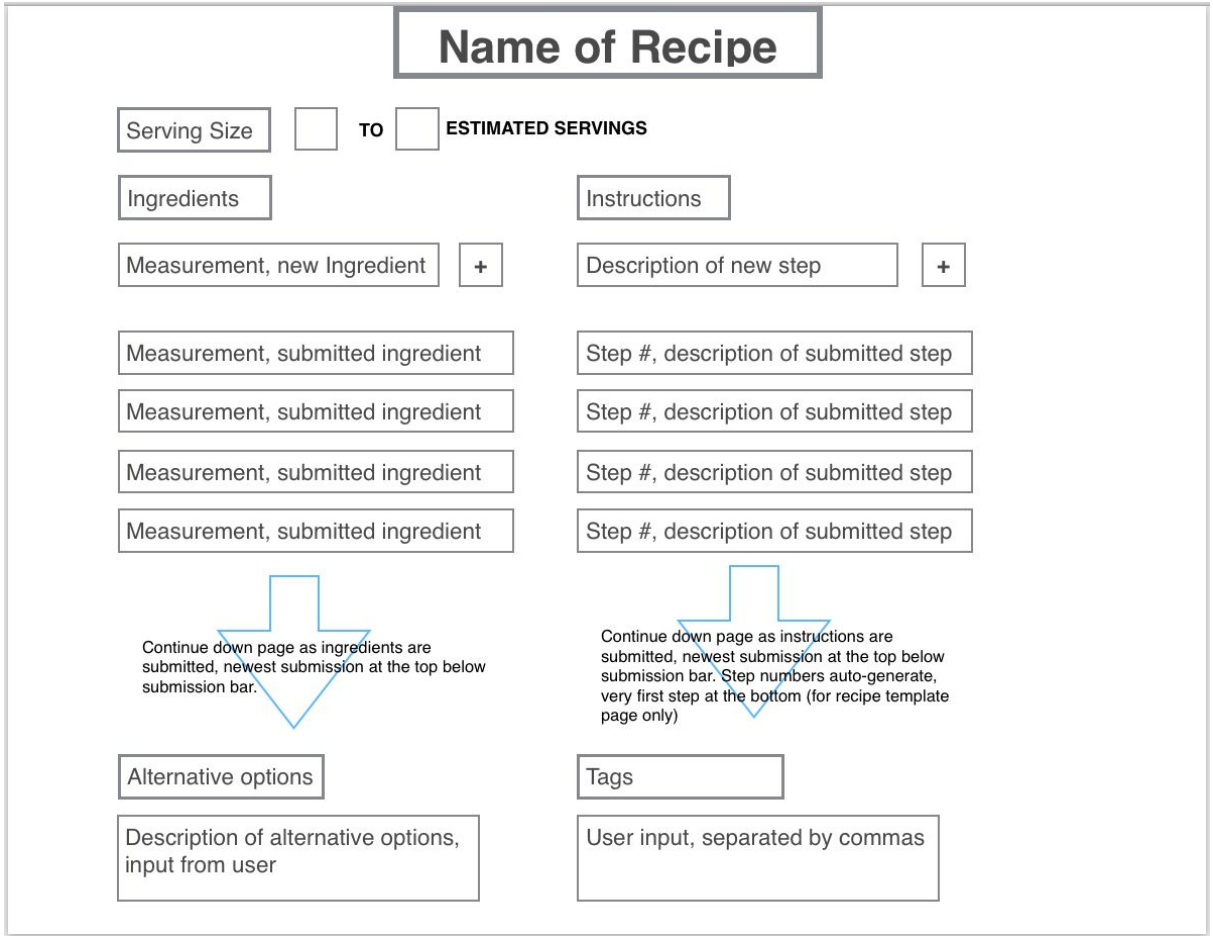
The Account User has submitted a recipe and it is public on the website. The internal logs are updated.

6.2 Failure Condition

The Account User is notified and internal logs are updated.

7. Example Picture

UI Sketch of Recipe Template Page



Use Case: Account Creation

1. **Brief Description**

   This use case describes how a new user will create an account on the website to utilize all of the website features.

2. **Actors**

   2.1. New Users

3. **Preconditions**

   The user has an active connection to the internet.

   Nosh is online and available to the user.

4. **Basic Flow of Events**

   1. This use case begins when the user initiates account creation on the website.
   2. The website redirects the user to a webpage to prompt the user for necessary account creation information.
   3. User enters necessary information to the account creation web page and clicks ‘Submit’.
   4. Once all necessary fields have been filled correctly, the website will create the new user account.
   5. The user will be redirected their account homepage after successful account creation.

5. **Alternative Flows**

   5.1 Incorrect Information

   If in step 3 of the basic flow the doesn’t submit the correct information, then
   1. The webpage will display an error message “Incorrect information, please enter/check your information.”
   2. User corrects information and attempts to re-submit their information by clicking ‘Submit’ again.
   3. This use case will move on to step 4 of the basic flow once the information in entered correctly.

6. **Post-conditions**

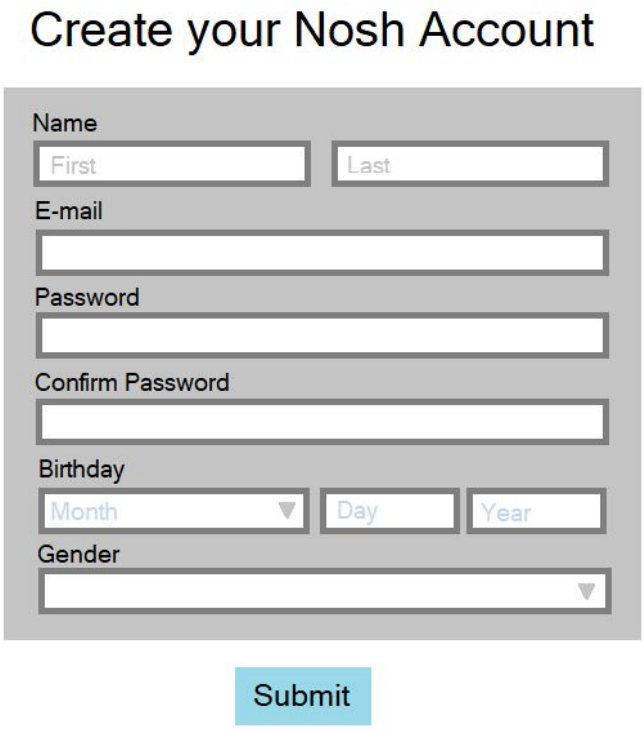
6.1. Successful Account Creation

The user successfully created an account for the website and can utilize all the features of Nosh.

6.2. Incomplete Account Creation

The user failed to submit the correct information necessary to create an account and did not create a account for the website.

7. Example Picture



Use Case: Results Page

1. Brief Description

This use case describes how a Nosh user will reach the results page.

2. Actors

2.1. Nosh user

3. Basic Flow of Events

1. The user will be prompted to create a new account in order to save recipes or log in with an existing account. This will be optional.
2. The user specifies by either choosing or typing the ingredients on hand, or searching through a specific criterion of recipes (ie: vegan recipes, recipes under 400 calories, etc.)
3. Nosh will display the recipes that fit the users specifications.
4. The user will choose a recipe out of the given recipes.
5. Nosh will direct the user through the cooking process with sidebar tools such as a timer and supply list.
6. Once the recipe has been completed, Nosh will display the results page the contains time spend on the recipe, a restatement of the nutritional info, and a segment where the user can rate the recipe.
7. The use case ends successfully.

4. Alternative Flows

4.1 Incomplete Recipe

If in any step, the user decides to back out of the recipe

1. Nosh will not display the results page

5. Key Scenarios

Incomplete recipe

6. Special Requirements

The nutritional information, time, and rating option, should be shown on each results page

7. Preconditions

There is an active internet connection and the website can be reached. Recipes are available in the system.

8. Post-conditions

8.1 Completed recipe

8.2 Incomplete Recipe

9. Example Picture

Use Case: User Recipe Book

1. **Brief Description**

   This use case describes how a use can add their favorite recipes to their own recipe book.

2. **Actors**

   2.1. Nosh
   2.2. User

3. **Preconditions**

   User has access to the website.

   The user has created an account with Nosh before.

4. **Basic Flow of Events**

   1. User arrives at websites
   2. User searches for recipes
   3. User find recipe that he/she like and would like to save
   4. User creates an account or logs in to account already made
   5. User clicks on Save/Add to favorites button
   6. User can then access favorites from their profile when they return to site later

5. **Alternative Flows**

   5.1 User cant log in or create an account

   User is inputting incorrect information or invalid values

   5.2 User is adding a recipe that is already saved

   User has previously added the recipe already

6. **Post-conditions**

   6.1 User can log in

   Error message will be displayed and show what is wrong with their login

6.2 Previously added recipe

User can't add a recipe that has already been added so they will be notified that it is already on their list

7. Example Picture

Use Case Descriptions

User Stories

(1) As a person who is a beginning chef with a limited amount of ingredients, I want a searching mechanism that will allow me to find recipes for the ingredients I have.

Hours: 20 hours
Priority: High

(2) As a beginning user of the website, I want some visual cues or buttons that will teach me how to use the search bar.

Hours: 3 hours
Priority: Medium

(3) As a user, I want a searching function that allows me to exclude ingredients I am allergic to.

Hours: 3 hours
Priority: High

(4) As a contributor, I want to add tags to my recipes so that they will show up in relevant user searches.

Hours: 2 hours
Priority: Low

(5) As a busy person with limited time, I want to find recipes inside a specified time constraint that will help me squeeze cooking into my schedule.

Hours: 2 hours
Priority: Medium

(6) As a picky eater, I want alternative recipes in my searches, that will satisfy my eating habits.

Hours: 6 hours
Priority: Low

(7) As a vegan who likes to cook, I can now find recipes specifically tailored to my needs and dietary constraints.

Hours: 5 hours
Priority: Medium

(8) As a college student who is unsure of what to make with leftover ingredients from a specific previous recipe, I can now get help in making use of those ingredients for a delicious recipe.

Hours: 6 hours
Priority: Low

(9) As an athlete I want a website where I can find meals that are high in protein and great for building muscles to help with my health goals.

Hours: 2 hours

Priority: Medium

(10) As a investor/advertiser I want a website where there is opportunities to incorporate our product within the recipes to increase our revenue.

Hours: 4 hours

Priority: Low

Trello

https://trello.com/b/F9oLkNzX/nosh

Screenshot as of 6:57 pm on February 23, 2018

Group Participation

Jasque Saydyk - Created document and first drafted section 1-5, completing sections 1 and 5, a use case and two user stories - 20%

Maria Granroth - Revision assistance with sections 1 and 5 during team meeting #4, overall document “moderation” and revision suggestions, completed a use case and two user stories - 20%

Matt Rittenback - Handled uniform formatting of the document between different group member’s sections, completed a use case and two user stories - 20%

Jasmine Mitchell - Revision assistance with sections 1 and 5 during team meeting #4, completed Use Case Diagram, a use case, and two user stories. - 20%

Nicholas Reader - Completed a use case and two use stories - 20%