

Figure 7. Home page for the guest user.

3.5.3 Sign up page

In the Sign-up page, the guest user will be able to create a free account by filling out the registration form as shown in Figure 8. The task flow diagram has been shown in Figure 28 and the details have been covered in section 4.3.2. The guest user is required to create an account on RECIPE if he/she wants to use its features.

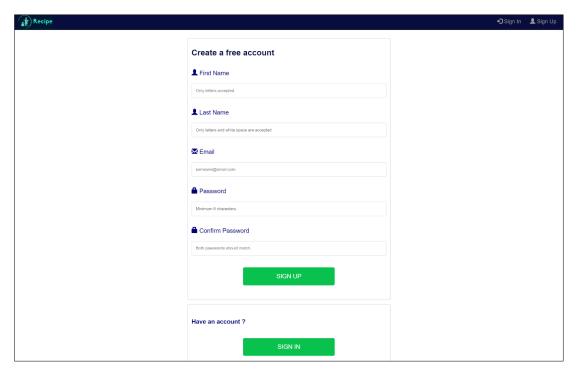


Figure 8. Sign up page for the guest user.

3.5.4 Sign in page

In the sign in page, the user will be able to sign in into the application by entering valid credentials as shown in Figure 9. The task flow diagram has been shown in Figure 29 and the details have been covered in section 4.3.3.

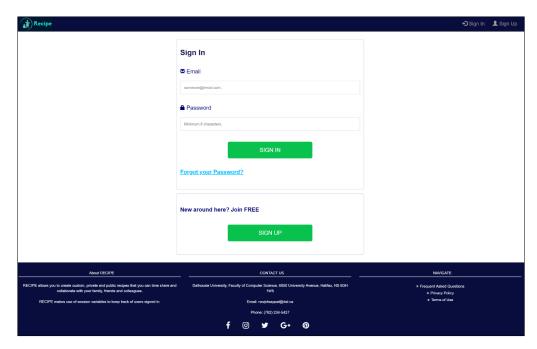


Figure 9. Sign in page for the user.

3.5.5 Forgot password page

In case of forgotten password, the user can reset the password by providing the email that was used in creating the account as shown in Figure 10. The task flow diagram has been shown in Figure 30 and the details have been covered in section 4.3.4.

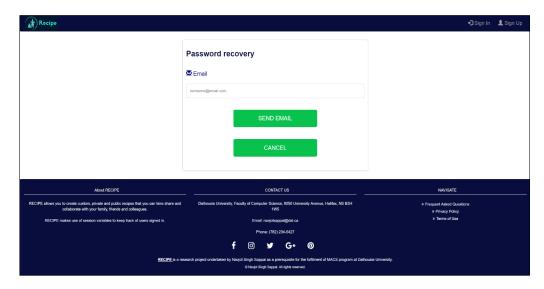


Figure 10. Forgot password page.

3.5.6 Password reset page

Upon clicking on the link that was sent via email, the user will be able to reset the password as shown in Figure 11. The task flow diagram has been shown in Figure 31 and the details have been covered in section 4.3.5.

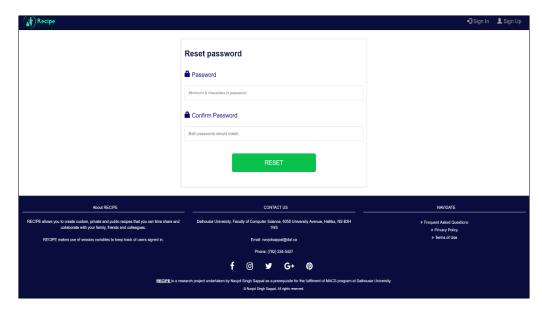


Figure 11. Reset password page.

3.5.7 Update account page

The user will be able to update account details as shown in Figure 12. The task flow diagram has been shown in Figure 32 and the details have been covered in section 4.3.6.

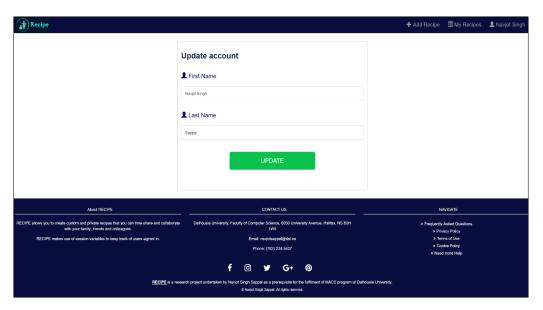


Figure 12. Update account details page.

3.5.8 My recipes page

In 'My Recipe' page, the user will be able to manage his/her recipes for free as shown in Figure 13. The user recipes are organized in the form of categories. The task flow diagram has been shown in Figure 33 and the details have been covered in section 4.3.7. The user can add a new private recipe by clicking on 'Add Recipe' option in the menu. By selecting a category from the drop-down list, the user will be able to view the recipes in that category under 'My Recipes' section. The user will be able to access collaborated recipes under 'Recipes collaborated with you' section. In addition, the user will be shown editor favorite recipes under 'Recipes you may like' section. The user can view the details of recipes in the associated web pages namely 'View Recipe', and 'View Collaborated Recipe'. Furthermore, along each recipe created by the user, the edit and delete options can be clicked to update or delete that recipe in the corresponding web pages. Moreover, across each collaborated recipe, the user can see an update option, clicking which allows him/her to update that recipe in the corresponding web page.

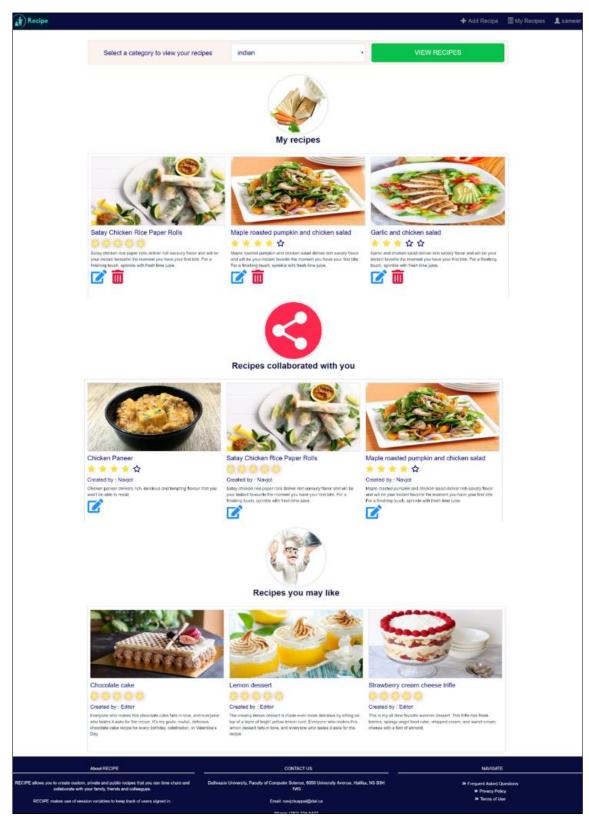


Figure 13. My recipes page.

3.5.9 Add recipe page

The user will be able to create a new private recipe by clicking on 'Add Recipe' option in the menu as shown in Figure 14. The task flow diagram has been shown in Figure 35 and the details have been covered in section 4.3.9. The user can add the following details in the recipe: recipe name, category, preparation time, cook time, number of servings, recipe image, video source, recipe rating, ingredients, directions, description, and comments. To address the issue of absence of videos in existing recipe websites such as [2], and [18], the user will be given an option to add the URL of the YouTube video as a visual aid for preparing the recipe.

To address the issues of the absence of collaborate and timeshare features in existing recipe websites such as [2],[17],[18], and [20], the user is provided with collaborate and timeshare features in the 'Add Recipe' page for free, allowing him/her to collaborate and timeshare recipes with other users or non-users. The user can add the email of the other user with whom he/she wants to collaborate for a recipe. A notification via email will be sent to that user. Similarly, the user can timeshare a recipe with another user or a non-user by specifying the number of days he/she wants to timeshare the recipe with that user. A link via email will be sent to that user, clicking on which allows viewing of the recipe for the specified length of time.

If two users want to work on the same recipe, then it is imperative to incorporate a feature that allows collaboration on a recipe so that both can make changes to the recipe. For example, if two chefs want to work on a same recipe, they can collaborate using this feature. A recipe owner has more rights over a recipe than a user that was collaborated for that recipe. Only recipe owners can delete their recipes. If a user has collaborated for a recipe with another user, the latter can view and update the recipe details for as long as the recipe exists. Moreover, the collaborating user cannot make changes to the collaborating and timesharing features in 'Update Collaborated Recipe' page. In addition, two users cannot simultaneously update the collaborated recipe and only the latest updates are reflected in the recipe.

If the user wants to give only a limited time read-only access of a recipe to other a non-user, then the timesharing feature would be useful as shown in Figure 14. For example, if a chef wants to share a recipe with a friend, the chef can use timeshare feature which allows only the chef's friend to have read-only access to the chef's private recipe for a specific length of time. Unlike collaborated recipe, a user can only timeshare a recipe for a maximum of 365 days.

Users normally spend lot of time grocery-shopping and preparing their food. Moreover, users are so pre-occupied with their work and life that they might even forget that someone has timeshared a recipe with them. To address this issue, RECIPE provides days instead of hours for timesharing a recipe.

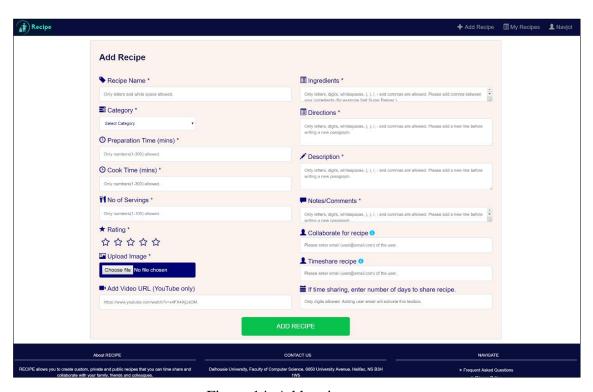


Figure 14. Add recipe page.

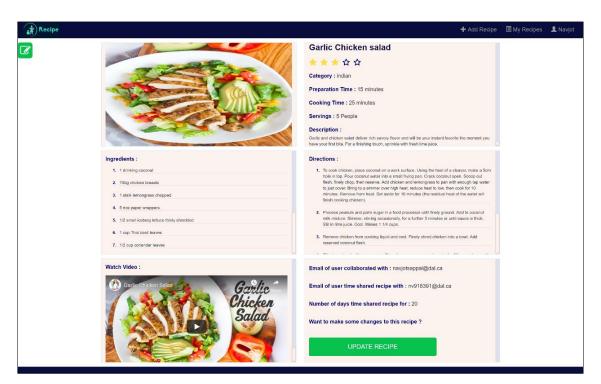


Figure 15. View recipe page.

3.5.10 View recipe page

The user can click on a recipe in 'My Recipes' page to view the details of a recipe in the 'View Recipe' page as shown in Figure 15. The user is also provided with an update option along each recipe in case he/she wants to update that recipe. The task flow diagram has been shown in Figure 34 and the details have been covered in section 4.3.8.

3.5.11 Update recipe page

The user will be able to update a recipe by clicking on the update option along the recipe in 'My Recipes' page. Upon clicking the update option, the user will be redirected to 'Update Recipe' page to update the recipe details as shown in Figure 16. The task flow diagram has been shown in Figure 36 and the details have been covered in section 4.3.10. The user can also update details of collaborate and timeshare features in the 'Update Recipe' page. The user can update the email of the other user with whom he/she wants to collaborate for that recipe. A notification will be sent to that user via email. Similarly, the

user can timeshare a recipe with another user or a non-user by specifying the number of days he/she wants to timeshare the recipe. A link will be sent to that user via email, clicking which would allow viewing of the recipe for a specific length of time.

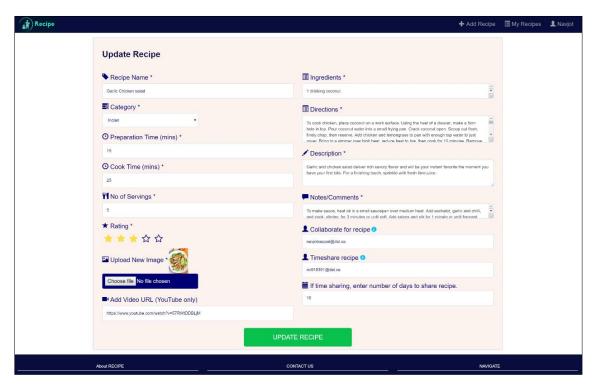


Figure 16. Update recipe page.

3.5.12 Delete recipe page

The user will be able to delete a recipe by clicking on the delete option along the recipe in 'My Recipes' page. Upon clicking the delete option, the user will be redirected to the 'Delete Recipe' page to confirm recipe deletion as shown in Figure 17. If the user had collaborated with another user for this recipe, a notification of recipe deletion will be sent via email to that user. The task flow diagram has been shown in Figure 37 and the details have been covered in section 4.3.11.

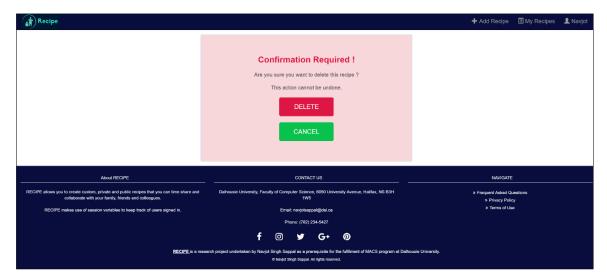


Figure 17. Delete recipe page.

3.5.13 View collaborated recipe

By clicking on a recipe in 'My Recipes' page, the user can view details of the collaborated recipes in 'View Collaborated Recipe' page as shown in Figure 18. The user is also provided with an update option to update the collaborated recipe if necessary. The task flow diagram has been shown in Figure 34 and the details have been covered in section 4.3.8.

3.5.14 Update collaborated recipe page

The user will be able to update collaborated recipes by clicking on update option along the recipe in 'My Recipes' page. Upon clicking update option, the user will be redirected to the 'Update Collaborated Recipe' page to update the recipe details as shown in Figure 19. However, the user will not be able to edit details of the collaborate and timeshare fields marked in color grey because he/she is not the owner of the recipe. In addition, two users cannot simultaneously update the collaborated recipe and only latest the updates will be reflected in the recipe. The task flow diagram has been shown in Figure 36 and details have been covered in section 4.3.10.

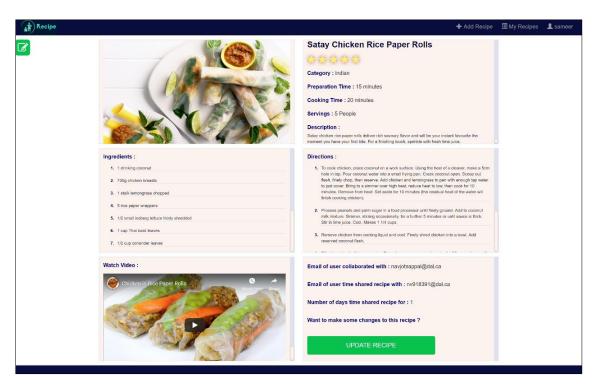


Figure 18. View collaborated recipe page.

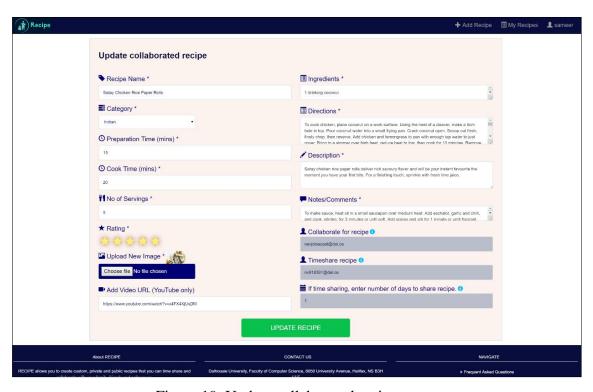


Figure 19. Update collaborated recipe page.

3.5.15 View timeshared recipe page

A non-user or other user with whom a recipe was time shared by a user can click on a link sent by the latter via email to view the recipe details in the 'Timeshare Recipe' page for a specific length of time as shown in Figure 20. Beyond the specified length of time, the non-user or other user will be denied access to that recipe as shown in Figure 21. The task flow diagram has been shown in Figure 38 and the details have been covered in section 4.3.12.

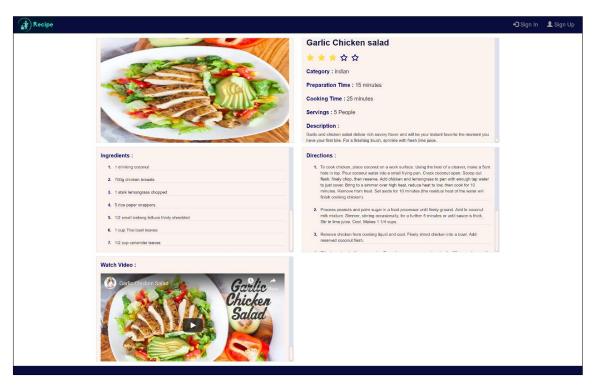


Figure 20. View timeshared recipe page.

3.5.16 Editor favorite page

The user can view the list of the editor's favorite recipes under 'Recipe you may like' section in 'My Recipes' page. Upon clicking on a recipe, the user will be redirected to the 'Editor Favorite' page to access the recipe details as shown in Figure 22. The task flow diagram has been shown in Figure 39 and the details have been covered in section 4.3.13.

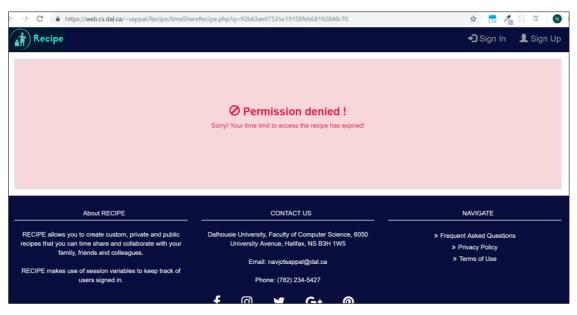


Figure 21. Access to a recipe denied when time limit expires.

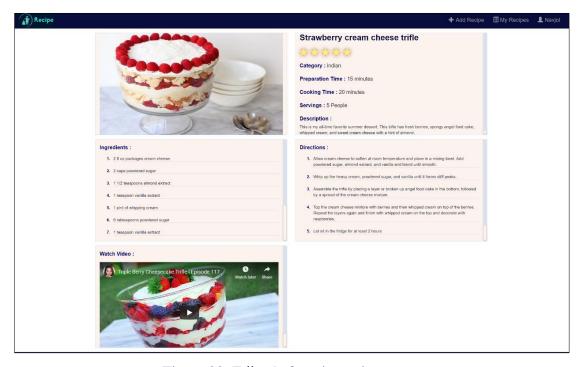


Figure 22. Editor's favorite recipe page.

3.5.17 Frequently asked questions (FAQs) page

FAQs is included in RECIPE to provide better user experience. The user can view

answers to frequently asked questions in the 'FAQs' page as shown in Figure 23. To address the issue of lack of help and documentation in existing recipe websites such as [17], a dedicated FAQs page is openly accessible to users should they need help regarding the use of RECIPE.

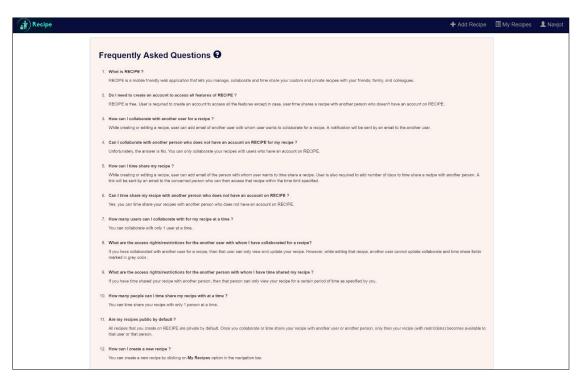


Figure 23. FAQs page.

3.5.18 Privacy policy page

A privacy policy is included in RECIPE to provide better user experience. The user can view the privacy policy in the 'Privacy Policy' page as shown in Figure 24. The privacy policy explains how and what personal information is collected, stored, and used in RECIPE. The privacy policy is provided to assure users that RECIPE is reliable, secure and transparent. Moreover, neither does RECIPE provide user's personal information to third-party services nor use cookies to store personal information.

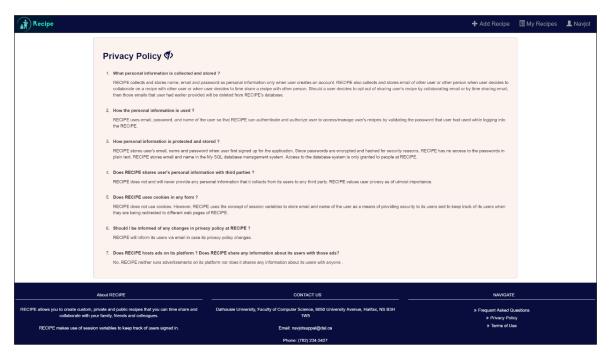


Figure 24. Privacy policy page.

3.5.19 Terms of use page

The terms of use are included in RECIPE to provide better user experience. The user can view the terms in 'Terms' page as shown in Figure 25. The terms are provided in RECIPE so that users can understand the conditions of using the services offered by RECIPE and make informed decisions when collaborating and timesharing their recipes with other users or non-users.

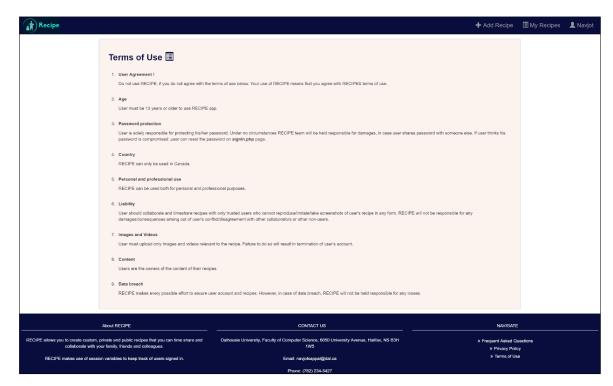


Figure 25. Terms of use page.