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Product Name: Entree

**Product Summary:** Social recipe web app aimed at college students.

Test #	01
Items Under Test	Main Page Class, getMorePosts(), updateNewsFeed()
Test Type	White Box, Black Box
Test Description	The main news feed is able to repopulate after the user creates a new recipe manually on their personal page
Steps to run test	<ol> <li>Create a new recipe in Profile class</li> <li>Add a post object to the main news feed of the user</li> </ol>
Expected Result	The main news feed of the user updates in the GUI

Test #	02
Items Under Test	Personal Page Class
Test Type	White Box, Black Box
Test Description	The user's personal news feed is able to repopulate after the user creates a new recipe manually on their personal page
Steps to run test	<ol> <li>Create a new recipe in Profile class</li> <li>Add a post object to the user's personal feed class</li> </ol>
Expected Result	User's personal feed updates in the GUI

Test #	03
Items Under Test	Main Page Class
Test Type	White Box, Black Box
Test Description	The user's main news feed is able to repopulate after the user reheats a post in the main feed
Steps to run test	User shares a recipe in the main news feed/other user's

	personal page  2. The user's main news feed updates with post object
Expected Result	The user's main feed has their new post at the top

Test #	04
Items Under Test	Personal Page Class
Test Type	White Box, Black Box
Test Description	The user's personal news feed is able to repopulate after the user shares a recipe from the main news feed
Steps to run test	<ol> <li>The user hits the share button on main news feed/other user's personal page</li> <li>Add a post object to the user's personal feed</li> </ol>
Expected Result	The user's personal feed updates properly in the GUI

Test #	05
Items Under Test	Main Page Class
Test Type	White Box, Black Box
Test Description	The user's followers' main news feeds are able to repopulate after the user manually creates a new recipe on their personal page
Steps to run test	The user creates a new recipe in their Profile Class     Add the post object to each follower's main feed
Expected Result	The followers main feed updates in the main feed

Test #	06
Items Under Test	Main Page Class
Test Type	White Box, Black Box
Test Description	The user's followers' main news feeds are able to repopulate after the user shares a new recipe from their main news feed
Steps to run test	The user shares a recipe from the main feed/other user's personal page     Post object is added to every follower's main news feed
Expected Result	The follower's main feed updates in the GUI

Test #	07
Items Under Test	Main Page Class
Test Type	White Box
Test Description	The user's main newsfeed is populated in the correct order (chronologically, most recent is at the top).
Steps to run test	<ol> <li>Refresh page</li> <li>Check if the main newsfeed is in the correct order (based on time of post)</li> </ol>
Expected Result	Main news feed is populated by posts in chronological order

Test #	08
Items Under Test	Main Page Class, updateNewsFeed()
Test Type	Unit Test
Test Description	The updateNewsFeed() method updates the member variable main news feed class, which is a list of posts

Steps to run test	<ol> <li>Call function after a post is shared or created</li> <li>Navigate to main news feed</li> </ol>
Expected Result	Check if member variable updates in the right order

Test #	09
Items Under Test	Personal Page Class, Post Object, List of Posts, getMorePosts()
Test Type	Unit Test
Test Description	When a recipe is created, the recipe object is constructed and placed inside the recipe class (list of posts)
Steps to run test	The user manually creates a recipe     Database is updated with new recipe
Expected Result	Check if the getMorePosts() method is called and properly updates the list of posts in the database

Test #	10
Items Under Test	Personal Page Class, Post Object, List of Posts, getMorePosts()
Test Type	Unit Testing
Test Description	When a recipe is shared, the profile class responds by calling getMorePosts()
Steps to run test	The user shares a recipe from a feed     Personal page object getMorePosts() is invoked
Expected Result	Check if the getMorePosts() method is called and calls updateNewsFeed() in the profile class

Test #	11
Items Under Test	Personal Page Class, addManualRecipe
Test Type	White Box, Black Box
Test Description	When the user input information to create a new recipe, the

	addManualRecipe() function is called and consequently calls the appropriate methods.
Steps to run test	Have a user input recipe information
Expected Result	the addManualRecipe function is called with calls getMorePosts() on the profile and updateNewsFeed() in the main news feed

Test #	12
Items Under Test	Personal Page Class, addManualRecipe
Test Type	White Box, Black Box
Test Description	When the user input information to create a new recipe, the addManualRecipe() function is called and consequently calls the appropriate methods.
Steps to run test	Have a user input recipe information     Click on confirm button after inputting proper text
Expected Result	the addManualRecipe function is called with calls getMorePosts() on the profile and updateNewsFeed() in the main news feed

Test #	13
Items Under Test	Personal Page, Follow Button
Test Type	White Box
Test Description	When you click follow button, the database updates accordingly
Steps to run test	<ol> <li>User clicks a follow button on other user's personal page</li> <li>Check if user is notified that they are now following this person</li> </ol>
Expected Result	The friend graph data structure will be updated with the new one way relationship

Test #	14
Items Under Test	Main Page Class, Personal Page Class
Test Type	Black Box, White Box

Test Description	Navigation to Main NewsFeed
Steps to run test	<ol> <li>User is currently on main news feed or user is currently in their personal page or user is currently viewing the personal page of another user</li> <li>User clicks on the Entree logo at the top of the page</li> <li>The page switches to the main news feed - updateMainPage() is invoked</li> <li>Most updated version of main news feed is displayed</li> </ol>
Expected Result	Click the main logo to return to the user's main news feed.

Test #	15
Items Under Test	Main Page Class, Personal Page Class
Test Type	Black Box, White Box
Test Description	Navigation to Personal Page
Steps to run test	<ol> <li>User is currently on main news feed or user is currently in their personal page or user is currently viewing the personal page of another user</li> <li>User clicks on their name at the top of the page</li> <li>The page switches to the main news feed - updatePersonalPage() is invoked</li> <li>Most updated version of the user's personal page feed is displayed</li> </ol>
Expected Result	Click the user's name to return to the user's personal page.

Test #	16
Items Under Test	Grocery List Class, Personal Page Class, updateNewsFeed()
Test Type	White Box, Black Box
Test Description	When personal page is updated, items currently in the grocery list persist
Steps to run test	Call refreshPersonalPage() and check if grocery list remains unchanged     Search something from the personal page and check if

	grocery list remains unchanged 3. Add a recipe post to the to the personal page and check if the grocery list remains unchanged 4. Navigate to the main page and navigate back to the personal page and see if the grocery list is unchanged
Expected Result	When running operations on the personal page, nothing is added or removed from the grocery list

Test #	17
Items Under Test	Grocery List Class, addGroceryItem(GroceryItem), updateGroceryFeed()
Test Type	White Box, Black Box
Test Description	When an item is manually added to the grocery list, the grocery list updates to include the title and description of the item added - GUI is updated as soon as user confirms information in text field
Steps to run test	<ol> <li>Click "add to grocery list"</li> <li>Add text to resulting text field and click confirm</li> <li>Check to see if the new ingredient is now visible in the Grocery List</li> <li>Check to see if the new ingredient is included in the grocery list items vector</li> </ol>
Expected Result	Individual item is added to the grocery list

Test #	18
Items Under Test	Grocery List Class, addGroceryItem(GroceryItem), addRecipeToList(), updateGroceryFeed()
Test Type	White Box, Black Box
Test Description	When the "add to grocery list" button is clicked from a recipe post on the user's personal page, the ingredients associated with that recipe are automatically added to the grocery list - GUI is updated as soon as user confirms information in text field

Steps to run test	<ol> <li>Choose a post on the personal recipe feed</li> <li>Click "add to grocery list"</li> <li>Check to see if all the ingredients associated with that specific post are added to the grocery list</li> <li>Check to see if all new ingredients are included in the grocery list items vector</li> </ol>
Expected Result	Multiple items are added to the grocery list

Test #	19
Items Under Test	Grocery List Class, addGroceryItem(GroceryItem), addRecipeToList(), updateGroceryFeed()
Test Type	White Box, Black Box
Test Description	If the user attempts to populate the grocery list with a grocery list item that already exists, that item should not be added to the grocery list
Steps to run test	<ol> <li>Manually add something to the grocery list that is identical to a grocery list item that already exists in the grocery list</li> <li>Check to see that the item is not added to the grocery list</li> <li>Click "add to grocery list" on a post in the personal feed that has at least 1 ingredient already present in the grocery list</li> <li>Check to see that the specific item is posted on the grocery list</li> </ol>
Expected Result	No repetitions occur in the grocery list

Test #	20
Items Under Test	Grocery List Class, addGroceryItem(GroceryItem), addRecipeToList(), updateGroceryFeed()
Test Type	White Box, Black Box
Test Description	A recipe post that has already been added to the grocery list should have the "add to grocery list" button disabled

Steps to run test	<ol> <li>Click the "add to grocery list" button on a post in the personal page</li> <li>Check to make sure the grocery list is populated accordingly</li> <li>Click the "add to grocery list" button on the same post in the personal page</li> <li>Check to make sure that no changes occur in the grocery list</li> </ol>
Expected Result	When the "add to grocery list" button is clicked in on a post that has already been added to the grocery list, the grocery list should not update

Test #	21
Items Under Test	Grocery List Class, removeGroceryItem(GroceryItem), updateGroceryFeed()
Test Type	White Box, Black Box
Test Description	When the user "removes" an individual grocery list item, that item no longer appears in the GUI and is deleted from the GroceryList vector.
Steps to run test	<ol> <li>Make sure the grocery list is populated with at least one grocery list item</li> <li>Choose an ingredient to remove</li> <li>Click "remove" on that grocery list item</li> <li>Check if that item has been removed from the GUI and the vector of grocery list items</li> </ol>
Expected Result	Individual item is removed from the grocery list

Test #	22
Items Under Test	Grocery List Class, doneShopping(), updateGroceryFeed()
Test Type	White Box, Black Box
Test Description	When the user clicks the "Done Shopping" button, all items are removed from GUI and the GroceryList vector has a size of 0.

Steps to run test	<ol> <li>Populate the grocery list with at least one item</li> <li>Click "done shopping"</li> <li>Check to see that all items are removed from the grocery list GUI and the grocery list item vector</li> </ol>
Expected Result	All items that were previously in the grocery list are now removed from the grocery list

Test #	23
Items Under Test	Grocery List Class, Personal Page Class
Test Type	White Box, Black Box
Test Description	When the user views their own personal page, they are able to see their current grocery list but when the user views another user's personal page, they are not able to see that user's grocery list
Steps to run test	<ol> <li>Navigate to personal page</li> <li>Ensure that grocery list is visible</li> <li>Search for another user on the service</li> <li>Click on the user after search results are populated</li> <li>Ensure that the searched user's grocery list is not visible when viewing their personal page</li> </ol>
Expected Result	See Test Description

Test #	24
Items Under Test	Search Bar Class on main page, Main Class News Page
Test Type	White Box
Test Description	User searches food on the main screen and the results populate in the list of Objects Class
Steps to run test	Search a food on the main page
Expected Result	Check if the list of post objects on the Main Class News Page updates with the appropriate objects

Test #	25
Items Under Test	Search Bar Class on Main Page, Main News Page GUI
Test Type	Black Box
Test Description	User searches food on the main screen and the results are shown in the main news page
Steps to run test	Search a food on the main page
Expected Result	Check if the gui updates with the appropriate search results

Test #	26
Items Under Test	Search Bar Class on Personal Page, Personal Page Class
Test Type	White Box
Test Description	User searches food on the personal page and the results are shown in the personal page
Steps to run test	Search a food on the personal page
Expected Result	Check if the list of objects in the personal page class update with appropriate results

Test #	27
Items Under Test	Search Bar Class on Personal Page, Personal Page Class
Test Type	Black Box
Test Description	User searches food on the personal page and the results are shown in the personal page
Steps to run test	Search a food on the personal page
Expected Result	Check if personal page GUI properly matches the list of post objects recently updated

Test #	28
Items Under Test	Search Bar Class on Personal Page, Personal Page Class
Test Type	White Box
Test Description	User searches person on the page with "@" and the appropriate usernames are filled in the dropdown object during live search
Steps to run test	Search a person's username and check result character by character
Expected Result	All matches are updating in the dropdown's object list of users while searching

Test #	29
Items Under Test	Search Bar Class on Personal Page, Personal Page Class
Test Type	Blox Box
Test Description	User searches person on the page with "@" and the appropriate usernames are filled in the dropdown GUI during live search
Steps to run test	Search a person's username and check result character by character
Expected Result	All matches are updating in the GUI while searching

Test #	30
Items Under Test	Posts Class, getters
Test Type	Black Box, Unit Test
Test Description	Timestamp, name, picture, username, instructions, number of reheats, and ingredients are correctly displayed
Steps to run test	Create a new post     Check that the post is constructed with the proper member variables
Expected Result	The timestamp should be the time that the user submitted the

recipe and the username should be the current user's username.
Everything else should be filled out by the user

Test #	31
Items Under Test	Posts Class
Test Type	White Box
Test Description	The submit button must check if all forms are completed when creating a new post
Steps to run test	Create a new post and leave certain forms blank     Press submit
Expected Result	The form should not go through, and there should be some type of notification or alert

Test #	32
Items Under Test	Posts Class
Test Type	White Box
Test Description	New posts and shared posts are added to the proper recipe list
Steps to run test	<ol> <li>Create a new recipe</li> <li>Iterate through the lists and see if the new recipes are added (print it out)</li> </ol>
Expected Result	Posts should be added to the lists

Test #	33
Items Under Test	Posts
Test Type	Black Box
Test Description	Posts are formatted properly and all buttons function properly - Featured posts, User post, and Follower posts are all different

Steps to run test	Check that all the posts have their proper layouts
Expected Result	Featured posts, user posts, and follower posts should have different layouts

Test #	34
Items Under Test	Posts, Search Map
Test Type	White Box
Test Description	Search Map is properly populated when posts are created (and not when they are reheated)
Steps to run test	<ol> <li>Create a new post</li> <li>Check if the post is placed in the search map by iterating through the map or using the contains() function</li> </ol>
Expected Result	The contains function should return a 1 for the object placed in the map

Test #	35
Items Under Test	Posts, reheat()
Test Type	White Box
Test Description	Reheating from the newsfeed repopulates the news feed properly
Steps to run test	Reheat a post from the newsfeed     Check if post populates the feed for other users
Expected Result	When a post is reheated, the other users' newsfeeds will automatically update

Test #	36
Items Under Test	Posts, reheat()
Test Type	White Box
Test Description	Reheat from other profiles populates the news feed properly

Steps to run test	<ol> <li>Reheat a post from another profile</li> <li>Check if post populates the feed for other users</li> </ol>
Expected Result	When a post is reheated, the other users' newsfeeds will automatically update

Test #	37
Items Under Test	Login Database
Test Type	White Box
Test Description	Test login functionality by specifying a username that doesn't exist and and password that doesn't exist. Once the user presses the "login" button, a message box should appear that says "Invalid login". After the message box is exited, the user should still be on the login page.
Steps to run test	<ol> <li>Enter a username that doesn't exist in the username text field</li> <li>Enter a password that doesn't exist in the password text field</li> <li>Press login</li> </ol>
Expected Result	A message box should appear that says "Invalid login". After exiting the message box, the user is still on the login page.

Test #	38
Items Under Test	Login Database
Test Type	White Box
Test Description	Test login functionality by specifying a username that doesn't exist and and password that does exist. Once the user presses the "login" button, a message box should appear that says "Invalid login". After the message box is exited, the user should still be on the login page.
Steps to run test	<ol> <li>Enter a username that doesn't exist in the username text field</li> <li>Enter a password that exists in the password text field</li> </ol>

	3. Press login
Expected Result	A message box should appear that says "Invalid login". After exiting the message box, the user is still on the login page.

Test #	39
Items Under Test	Login Database
Test Type	White Box
Test Description	Test login functionality by specifying a username that does exist and and password that doesn't match. Once the user presses the "login" button, a message box should appear that says "Invalid login". After the message box is exited, the user should still be on the login page.
Steps to run test	Enter a username that exists in the username text field     Enter a password that doesn't match in the password text field     Press login
Expected Result	A message box should appear that says "Invalid login". After exiting the message box, the user is still on the login page.

Test #	40
Items Under Test	Login Database
Test Type	White Box
Test Description	Test login functionality by specifying a username that does exist and and password that matches Once the user presses the "login" button, the user should be taken to their main news feed
Steps to run test	<ol> <li>Enter a username that doesn't exist in the username text field</li> <li>Enter a password that exists in the password text field</li> <li>Press login</li> </ol>
Expected Result	The user is taken to their main news feed

Test #	41
Items Under Test	Guest Login Functionality
Test Type	Black Box
Test Description	Test guest functionality by pressing "guest" on login page. Guest User should
Steps to run test	Press "Guest" button on login page.
Expected Result	The user is taken to their main news feed

Test #	42
Items Under Test	Guest Capability
Test Type	Black Box
Test Description	Guest should lack the capability to follow people, add recipes, create recipes, go to main page, and go to personal page.  Basically they should only be able to view the featured news feed.
Steps to run test	Log in as guest.     Check that expected result is consistent.
Expected Result	Guest can only view featured news feed and cannot follow people, add recipes, create recipes, go to main page, or go to personal page.

Test #	43
Items Under Test	GUI
Test Type	Black Box
Test Description	Test the browser compatibility of HTML/CSS elements and formatting
Steps to run test	Open the web page on multiple browsers on different devices

	<ul><li>a. Mac, PC, mobile</li><li>b. Google Chrome, Safari, Internet Explorer, Firefox</li></ul>
Expected Result	Properly using CSS to format would mean that the general format of the web pages is the same across multiple platforms.

Test #	44
Items Under Test	Featured Recipe Class
Test Type	White Box, Black Box
Test Description	Every 24 hours the featured recipe object's list of post objects updates with new recipes
Steps to run test	<ol> <li>Check if every 24 hours, the appropriate object updates with a fresh new list</li> <li>Make sure all the new recipes are different from the previous ones</li> <li>Make sure GUI updates</li> </ol>
Expected Result	The featured recipes update on time and with a fresh new list