

Reminder Class

Reminders feature allows the user to set a reminder using time and date features when selecting ingredients to add for purchase. The user would use the reminder feature to create a list of ingredients and plan for when to purchase or prepare ingredients to use in recipes for meal preparation.

Unit Testing - Test Case for Reminder Feature

Test Case Description	The users should be able to set a reminder using time and date features and add ingredients needed to purchase.				
Test Scenario	Checking that after entering, the reminder is set at the correct time and day with ingredients needed for purchase.				
Test Case ID	Test Steps	Test Input	Expected Results	Actual Results	Status
1	1. Enter valid date (mm/dd/yyyy)	Date:10/30/2023	Reminder: 10/30/2023 at 05:03 PM	Reminder: 10/30/2023 at 05:03 PM	Valid
	2. Enter Time (hh:mm)	Time: 05:30			
	3. Select Am or PM	PM			
2	1. Enter past date (mm/dd/yyyy)	Date:10/23/2022	System should display an error message indicating that a reminder cannot be set for a past date and time.	[Error Message]: "Cannot set a reminder for a past date and time."	Valid
	2. Enter Time (hh:mm)	Time: 03:45			
	3. Select Am or PM	PM			
3	1. Enter future date (mm/dd/yyyy)	Date:11/25/2023	Reminder: 11/25/2023 at 08:15 AM	Reminder: 11/25/2023 at 08:15 AM	Valid
	2. Enter Time (hh:mm)	Time: 08:15			
	3. Select Am or PM	PM			

4	1. Enter invalid date (dd/mm/yyyy)	Date: 25-10-2023	System should display an error message indicating that a reminder cannot be set for a past date and time.	[Error Message]: "Cannot set a reminder for a past date and time."	Valid
	2. Enter Time (hh:mm)	Time: 12:30			
	3. Select Am or PM				
5	1. Enter valid date (mm/dd/yyyy)	Date: 10/26/2023			
	2. Enter an invalid time (99:99 AM).	Time: 99:99 AM	System should display an error message indicating that the time format is incorrect.	[Error Message]: "Invalid time format. Please use hh:mm AM/PM."	Valid
	3. Select Am or PM				

Test Set: Ingredient Selection in Reminder Feature

Test Case Description	The users should be able to select ingredients within the Reminder feature. This set of test cases ensures that the system handles ingredient selection correctly. These test cases ensure the user has full functionality in the Reminder feature, like adding, editing, or removing ingredients.				
Test Scenario	Checking that after selecting the ingredient, the reminder has the full ingredient list as well as the correct date and time.				
Test Case ID	Test Steps	Test Input	Expected Results	Actual Results	Status
1	1. Create a new reminder	Reminder Date: 10/27/2023	Reminder displays: 10/27/2023 at 03:00 PM.	Reminder displays: 10/27/2023 at 03:00 PM.	Valid
	2. Select the "Add Ingredient" option.	Time: 03:00 PM			

	3. Search for an ingredient	Ingredient: Tomatoes			
	4. Add the ingredient to the reminder		Ingredient List: Tomatoes	Ingredient List: Tomatoes	
2	1. Create a new reminder	Date:10/23/2022	System should display an error message indicating that a reminder cannot be set for a past date and time.	[Error Message]: "Cannot set a reminder for a past date and time."	Valid
	2. Select the "Add Ingredient" option.	Time: 03:45			
	3. Attempt to add an ingredient with an invalid name (e.g., "Invalid!@#").	Invalid Ingredient: Invalid!@#			
	4. Verify if the system rejects the invalid ingredient.		System should display an error message indicating that the ingredient name is invalid and should not add the ingredient to the list.	[Error Message]: "Invalid ingredient name."	
3	1. Create a new reminder	Date:11/25/2023 at 08:15 AM	Reminder: 11/25/2023 at 08:15 AM	Reminder: 11/25/2023 at 08:15 AM	Valid
	2. Select the "Add Ingredient" option.				
	3. Search for an ingredient (e.g., "Onions")		Initial Ingredient: Onions		

	4. Add the ingredient to the reminder.				
	5. Edit the ingredient name to "Green Onions."		Edited Ingredient: Red Onions	Ingredient List: Red Onions	
4	1. Create a new reminder	Date:11/25/2023 at 08:15 AM	Reminder: 11/25/2023 at 08:15 AM	Reminder: 11/25/2023 at 08:15 AM	Valid
	2. Select the "Add Ingredient" option.		Ingredient List: Carrots		
	3. Search for an ingredient (e.g., "Squash")				
	4. Add the ingredient to the reminder.				
	5. Delete the added ingredient from the reminder			Ingredient List is empty (no ingredients).	

Functional Testing:

Case 1: Creating a Reminder

- Test the end-to-end process of creating a reminder with a specific date, time, and a list of ingredients.
- Verify that the reminder is successfully created and saved.

Case 2: Editing a Reminder

- Create a reminder.
- Test the ability to edit the reminder's date, time, and ingredients.
- Verify that the edited information is saved correctly.

Case 3: Deleting a Reminder

- Create a reminder.
- Test the ability to delete a reminder.
- Verify that the reminder is removed from the system.

Case 4: Ingredient List Management

- Create a reminder with a list of ingredients.
- Test the ability to add, edit, and delete ingredients from the list.
- Verify that the ingredient list is correctly updated.

System Testing:

Time (hour) - accepts values between 1 - 12

Time (minutes) - accepts values between 0 - 60

Date (mm/dd/yy) -

Ingredient- accepts a string for the ingredient needed for

System Testing - Equivalence classes for the input data

Test Case	Valid	Invalid	Empty
Time - Hour	$\geq 1 \ \& \ \leq 12$	$< 1 \ \& \ > 12$	“ ”
Time - Minutes	$\geq 0 \ \& \ \leq 60$	$< 0 \ \& \ > 60$	“ ”
Date - Month	$\geq 1 \ \& \ \leq 12$	$< 1 \ \& \ > 12$	“ ”
Date - Day	$\geq 1 \ \& \ \leq 31$	$< 1 \ \& \ > 31$	“ ”
Date - Year	\geq current year & \leq 2100	$<$ current year & $>$ 2100	“ ”
Ingredient	String of valid ingredient	!@#\$	“ ”

Blackbox Test Case for Reminder

Takes int input from the user for setting a reminder					
TC ID	Test Name	Test Condition	Test Steps	Test Input	Expected Result
1	Time - Hour	Takes integer input from the user for setting a reminder	1. Input int $>$ 00:00	05:00	Reminder Set for 5:00
2	Time - Hour	Takes integer input from the user for setting a reminder	1. Input int $<$ 01:00	00:00	Invalid
3	Time - Minute	Takes integer input from the user for setting a reminder	1. input int $>$ 00:00	00:30	Reminder set
4	Time - Minute	Takes integer input from the user for setting a reminder	1. input int $<$ 00:00	- 00:00	Invalid
5	Ingredient	Accepts a string input from the user for the ingredient needed for the reminder	1. input a valid string: "Pasta"	Pasta	Ingredient added to the reminder

Takes int input from the user for setting a reminder

TC ID	Test Name	Test Condition	Test Steps	Test Input	Expected Result
6	Ingredient	Accepts a string input from the user for the ingredient needed for the reminder	1. Attempt to input an invalid ingredient name	Oranges!	Invalid