

EXPENSE SPLITTER

IIHT

Time To Complete: 10 to 12 hr

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1 PROJECT ABSTRACT

In the dynamic realm of personal finance management, there's an increasing need for digital tools that simplify expense tracking and sharing among friends, family, or colleagues. The CEO of a startup specializing in financial solutions, Mr. X, tasks a team of developers with crafting an Expense Splitter Application using Angular.

Your Task is to develop a digital solution that empowers users to effortlessly record expenses, allocate costs among participants, and track settlements, fostering transparent and efficient expense management.

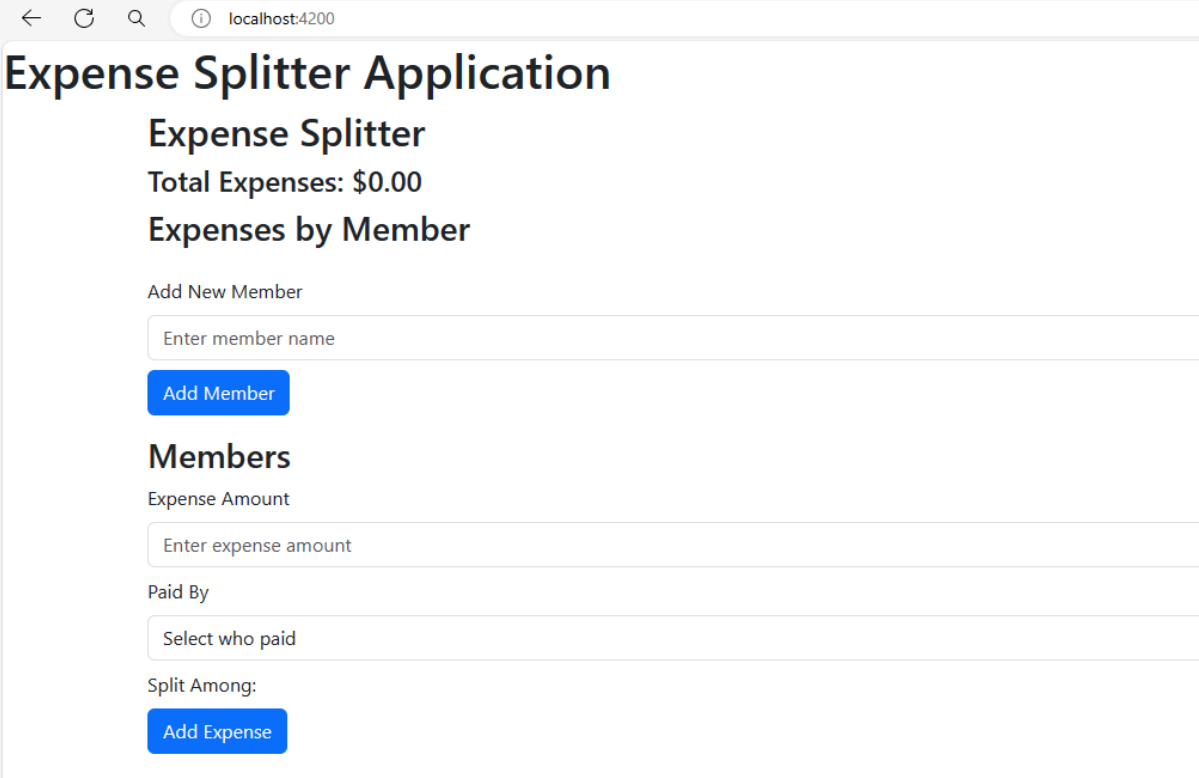
2 PROBLEM STATEMENT

"Expense Splitter" is a Single Page Application (SPA) that empowers users with an interactive interface that enables them to record expenses, add participants, define payment shares, and monitor settlement statuses.

3 PROPOSED EXPENSE SPLITTER APPLICATION WIREFRAME

UI needs improvisation and modification as per given use case and to make test cases passed.

3.1 WELCOME PAGE



A wireframe of a web application titled "Expense Splitter Application". The browser address bar shows "localhost:4200". The application has a main heading "Expense Splitter" followed by "Total Expenses: \$0.00" and "Expenses by Member". Below this is a section "Add New Member" with a text input field "Enter member name" and a blue "Add Member" button. The next section is "Members" with three input fields: "Expense Amount" (with placeholder "Enter expense amount"), "Paid By" (with placeholder "Select who paid"), and "Split Among:" (with a blue "Add Expense" button).

Expense Splitter Application

Expense Splitter

Total Expenses: \$0.00

Expenses by Member

Add New Member

Enter member name

Add Member

Members

Expense Amount

Enter expense amount

Paid By

Select who paid

Split Among:

Add Expense

3.2 SCREENSHOTS

*** Add Members & Expense Amount***

The screenshot shows a web browser at localhost:4200 displaying the 'Expense Splitter Application'. The page has a title 'Expense Splitter' and a subtitle 'Total Expenses: \$0.00'. Below this is a section titled 'Expenses by Member' with a table listing four members: John, Felix, Rio, and Smith, each with an expense of \$0.00. Underneath the table is a form to 'Add New Member' with a text input field labeled 'Enter member name' and a blue 'Add Member' button. Below the form is a section titled 'Members' with a table listing the same four members: John, Felix, Rio, and Smith. At the bottom of the page is a form for 'Expense Amount' with a text input field containing the value '100'.

Member	Expense
John	\$0.00
Felix	\$0.00
Rio	\$0.00
Smith	\$0.00

Add New Member

Enter member name

Add Member

Members

Member
John
Felix
Rio
Smith

Expense Amount

100

*** Paid By***

The screenshot shows the same web browser at localhost:4200, but with the 'Paid By' dropdown menu open. The dropdown menu is located below the 'Expense Amount' form and contains a list of members: John, Felix, Rio, and Smith. The 'John' option is currently selected and highlighted. The dropdown menu is titled 'Select who paid'.

Enter member name

Add Member

Members

Member
John
Felix
Rio
Smith

Expense Amount

100

Paid By

John

Select who paid

John

Felix

Rio

Smith

*** Split Among***

Q

localhost:4200

Add New Member

Enter member name

Add Member

Members

John

Felix

Rio

Smith

Expense Amount

100

Paid By

John

Split Among:

☒ John

☒ Felix

☒ Rio

☒ Smith

Add Expense

*** After Clicking Add Expense***

← ↻ 🔍 localhost:4200

🔍 A ☆

Expense Splitter Application

Expense Splitter

Total Expenses: \$100.00

Expenses by Member

John: \$100.00
Felix: \$0.00
Rio: \$0.00
Smith: \$0.00

Add New Member

Add Member

Members

John
Felix
Rio
Smith

🔍 localhost:4200

John
Felix
Rio
Smith

Expense Amount

Paid By

Split Among:

☒ John

☒ Felix

☒ Rio

☒ Smith

Add Expense

Settlements

Felix owes John: 25.00
Rio owes John: 25.00
Smith owes John: 25.00

4 BUSINESS-REQUIREMENT:

As an application developer, develop the Expense Splitter (Single Page App) with below guidelines:

User Story #	User Story Name	User Story
US_01	Welcome Page	<p>As a user I should be able to visit the welcome page as the default page.</p> <p>Acceptance criteria:</p> <ol style="list-style-type: none">1. Should have "Expense Splitter Application" as heading in h1.2. Should have "Expense Splitter" as heading in h2 and "Expenses by Member", "Members", "Settlements" as heading in h3 and "Total Expenses: " as heading in h4.3. Users should be able to add members using the "Add Member" button.4. Users should be able to specify the expense amount, who paid (selected from a dropdown), and which members the expense should be split among (with checkboxes) as showcased in screenshots.5. Users should be able to see the total expenses and settlements after clicking the "Add Expense" button, indicating who needs to pay whom and how much.

5 CONSTRAINTS

1. You should be able to press the "TAB" key and "SHIFT + TAB" to navigate from top field to bottom field and vice-versa.

6 MANDATORY ASSESSMENT GUIDELINES

1. All actions like build, compile, running application, running test cases will be through Command Terminal.
2. To open the command terminal the test takers, need to go to Application menu (Three horizontal lines at left top) -> Terminal -> New Terminal.
3. This editor Auto Saves the code.
4. These are time bound assessments the timer would stop if you logout and while logging in back using the same credentials the timer would resume from the same time it was stopped from the previous logout.
5. This is a web-based application, to run the application on a browser, use the internal browser in the workspace. Click on the second last option on the left panel of IDE, you can find Browser Preview, where you can launch the application.

Note: The application will not run in the local browser

6. You can follow series of command to setup Angular environment once you are in your project-name folder:
 - a. npm install -> Will install all dependencies -> takes 10 to 15 min.
 - b. npm run start -> To compile and deploy the project in browser. You can press the <Ctrl> key while clicking on localhost:4200 to open the project in the browser -> takes 2 to 3 min.
 - c. npm run test -> to run all test cases. **It is mandatory to run this command before submission of workspace -> takes 5 to 6 min.**
7. Once you are done with development and ready with submission, you may navigate to the previous tab and submit the workspace. It is mandatory to click on **"Submit Assessment"** after you are done with code.