Expno: 10 Expense tracker

Date: 06.05.2025

Aim:

To develop a user-friendly expense tracker web application that enables users to efficiently record, categorize, and analyze their expenses, promoting better financial management and budgeting.

Problem statement:

Individuals often struggle to manage their finances due to a lack of visibility and control over their daily expenses. Many existing solutions are either too complex, lack customization, or do not provide actionable insights. There is a need for a simple, intuitive, and secure web-based expense tracker that enables users to record, categorize, and analyze their income and expenditures in real-time, helping them make informed financial decisions and maintain better budgeting habits.

Objectives:

Allow users to easily record and categorize expenses.

Provide visual insights into spending habits.

Enable budget setting and alerts.

Ensure secure and private data handling.

Offer a mobile-friendly, user-friendly interface.

Support custom categories and recurring entries.

Help users track financial goals and past trends.

Algorithm:

1. **Login:** Authenticate user and start session.
2. **Add Transaction:** User inputs amount, type, category, and date → Save to database.
3. **Edit/Delete Transaction:** Fetch by ID → Update or remove.
4. **View Summary:** Retrieve transactions → Calculate income, expenses, and balance.
5. **Generate Reports:** Group data → Show charts and insights.
6. **Set Budget:** User sets budget → Compare with expenses → Alert if exceeded.
7. **Logout:** End session securely.

Program:

HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial
scale=1.0">
<title>Expense Tracker</title>
<link rel="stylesheet" href="styles.css">
</head>
<body>
<div class="container">
<h1>Expense Tracker</h1>
<form id="expenseForm">
<input type="text" id="description" placeholder="Expense
Description" required>
<input type="number" id="amount" placeholder="Amount"
required>
<button type="submit">Add Expense</button>
</form>
<h2>Expenses</h2>
<ul id="expenseList"></ul>
<h3>Total: <span id="totalAmount">0</span></h3>
</div>
```

```
<script src="script.js"></script>
</body>
</html>
```

CSS:

```
body {
font-family: Arial, sans-serif;
background-color: #f0f0f0;
display: flex;
justify-content: center;
align-items: center;
height: 100vh;
margin: 0;
}
.container {
background-color: white;
padding: 20px;
border-radius: 8px;
box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
width: 300px;
}
form {
display: flex;
flex-direction: column;
}
input {
```

```
padding: 10px;
margin: 5px 0;
border: 1px solid #ccc;
border-radius: 4px;
}
button {
padding: 10px;
border: none;
border-radius: 4px;
background-color: #007BFF;
color: white;
cursor: pointer;
}
button:hover {
background-color: #0056b3;
}
ul {
list-style-type: none;
padding: 0;
}
li {
display: flex;
justify-content: space-between;
padding: 10px;
border-bottom: 1px solid #ccc;
```

```
}
li button {
background-color: #dc3545;
border: none;
color: white;
cursor: pointer;
}
li button:hover {
background-color: #c82333;
}
body {
font-family: Arial, sans-serif;
background-image:
url('https://www.baltana.com/files/wallpapers-26/4K-Minimalist
HD-Background-Wallpaper-82740.jpg');
background-size: cover;
background-position: center;
display: flex;
justify-content: center;
align-items: center;
height: 100vh;
margin: 0;
}
.container {
background-color: rgba(255, 255, 255, 0.8);
```

```
padding: 20px;
border-radius: 8px;
box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
width: 300px;
}
form {
display: flex;
flex-direction: column;
}
input {
padding: 10px;
margin: 5px 0;
border: 1px solid #ccc;
border-radius: 4px;
}
button {
padding: 10px;
border: none;
border-radius: 4px;
background-color: #007BFF;
color: white;
cursor: pointer;
}
button:hover {
background-color: #0056b3;
```

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}
ul {
list-style-type: none;
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li button {
background-color: #dc3545;
border: none;
color: white;
cursor: pointer;
}
li button:hover {
background-color: #c82333;
}
```

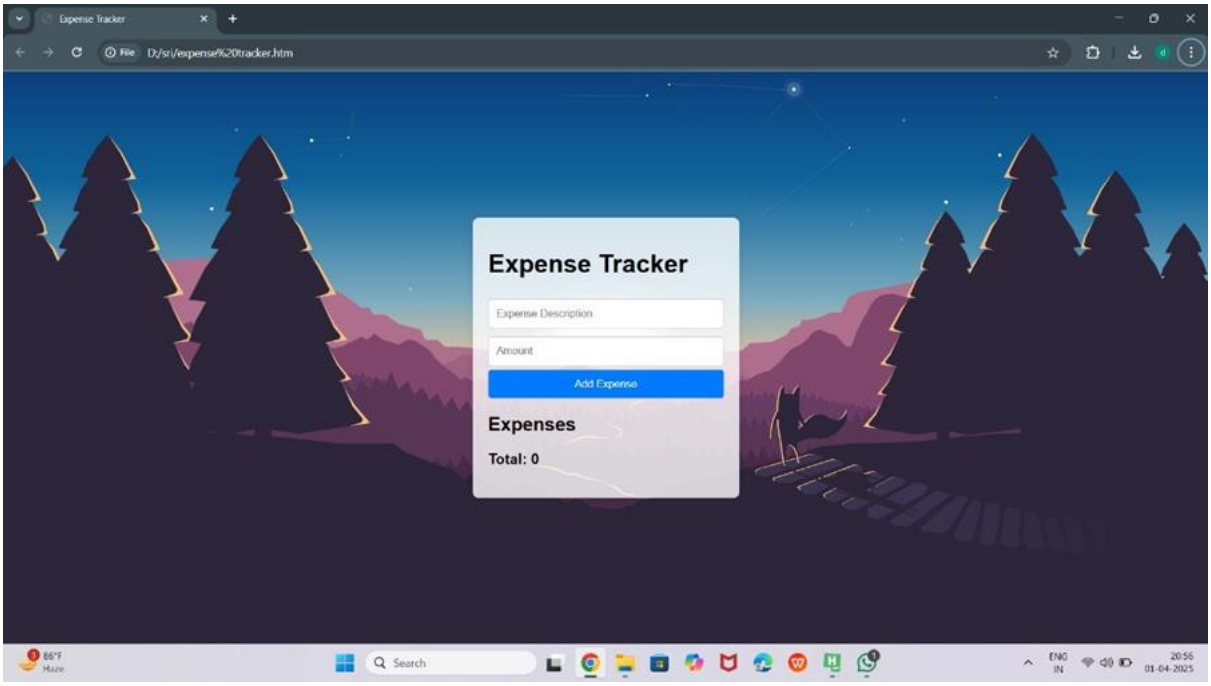
Javascript:

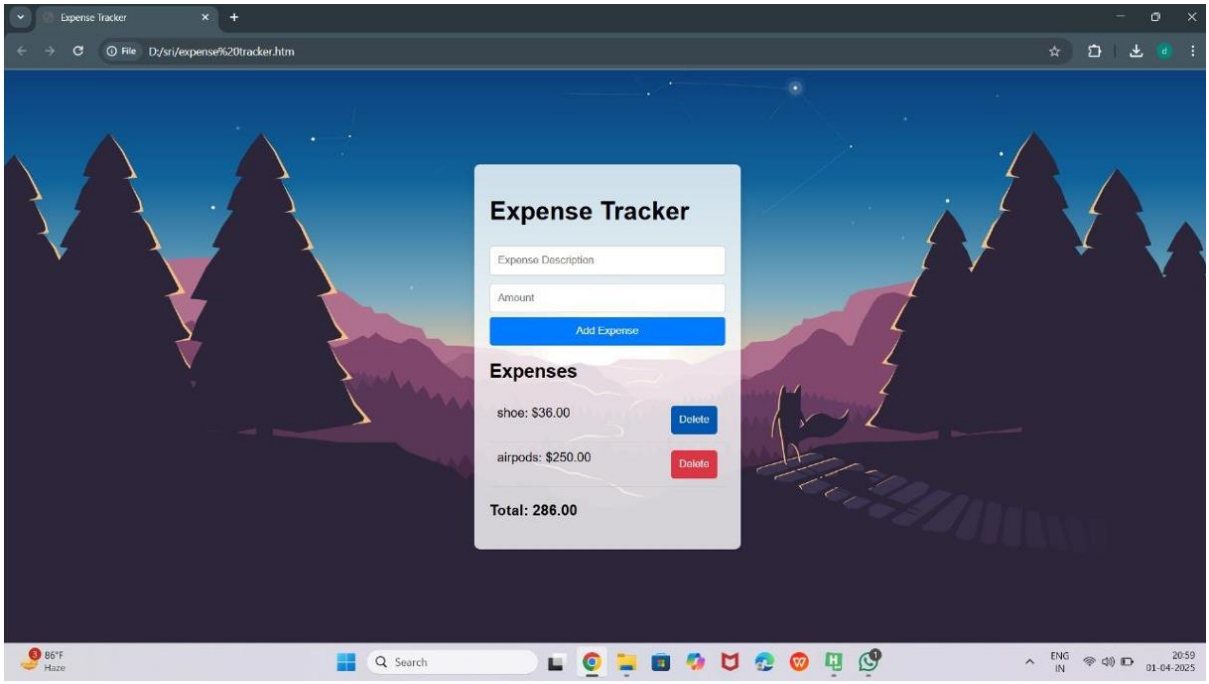
```
const expenseForm = document.getElementById('expenseForm');
const expenseList = document.getElementById('expenseList');
const totalAmount = document.getElementById('totalAmount');
let expenses = [];
```

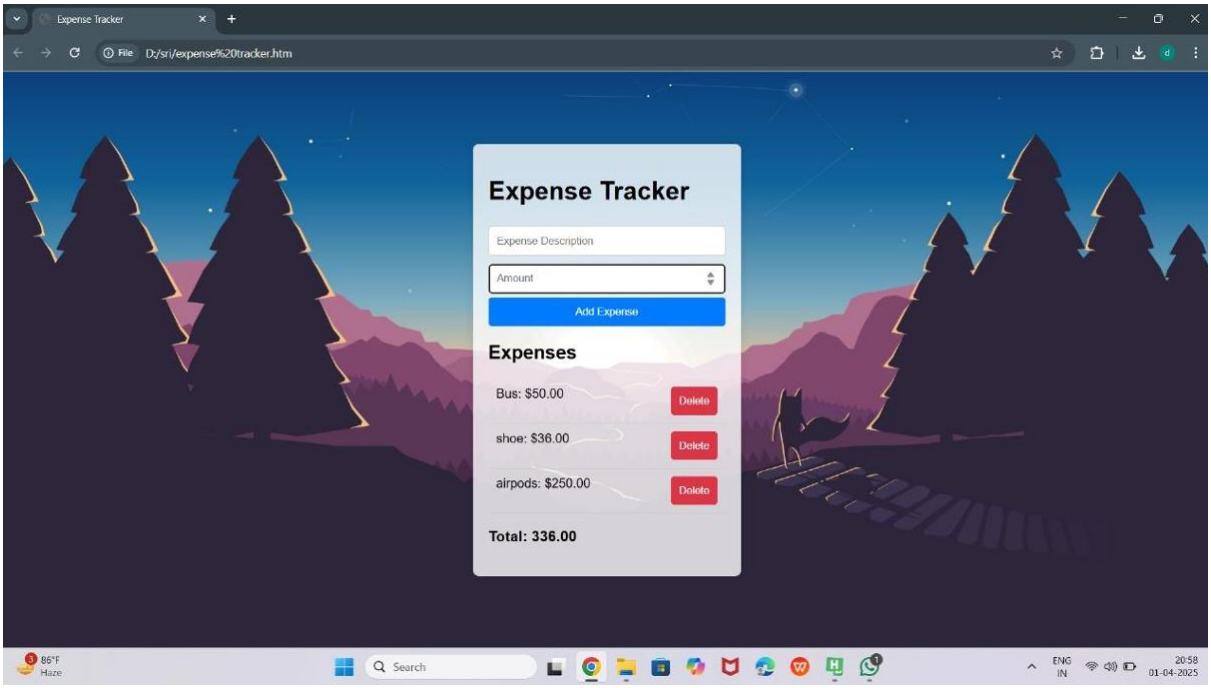
```
expenseForm.addEventListener('submit', function(event) {
event.preventDefault();
const description =
document.getElementById('description').value;
const amount =
parseFloat(document.getElementById('amount').value);
const expense = {
id: Date.now(),
description: description,
amount: amount
};
expenses.push(expense);
updateExpenseList();
updateTotal();
expenseForm.reset();
});
function updateExpenseList() {
expenseList.innerHTML = '';
expenses.forEach(expense => {
const li = document.createElement('li');
li.innerHTML = `
${expense.description}: $${expense.amount.toFixed(2)}
<button
onclick="deleteExpense(${expense.id})">Delete</button>
`;
```

```
expenseList.appendChild(li);
});
}
function updateTotal() {
const total = expenses.reduce((sum, expense) => sum +
expense.amount, 0);
totalAmount.textContent = total.toFixed(2);
}
function deleteExpense(id) {
expenses = expenses.filter(expense => expense.id !== id);
updateExpenseList();
updateTotal();
}
```

Output:


Expense Tracker
File D:/sri/expense%20tracker.htm
Expense Tracker
Expense Description
Amount
Add Expense
Expenses
Total: 0
Search
ENG
IN
20:56
01-04-2025


Expense Tracker
File D:/sri/expense%20tracker.htm
Expense Tracker
Expense Description
Amount
Add Expense
Expenses
shoe: $36.00
Delete
airpods: $250.00
Delete
Total: 286.00
Search
ENG
IN
20:59
01-04-2025



Result:

The expense tracker website enables users to efficiently manage their personal finances by tracking income and expenses, analyzing spending patterns, staying within budget, and making informed financial decisions—all through a secure, user-friendly interface.