

Student Budgeting System

Submitted to the
Department of Master of Computer Applications
in partial fulfilment of the course

MCAE11, FULL STACK WEB DEVELOPMENT

by

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CERTIFICATE

This is to certify that the project work entitled “**Student Budgeting System**” is carried out by

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students of **2nd Semester**, MCA, Ramaiah Institute of Technology, Bangalore, in partial fulfilment of the course **MCAE11, Full Stack Development**, during the year 2022-2023.

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1)

2)

INTRODUCTION:

Managing finances as a student can be challenging, especially when you're juggling tuition fees, textbooks, rent, groceries, and social activities. A Student Budgeting System is a valuable tool that helps students plan, track, and optimize their finances during their academic journey. This system is designed to provide students with the necessary tools and strategies to make informed financial decisions and achieve their financial goals while pursuing education.

Key Components of a Student Budgeting System, Budget Planning, Expense Tracking, Savings and Investments. The system enables students to create a comprehensive budget by listing all income sources and. It helps students allocate their resources effectively. And also Tracking expenses is a crucial aspect of managing a student budget. Students can log their daily or monthly expenses, categorize them and monitor their spending patterns. The system can provide information and tools for students to explore expenses and savings. And also empowers students to take control of their finances, make informed decisions, and develop responsible money management skills.

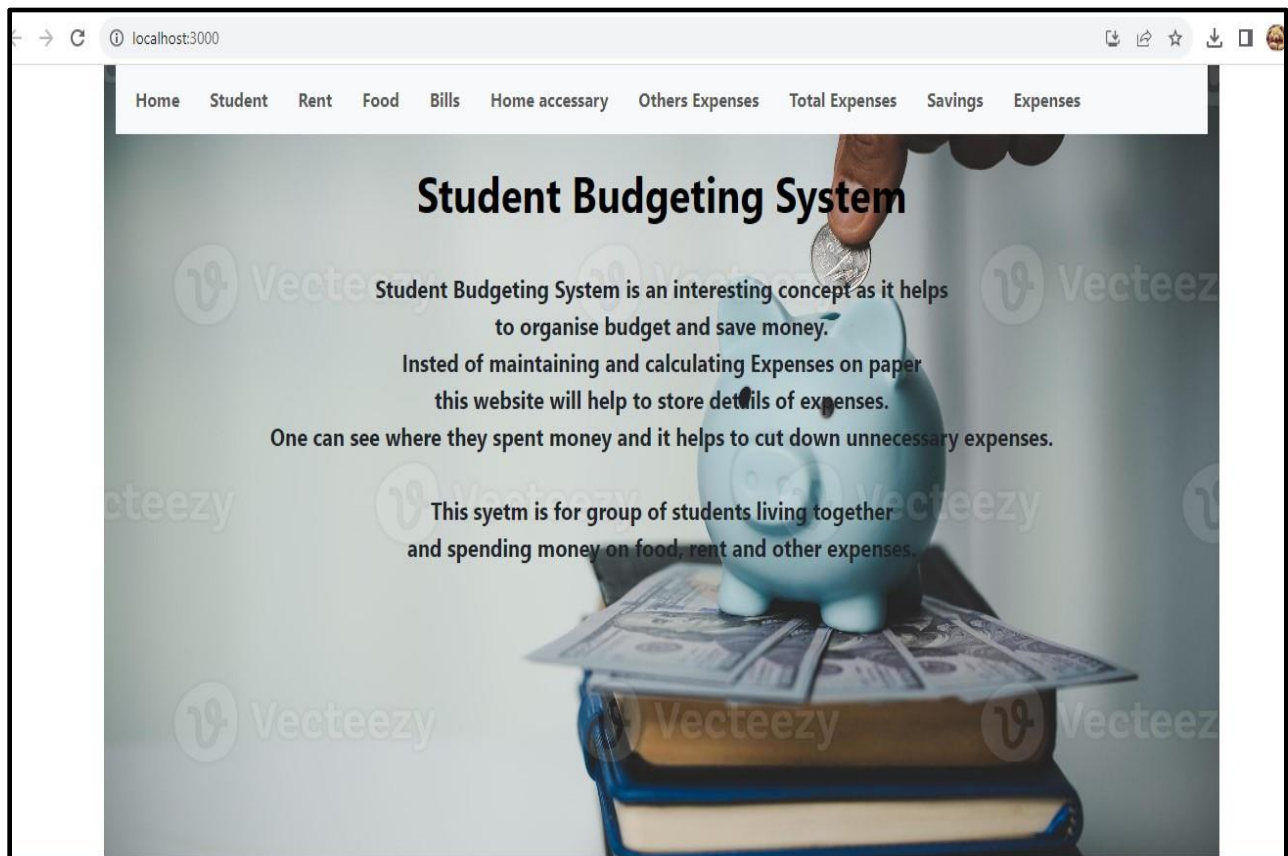
TECHNOLOGY USED:

- React: The code is written using the React library, which is a popular JavaScript library for building user interfaces.
- Functional components: These are simple JavaScript function that returns HTML. Create new js file in src folder then we have to export the component to use this component. The functional component is also known as stateless component because we can not use state directly in functional components. Import the functional component file in app.js.
- Forms: Forms are created using functional component and the controlled components like `useState`, `useEffects` are used.
- `useState`: The `useState` hook is used to manage the state of the data retrieved from the API. It initializes the state with an empty array.
- `useEffect`: The `useEffect` hook is used to perform side effects in the component.

- Bootstrap: Bootstrap utilizes Sass for a modular and customizable architecture. Import only the components you need, enable global options like gradients and shadows, and write your own CSS with our variables, maps, functions, and mixins. `@import "../node_modules/bootstrap/scss/bootstrap";` to import the bootstrap.
- axios: Axios is a popular JavaScript library for making HTTP requests. It is used here to send HTTP requests to the API to retrieve data and perform deletions.

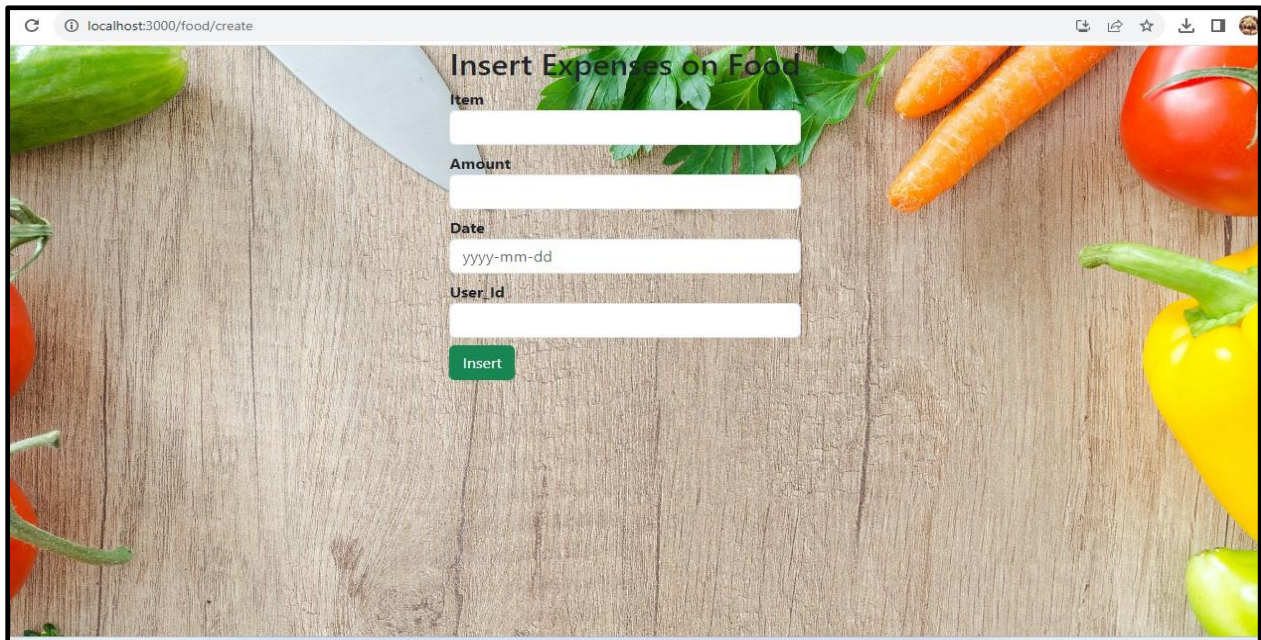
INPUT/OUTPUT SCREENS:

Homepage:



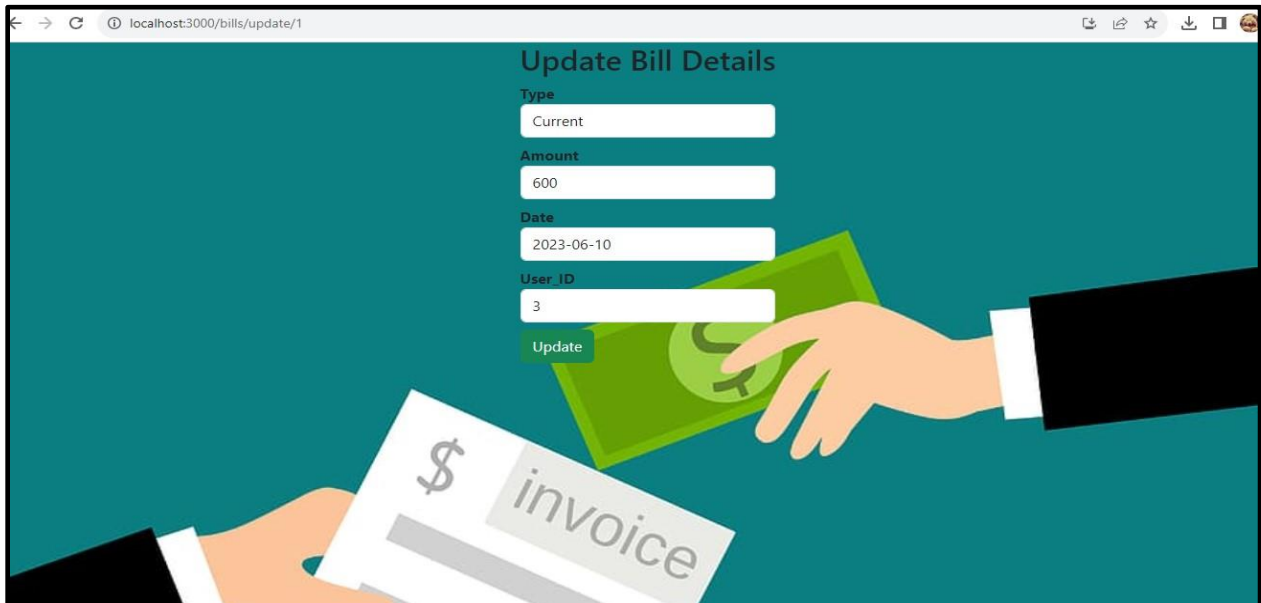
This is main page, which contain small introduction about the student budgeting system and contains the navigation bar through which we can navigate to all other pages.

Insert Expenses on Food:

A screenshot of a web browser showing a form titled "Insert Expenses on Food". The form is overlaid on a background image of various vegetables (cucumber, tomatoes, carrots, bell pepper) on a wooden cutting board. The form fields are: "Item" (text input), "Amount" (text input), "Date" (text input with placeholder "yyyy-mm-dd"), and "User_Id" (text input). Below the fields is a green "Insert" button. The browser's address bar shows "localhost:3000/food/create".

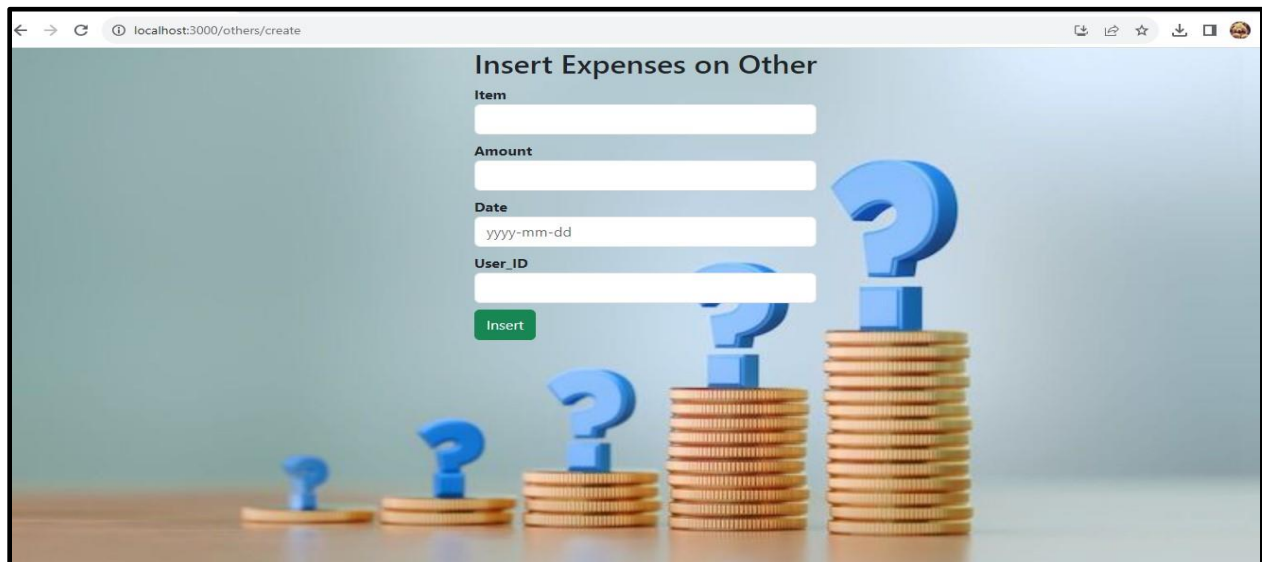
This is insertion page where student can insert the expense on food by entering item name, amount, data on which day he/she spent money along with his user id which helps in calculating the total expenses.

Bill Updates:

A screenshot of a web browser showing a form titled "Update Bill Details". The form is overlaid on a background image of a hand holding a green bill and another hand holding a white invoice with a dollar sign. The form fields are: "Type" (text input with value "Current"), "Amount" (text input with value "600"), "Date" (text input with value "2023-06-10"), and "User ID" (text input with value "3"). Below the fields is a green "Update" button. The browser's address bar shows "localhost:3000/bills/update/1".

This page is updating page where student can update bill details which are already exist in Bill Table, in case of any changes in existing data Student can change those details.

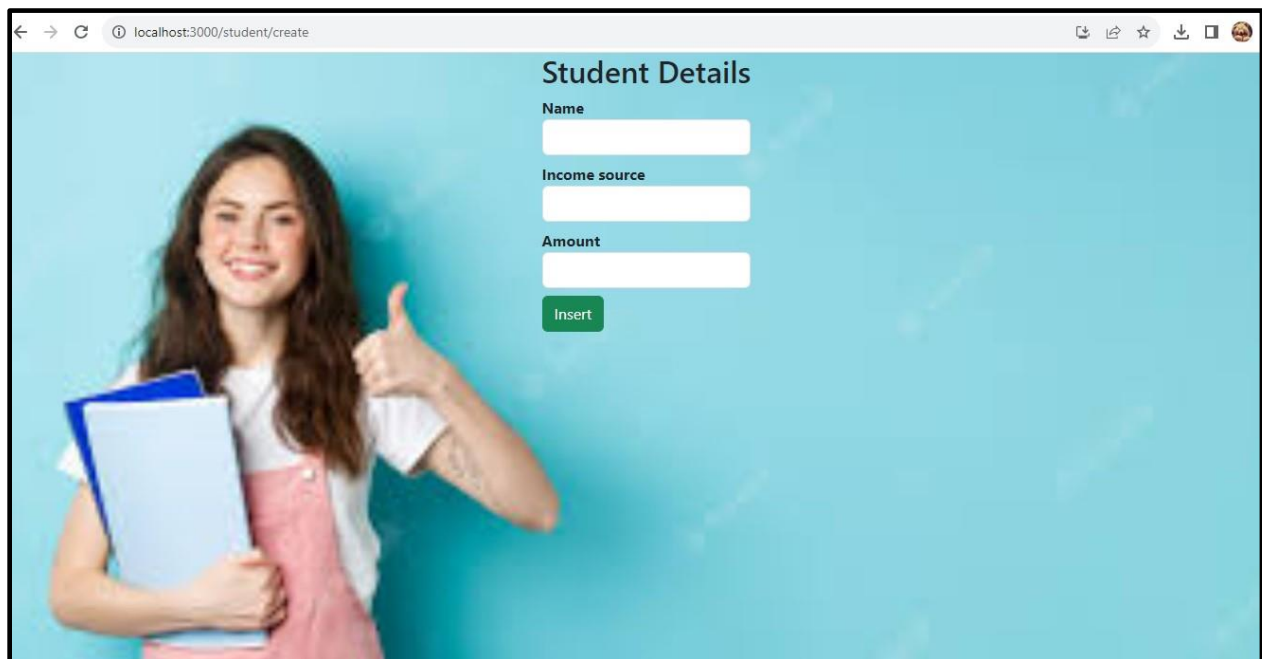
Other Expenses:



The screenshot shows a web browser window with the address bar displaying 'localhost:3000/others/create'. The page title is 'Insert Expenses on Other'. The form contains four input fields: 'Item', 'Amount', 'Date' (with a placeholder 'yyyy-mm-dd'), and 'User_ID'. Below these fields is a green 'Insert' button. The background of the form features a blue gradient and a 3D illustration of four stacks of gold coins, each topped with a blue question mark, increasing in height from left to right.

This page is inserting page to insert the expenses other than food, rent, home accessory by entering the item name amount, data on which day he/she spent money along with his user id which helps in calculating the total expenses.

Student Details:



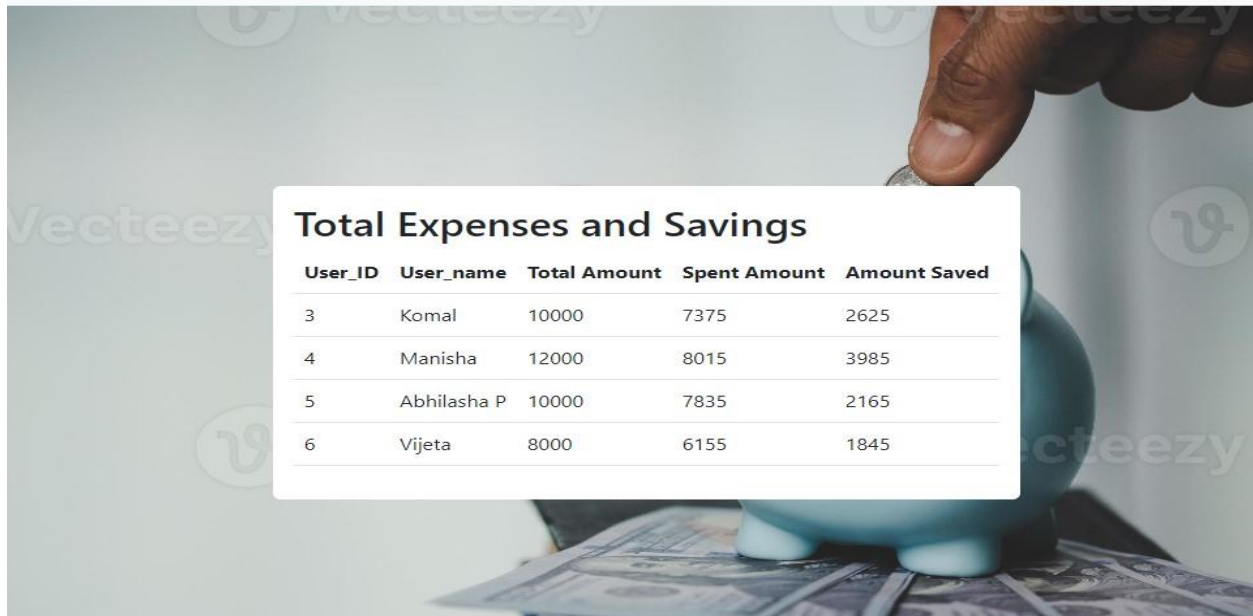
The screenshot shows a web browser window with the address bar displaying 'localhost:3000/student/create'. The page title is 'Student Details'. The form contains three input fields: 'Name', 'Income source', and 'Amount'. Below these fields is a green 'Insert' button. The background of the form features a light blue gradient and a photograph of a smiling young woman with long dark hair, wearing a white shirt and pink overalls, holding a blue folder and giving a thumbs-up gesture.

This is inserting page for student, that is whenever there is a new student comes in the group of students leaving together, new student should register him/herself by entering data on student

table by entering name, source of income and total amount at the starting of month system will generate the User id for new student

Total Expenses and saving:

Student	Rent	Food	Bills	Home accessory	Others Expenses	Total Expenses	Savings	Expenses
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User_ID	User_name	Total Amount	Spent Amount	Amount Saved
3	Komal	10000	7375	2625
4	Manisha	12000	8015	3985
5	Abhilasha P	10000	7835	2165
6	Vijeta	8000	6155	1845

This page displays the total expenses of each student and how much they saved in a month, that helps the student to track their expenses and they can cut down their expenses.

CONCLUSION:

Student Budgeting System is an essential tool for students to manage their expenses effectively, develop financial literacy, and achieve their academic and personal goals while maintaining financial stability. It promotes financial responsibility and empowers students to make smart financial choices throughout their educational journey and beyond.