

Project Name: Personal Finance & Budget Tracker

Project Period: 12 weeks

Background:	<p>This project is part of a university coursework assignment, aiming to simulate a real-world software development project. The chosen topic is a Personal Finance & Budget Tracker, which addresses the common challenge many individuals face in managing daily expenses and setting financial goals. The purpose of the assignment is to apply software engineering principles, including requirements analysis, design, implementation, and testing, to deliver a functional web-based application within the set academic timeframe.</p>
Aim:	<p>The primary purpose of this project is to design and implement a Personal Finance & Budget Tracker that allows users to record expenses, categorize spending, track progress toward goals, and receive alerts when nearing or exceeding budget limits. The project also aims to integrate a secure backend database to persist financial data and provide visual dashboards that are intuitive and actionable.</p>
Objectives (SMART):	<p>Develop a responsive web application using React.js and Node.js.</p> <p>Implement expense aggregation: users can add, view, edit, and delete transactions.</p>

	<p>Categorize expenses automatically or manually by user (e.g., Food, Transport, Entertainment).</p> <p>Provide interactive dashboards with graphs and charts to visualize spending patterns.</p> <p>Implement goal-setting functionality: users can define spending or saving goals by category and period.</p> <p>Build a progress-tracking module with alerts for approaching/exceeding goals.</p> <p>Integrate a PostgreSQL database to store user data, transactions, and goals.</p> <p>Ensure security features such as user authentication, password recovery, and data protection.</p> <p>Provide documentation, including user guides and technical architecture.</p> <p>Conduct end-to-end testing and user acceptance testing before deployment.</p>
Success Criteria:	<p>Timely Completion – All core modules delivered within the 12-week timeframe.</p> <p>Functional Accuracy – Transactions, goals, and visualizations are calculated and displayed correctly.</p> <p>User Experience – UI is intuitive, responsive, and user-friendly.</p> <p>Database Integration – Data persists reliably in PostgreSQL with secure access.</p>
Deliverables	<p>A fully functional web-based Personal Finance & Budget Tracker.</p> <p>Expense aggregation features with categorization.</p> <p>Visualization dashboard with charts and summaries.</p> <p>Goal-setting and progress-tracking features with alerts.</p> <p>PostgreSQL database integration and schema design.</p>

	<p>Documentation: Technical specification, database schema, and user guide.</p> <p>Final deployment package for hosting on the client's server.</p>
Scope	<p>Expense Management – Record, update, and delete expenses.</p> <p>Visualization – Dashboard with charts for spending trends.</p> <p>Goal Management – Set, track, and alert for spending goals.</p> <p>Database Integration – PostgreSQL backend for persistence.</p> <p>Security – User login, authentication, and password reset.</p>
Milestones	<p>Week 3 – Database schema design and environment setup.</p> <p>Week 5 – Expense aggregation module completed.</p> <p>Week 7 – Visualization dashboard implemented.</p> <p>Week 9 – Goal-setting and alert module completed.</p> <p>Week 11 – Full system integration and testing.</p> <p>Week 12 – Documentation finalized.</p>
Reporting/ Meeting Frequency:	<p>Weekly group meeting (Monday and Thursday, Zoom).</p> <p>Weekly tutorial meeting (Wednesday 6–9pm, school).</p>