

# Expense Tracking Application

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## Introduction

- Managing personal finances effectively is important for individuals in today's economy. Unfortunately, most expense tracking applications are far too advanced for the everyday user. Issues occur when finding the right tool to use as they are mainly targeted at financial professionals like accountants. Staying up to date with finances is crucial reducing the risk of overspending and allowing for financial growth.

## Literature

Investigation into modern day web development using ReactJS revealed many different techniques that this technology was capable of, such as manipulating virtual DOM resulting in better performance. Additionally using JSX used to write markup for components more easily. MVC architecture requiring additional tools for it to fully work with React.

Comparing methods from a spending tracker application which took a different approach.

## Methodology

This project was written using Javascript, using NPM as the package management tool. Frontend development was based using React.js and relevant libraries mainly with Axios handling the api requests communicating with the backend. Backend uses Express.js, Node.js and MongoDB. Using these technologies allowed for an adaptable, high performing and secure technology allowing for functional requirements to be met.

## Project Artefact

The software that was created was an expense tracker web application built using JavaScript, React.js, Express.js, MongoDB and Node.js (MERN). This application is intended to have high compatibility, performance and scalability for future development.

## Results

The expense tracking application was created for use as a web application. The application is ran on a local machine. This web application met all functionalities for creating expenses and categorizing them, budgeting each category, filtering categories and showing visual analysis through charts and insights to help the user make better financial decisions.

## Conclusions

- The goal and objectives have been achieved successfully. This was a challenging project; however, it allowed for a lot of learning and personal development opportunities. There are still many advanced features that could've been added if my time was managed effectively. Also increasing the user experience would be a goal for future development of this application.

## References

- Video URL:  
[https://drive.google.com/file/d/1WcVuFy rpQnRwIFu7XRNaV-OuqnXtJb5T/view?usp=share\\_link](https://drive.google.com/file/d/1WcVuFy rpQnRwIFu7XRNaV-OuqnXtJb5T/view?usp=share_link)
- Source code URL:  
[https://drive.google.com/drive/folders/1wMbKK5lcwMsDLLr6lx5-3HEc6DnZJWo1?usp=share\\_link](https://drive.google.com/drive/folders/1wMbKK5lcwMsDLLr6lx5-3HEc6DnZJWo1?usp=share_link)