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| Photo displaying partial image of two pie charts on a canvas-textured page |
| BTWBeheer  Ideation document – Individual project |
| |  |  |  | | --- | --- | --- | | Nies,Midas M.F.A. | Demand based - Semester 3 | Software engineering HBO ICT Fontys | |

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# Project Description

BTWBeheer is a web-based bookkeeping application designed for small entrepreneurs and businesses to manage their finances efficiently. Inspired by the success of digiBTW, our goal is to create a user-friendly and feature-rich platform that simplifies bookkeeping tasks, helps users stay tax-compliant, and provides valuable insights into their financial health.

# Project Goals

1. **Simplify Bookkeeping**: Create an intuitive and straightforward user interface that makes bookkeeping tasks easy to understand and perform.
2. **Automate Data Entry**: Implement automation features to reduce manual data entry and save users time when recording transactions.
3. **Ensure Tax Compliance**: Incorporate tax calculations and reminders to help users meet tax deadlines and comply with tax regulations.
4. **Financial Insights**: Provide users with valuable financial insights through reports and visualizations to help them make informed decisions.
5. **User Authentication and Security**: Implement user authentication and ensure the security of sensitive financial data.
6. **Scalability**: Design the application to handle growing user bases and increasing data volumes.
7. **Documentation and Support**: Provide comprehensive documentation and customer support to assist users in using the application effectively.

# Target Audience

* Small business owners and entrepreneurs.
* Freelancers and self-employed professionals.
* Accounting professionals looking for a streamlined bookkeeping tool for their clients.

# Key Features

1. **Dashboard**: A user-friendly dashboard displaying financial summaries, upcoming tax deadlines, and recent activity.
2. **Transaction Management**: Tools for adding, categorizing, and reconciling transactions.
3. **Expense Tracking**: A module for tracking expenses and receipts, including the ability to upload and store digital copies.
4. **Income Management**: Features to record income, sales, and revenue sources.
5. **Tax Calculations**: Automatic tax calculations based on income and expenses, with reminders for tax payments.
6. **Reporting and Analytics**: Generate financial reports, balance sheets, profit and loss statements, and tax reports.
7. **User Management**: User registration, profiles, and role-based access control.
8. **Data Import/Export**: Import data from spreadsheets or other accounting software, and export data for tax filing purposes.
9. **Reminders and Alerts**: Notifications for upcoming tax deadlines and financial insights.

# Technology Stack

## Front-End

* React

## Back-End

* Node.js
* Express

## Database

* MySQL

## ORM (Object-Relational Mapping):

* Sequelize

## Authentication and Authorization

* Passport.js

## Deployment

* Hosting on cloud, if possible, on Fontys servers.
* Docker for containerization (optional).

# Project Timeline

The project will be divided into five sprints, each lasting three weeks:

* Sprint 1: Project Initialization and Planning
* Sprint 2: Core Functionality Development
* Sprint 3: Core Functionality Development
* Sprint 4: Enhancements and Refinements
* Sprint 5: Testing, Optimization and Deployment

# Conclusion

BTWBeheer aims to provide a reliable and efficient bookkeeping solution for small entrepreneurs and businesses, allowing them to focus on growing their ventures while staying in control of their finances. This ideation document outlines the project's goals, features, and technologies, setting the stage for the successful development of BTWBeheer.