

Abstract

This project streamline and improve the efficiency of the whole accounting process, by using current best practices for user interaction engineering and current design practices. Our software should be able to provide secure, user-friendly, and accessible financial management solutions anywhere and everywhere through various devices including desktop and mobile. Allowing users to manage their accounts whenever it seems necessary while still maintaining a high level of security.

The project is inspired by the various complexity and problems regarding the accounting process in the real world such as financial reporting, miscalculations, and data security; by streamlining this process and making it more automated it will mitigate the risk and problems associated with accounting.

Introduction

Accounting can be a very simple and complex process one simple error can cause a butterfly effect of issues. Our goal is mitigated these errors, our robust software was made with a deep understanding of numerous web technology and coding practices, and substantial knowledge of databases. With cybersecurity such as data encryption, user authentication and password management being reliably in charged with crucial information regarding this process.



Tools

OnAccount was made using various software tools to accomplish this project, these are the primary language and software that were use:

- **Web development:** HTML, CSS, ASP.NET C#, Docker
- **Database Management:** MySQL
- **Cybersecurity** such as user authentication, password management, and data encryption.
- **GitHub** as a repository and version control

Methods

Scrum Methodology: The project was executed using the Scrum methodology to ensure an iterative progress, regular feedback, and adaptability. This was the most optimal way to make our stakeholders satisfied as we go through the project. Scrum incentive an effective team collaboration and cohesiveness. The project itself was finished within 4-months of starting, while having five sprints in total. These Sprints following sprints contain about 20-30 stories/requirements every two weeks.

Sprints were design around the Accounting process, such as chart of account module, journalizing/ledger module, adjusting entries and financial report module. Every aspect of the process of accounting has been thoroughly reviewed and practices before designing and coding the project.

Results

- A secure, multi-role web-based accounting application (Administrator, Manager, Accountant)
- User interfaces for creating accounts, chart of accounts, and journalizing transactions.
- Financial reporting capabilities, including balance sheets and cash flow statements.

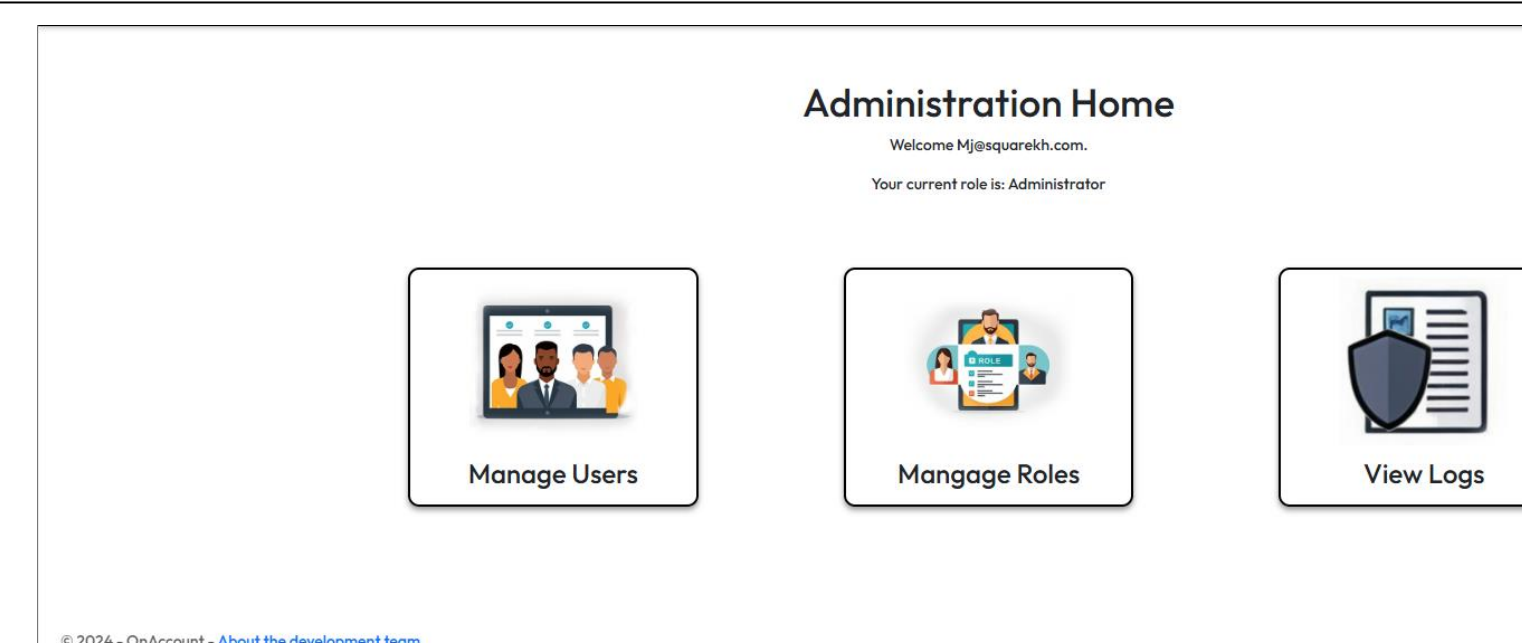


Fig 1: Administrator home page

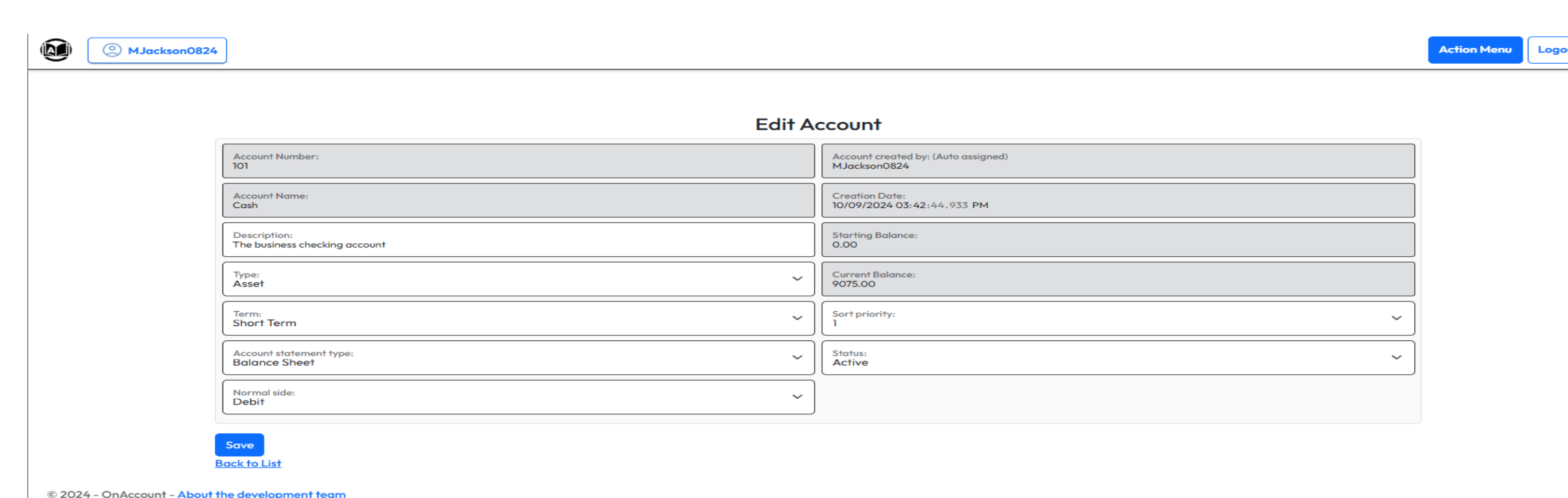


Fig 2: Creation of an account in the Chart of Account module

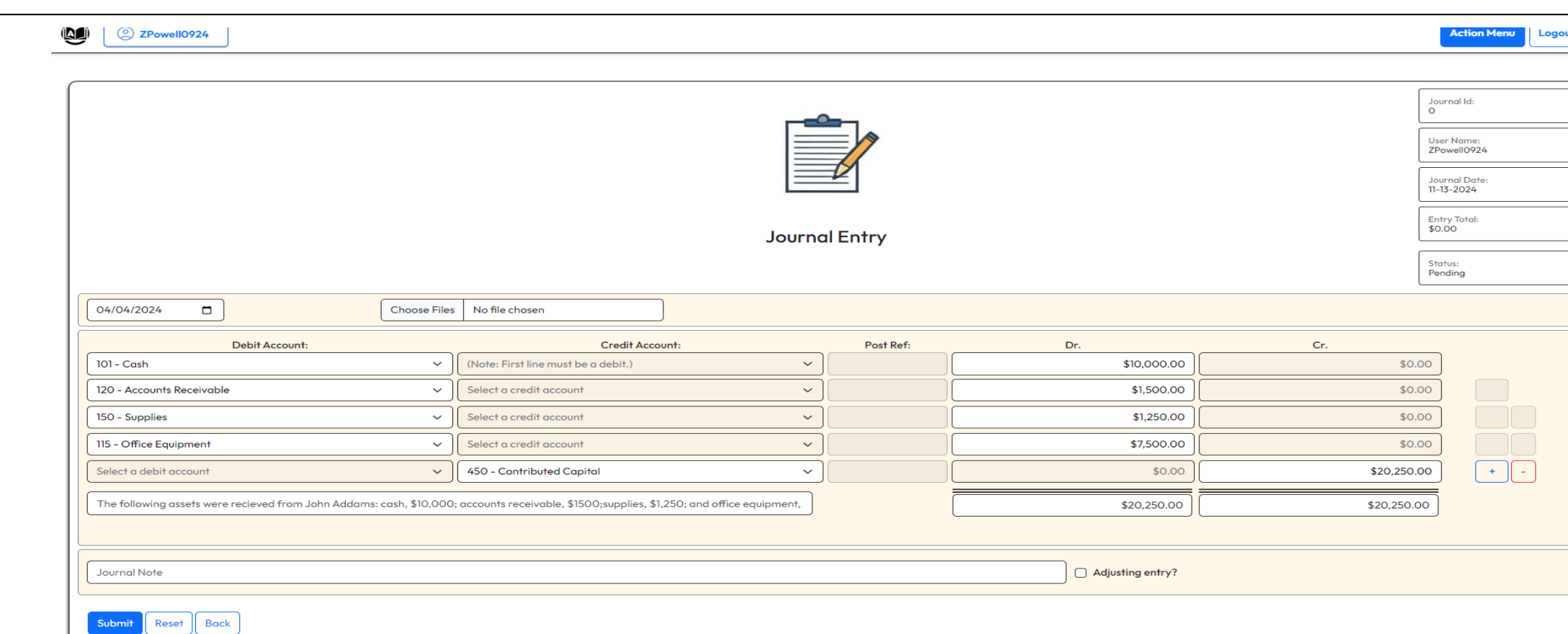


Fig 3: Journalizing a transaction in the Journal module

Account Name	Debit	Credit
101 - Cash	\$1,000.00	
102 - Accounts Receivable	\$2,000.00	
103 - Supplies	\$1,000.00	
104 - Prepaid Insurance	\$1,000.00	
105 - Accumulated Depreciation		\$1,000.00
106 - Equipment	\$21.00	
201 - Accounts Payable		\$1,000.00
202 - Unearned Revenue		\$1,000.00
301 - Salaries Expense	\$1,000.00	
302 - Utilities Expense	\$200.00	
303 - Depreciation Expense	\$200.00	
401 - Advertising Expense	\$200.00	
101 - Office Equipment	\$1,000.00	
401 - Contributed Capital		\$10,000.00
101 - Retained Earnings		\$1,000.00
401 - Service Revenue		\$1,000.00
Totals	\$12,776.00	\$12,776.00

Fig 4: Trial balance page

Conclusion

OnAccount uses an amalgamation of strict accounting principle and current software design. That lead to an efficient and usable software that can be used by anyone and anywhere, while still providing reliable security and structured database.

Our software can be used by various of business that are needing accessible and secure accounting solutions to, accountants and financial managers seeking role-based access to streamline financial processes.

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- **Project Website:** <https://www.on-account.net/>

References

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