

MacFERP

McMaster Financial Expense Reporting Platform

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Reimbursement:
Reimagined

Group 12
3/30/25

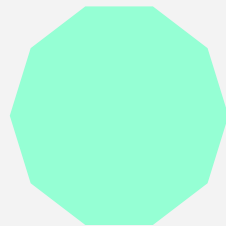
So you want to be reimbursed?

Currently, it's harder than you think...

- Requests submitted and tracked through **cumbersome** combination of Google forms and spreadsheets
- **Error prone** process
- Leads to issues in tracking journey of a request
 - This leads to **missed audits, missing money, and wasted time**

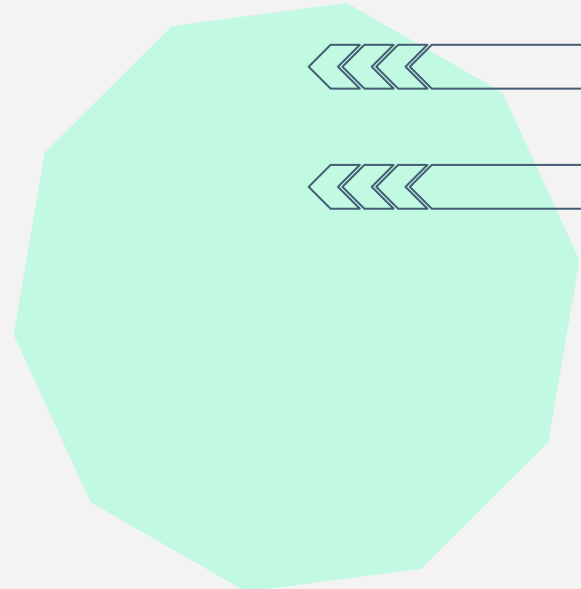
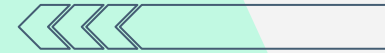
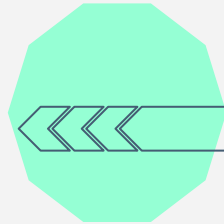


— But what if
there was a
better way?



What if there was a platform providing...

- A paper trail via audit logging
- Integration with ledger tracking API
- Notifications through email
- An intuitive and appealing design



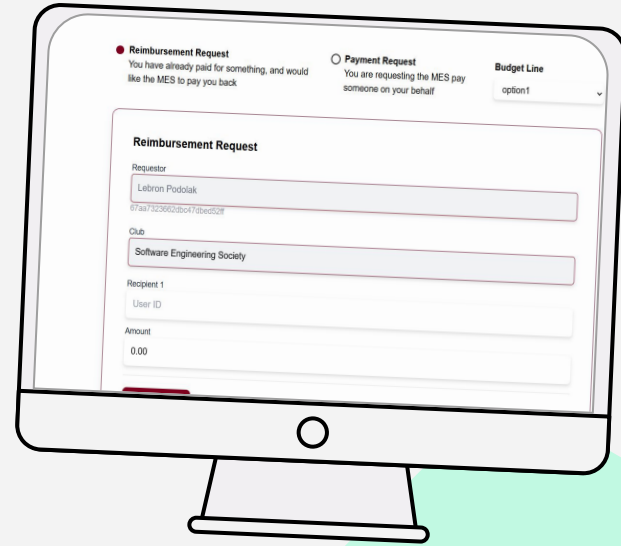
Introducing



MacFERP

*Financial Expense
Reporting Platform*

McMaster Engineering
Society's very own **in-house**
reimbursement solution



Why MacFERP?

01

All-in-one

Submitting and reviewing, all in one place



Tracking made easy

Reimbursement and Payment requests tracked from start to finish, and everywhere in between



02

03

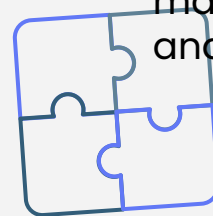
Notifications

Students are kept in the loop at all times on the status of their request



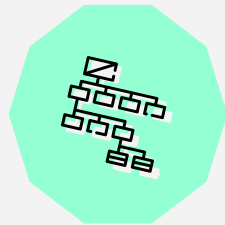
Simple and Functional

Clean, intuitive design makes operation easy and simple for all users



04

What else can MacFERP do?



Edit and approve requests

MES Admins can view, edit, and change the status of requests, with the ability to sort and search



Ledger Tracking

Easily view the audit log and reconcile requests with bank transactions, made possible through Plaid integration

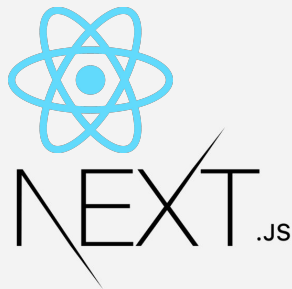


PLAID

Our Stack

React and Next.js

For seamless UI build and server-side rendering



Tailwind CSS

Responsive and dynamic UI for all devices



MongoDB

Efficient, NoSQL database control



Typescript

The versatility of JS with strong typing

Demonstration

Reimbursement Request

Requestor

Lebron Podolak

67aa7329662dbc47dbed52ff

Club

Software Engineering Society

Recipient 1 Email

User Email ...@mcmaster.ca

Amount

0.00

+ Add Recipient

Total Amount

Description

Receipts

Create new requests



Submitted Requests

Search by requester name...

Reimbursement Requests

Requester: Austin Bennett - EngiQueers

Amount: \$40

Submitted: March 29, 2025

Requester: Austin Bennett - EngiQueers

Amount: \$100

Submitted: March 29, 2025

Requester: Tyrone Smith - Software Engineering Society

Amount: \$17

Submitted: March 29, 2025

Requester: adam podolak - EngiQueers

Amount: \$520

Submitted: March 29, 2025

Budget

View submitted requests

Audit Page

2025-03-01

2025-03-29

Fetch Data

Link Bank with Plaid

Requests

Audit 14

Friday, March 28, 2025

Reimbursement Pending

hello does this work

Requestor: ad11Ba

8:15:27 p.m.

\$200

View Request

Reimbursement Pending

hello christian petrica

Requestor: ad11Ba

8:21:44 p.m.

\$400

View Request

Reimbursement Pending

whatlakjchiasif

Requestor: dbed52ff

8:31:45 p.m.

\$69

View Request

Check audit log

Usability testing and results

We asked a fellow engineering student to test run the product

- Simple tasks: logging in as a new user, creating and editing a new reimbursement request
- The student struggled with navigating between pages and finding buttons
- Feedback: adding a “Dashboard” button, improving button contrast, changing the icon to edit user info

Dashboard



New request

Bonus: Usability Testing Plan

Tester Script

- “I will ask you to attempt to create, view, and edit a new reimbursement request, simulating an MES Club official.”
- “While you are completing these tasks, I would like you to share your thoughts out loud. Please also let me know when you are starting a task.”
- “Feel free to ask me any questions you might have, but please be aware that I may not be able to answer your questions because we would like you to imagine that you are attempting these tasks on your own – just like you would do in the real world.”
- “You may at any time quit the task you are attempting if you don’t feel comfortable proceeding, and we will move on to the next task.”
- “Finally, please remember that we are testing the design of the prototype of this app and not you. There are no right or wrong answers. So, please feel free to openly share your feedback and thoughts with us as it will help us to improve the interface design and content.”

User Tasks:

1. Open MacFERP and login with your Mac email
2. Create a new reimbursement request
 - a. Fill in the fields to the best of your ability.
 - b. Feel free to use valid, arbitrary data
 - c. Which fields seem the most useful? Unnecessary?
3. Save the new request
4. Find the created request in the View Requests page

User Manual

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MacFERP – McMaster Financial Expense Reporting Platform

User Manual

Version 1.1
3/29/2025

3.2 Viewing Submitted Requests

- From the dashboard select "View requests". This will take users to the **view requests** page shown below:



Figure 10

- From here, users can view their submitted requests by clicking the "View Request" button on the corresponding requests they wish to view.
- Doing so will take the user to the edit requests page, where users can make changes to their reimbursement request. Details in section 3.3.
- Users can also search and sort based on date, request amount, and status:

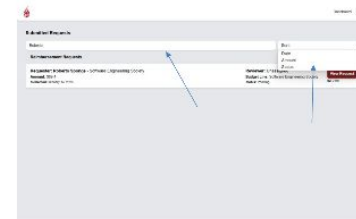


Figure 11