MyBooks

1/16/2025

Problem Diagnosis: Simple, user-friendly platforms for companies and customers to manage and interact with invoices and payments.

This project will take on issues with other services like double billing, difficulty accessing historical data, and complexity for users. It will provide a separate log-in with different permissions for users and the companies who are sending them invoices. Once logged in, customers have the ability to first select which company they are working with or have worked with. If they have a flagged invoice (as discussed below), they will be immediately notified upon login and can be redirected to that invoice under that company. Here they can view what has not been paid, what they are paying for, and when the invoice was uploaded. The company contact information will be listed as well. Customers can also view previous invoices with this company. Information such as "total paid" and "total unpaid" will be available.

For the company, once logged in, they can select a customer from a dropdown. If an invoice is left unpaid for longer than the timeframe specified upon input, that invoice will be flagged, and a pop-up will appear giving the user the option to be redirected to the invoice or stay on the current page. Here, the customer contact information will be listed. If there are multiple flags, the longest outstanding will have a pop-up, and any others will pop-up upon next login. The customers with flags will also be viewable from the drop-down. If there are no flags, companies can select a customer. Once selected, they have the option to view paid, which would include all items/services in table form and total paid (View-Only). If they select unpaid, they can view all unpaid items/services, the amount of each, when they were uploaded, and when they are expected to be paid by. They cannot directly edit posted items/services, but they can delete and add as they please, as long as it is still unpaid. Once paid, the company can mark as paid (confirm button included).

To avoid accidental double billing, uploads to the same customer with the same title will result in a pop-up. It will list the previous uploads with the same title and request that the company either confirm or delete.

Automatic log-out upon exit; logout button in corner under menu with home button that can take the user back to the home page to select a different company/customer.

- Daniel Dwyer (Dwyer Contracting)
 - > Previous "Customer" Experience
 - Double-billing: have to re-read certain invoices to ensure they are charging correctly; waste of time
 - Solution: Flag invoice titles that are the same as others to the same customer
 - ◆ Pop-up: Cancel Invoice or Proceed with Submission

➤ Proceed with Submission will still ask the customer via pop-up when the invoice is opened, confirming that the information looks correct.

> Previous "Company" Experience

- Complaints of difficulty accessing historical information for reference
 - Historical customer invoices available
 - Historical invoices for ongoing customers
 - ◆ Ability to view how much customer has paid and how much is still owed.
 - ◆ Customers will also be able to view this data for their own projects for their own reference
- Clients report confusion with current invoice management system

Metrics for Success

- Bug-free implementation
- All data viewable to both parties
- Smooth but effective means for minimizing double-billing
- Functional separate login to accommodate separate permissions
- Information is displayed in digestible and well-laid-out manner that appeals to users
- Tested all events with various test data and circumstances

Business Value

- User-friendly data organization; not difficult for clients to access and understand
- Means to manage invoices and keep projects and payments on schedule

Work Plan

- Begin planning and constructing database
 - o SQL
- Design front-end before getting into back-end
 - o Tailwind/CSS/HTML
- Back-end
 - Python Flask or PHP
- Bug-Fixing and Testing
 - Run a variety of test-cases to ensure everything works as planned

• Reference with a current user of a different software to ensure this application is an appropriate solution to their problem.

Starting Page

- Welcome!
- About blurb
- Create Account/Login button

Create Account

- Select Customer or Company
- Fill in data for database: Client: (First name, last name), Company: (Company name), street address, city, state, email, phone number (Click Next)
- Choose a Username and Password
- Store; encrypt password

Customer Login

- Enter Username and Password
- Welcome Dashboard
 - If an invoice has been unpaid for __ amount of time, pop-up notifies the customer immediately upon login. Option to open invoice from pop-up.
 - Select Company
 - Drop-Down selection
 - Select previous company invoices
 - Separate drop-down; View-only
 - View Unpaid/View Invoice History
 - Unpaid: Table-form; invoices marked by company as unpaid
 - Include total unpaid
 - Paid: Table-form
 - Include total paid (View-only)

Company Login

- Enter Username and Password
- Validate and use database to select company or client dashboard/permissions
- Welcome Dashboard
 - Add customer: Enter customer code
 - Select customer invoice
 - Drop-down selection
 - Flag customers with invoices unpaid for __ time

- Select previous customer invoices
 - Separate drop-down; View-only
- View Stats (Same Page as 2 above)
 - Redirected
 - 2 tables: total paid and total unpaid. (Can choose year)
 - Total paid includes total amounts paid from every customer, as well as each customer's percent contribution to the total total amount paid of all customers (also displayed).
 - Total unpaid includes the amounts unpaid from each customer as well as the total amount unpaid from all customers. It also shows the percentage that each customer contributes to total unpaid.

View Unpaid/View Invoice History/Input Invoice

- Unpaid: Table-form, Delete Invoice/Move to paid
 - Include total unpaid
 - If unpaid for ___ amount of time, the invoice is flagged
 - Corresponding customer phone number and email are listed at the bottom for ease in communication
 - If no invoices are unpaid, table says "No invoices unpaid"
 - Option to mark customer as complete
 - Upload Invoice
 - (Auto-InvoiceID), Date charged, Amount Charged, Description of charge
- Paid: Table-form; View-only. Changes can no longer be made.
 - Include total paid
- Input Invoice
 - Fill in form for adding to database
 - Submit

Business Rules

- Customers can work with one or many companies
- Companies can work with one or many customers
- Only Companies can connect with customers
- Companies and customers that are no longer working together can still view data if needed
- A single email may not have more than one account of either type