Bank Transaction Scanner

PROGRESS PRESENTATION

Automate the extraction of bank transaction data Goal

Report Highlights

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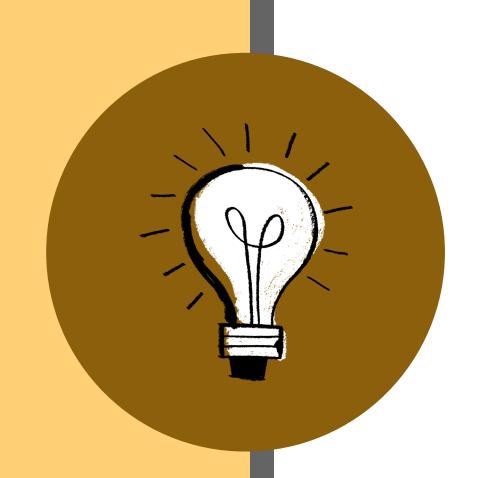
Overview

The **Bank Transaction Scanner** is a smart web application designed to simplify the extraction and analysis of financial transaction data from various sources such as images (JPG, PNG) and PDFs. By leveraging a trained bank classification model and bank-specific extraction templates, the system automatically identifies the bank type from uploaded transaction files and extracts critical financial information, including transaction details and total amounts.



BANK TRANSACTION SCANNER

Progress Report 2025



Project Link

Live Frontend Link (Deployed):

<u>Bank Transaction Scanner</u>



Pages Available:

- Home: Upload and extract page (Under construction)
- History: Show extracted history (Under construction)
- About: Project info and team

BANK TRANSACTION SCANNER

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What Works So Far

Home Page:

In the current local version of the application, the Home Page is fully functional and includes several powerful features. Users can upload multiple transaction files at once, whether they are in image formats like PNG or JPG, or PDFs. Once uploaded, each file is automatically classified by a trained machine learning model to determine its corresponding bank. Based on the identified bank, the system applies bank–specific extraction templates to pull out key transaction details. After processing, the page displays useful information such as the total amount of all transactions (currently summing all currencies together), detailed information of each transaction, the total number of uploaded files, and a count of how many files belong to each bank (for example, ABA: 3, ACLEDA: 2).



What Works So Far

Bank Classification:

We successfully built a machine learning-based bank classification model capable of accurately identifying the bank type—specifically ABA and ACLEDA—from transaction images. This model plays a crucial role in the data extraction process, as it automatically determines which template to use for extracting relevant transaction details based on the classified bank.

History Page:

The History Page provides a preview of past transaction batches and is partially functional in the local environment. It features a table that displays key metadata for each extraction session, including the extract ID, the total number of uploaded files, and the date and time when the extraction was performed. In the "Actions" column, there are two options currently under development: one to view detailed transaction information from the extract session, and another to download a ZIP file containing all extracted data—including a CSV file of the transaction details and the original transaction images.



Current Limitations

Under Development

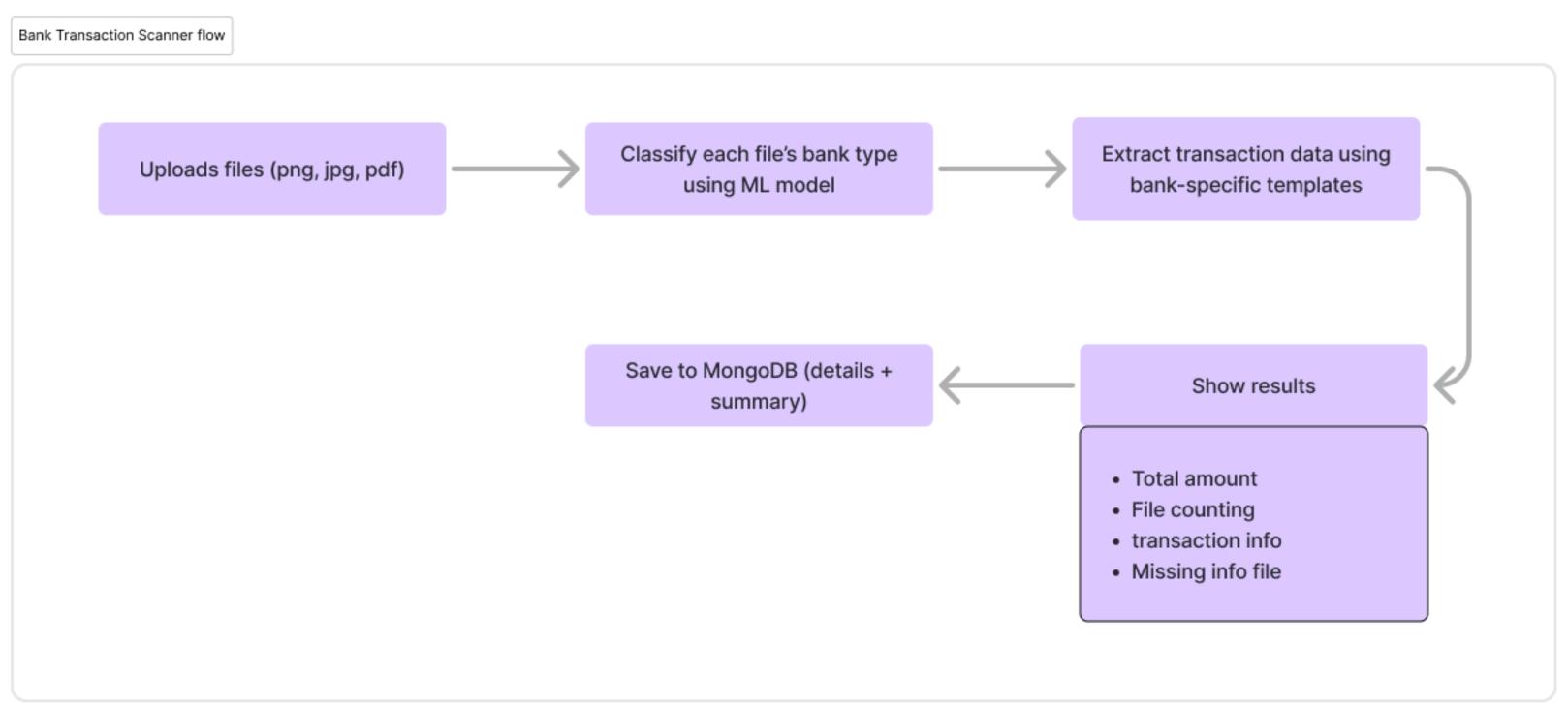
• Extraction logic: only handles simple patterns so far

 Currency classification: total amount is not separated by currency

• Detail view of transactions: WIP

Action buttons in History page not yet functional

System Flow



Live UI Demo

We've designed and implemented a simple, intuitive web interface to demonstrate the full functionality of our system.

- Home Page: Upload bank statements, classify bank, extract data
- History Page: View past extractions, check for missing info, download results
- About Us Page: Team info and project overview

Now, let's walk through a live demo to show it in action!

Next Steps in Progress

As we continue to refine and expand our Bank Transaction Scanner, there are several key areas we're planning to focus on. These next steps will help improve system performance, enhance user experience, and ensure readiness for real-world deployment.

Improve extraction accuracy

Currency separation in totals

Transaction detail view

Finalize
history page
actions

Testing & deployment polishing

THANK YOU