



Data Migration to eMPF

Project by Jacky Lo Advised by **Prof Sander Pedro**





Statistics

11 million MPF accounts

> AUM of HK\$1.11 trillion

Fund expense ratio of **1.37**%

A new era of digitalisation of the MPF scheme

The Mandatory Provident Fund (MPF) is a compulsory **retirement savings** scheme in Hong Kong. It aims to provide **financial security** for retirees through contributions from both employers and employees.

The eMPF platform, established by the MPF Authority, is a digital solution designed to **streamline processes**, increase cost efficiency, and centralize MPF contributions management.

To migrate data to the eMPF platform, a MPF trustee requires an ETL (Extract, Transform, Load) process. This process helps transfer and integrate data from various sources into the eMPF platform.

eMPF could reduce administration fees that funds levy by up to 55%.

Current Challenges



Coordinating stakeholders

Lack of collaborative software hinders efficient communication and collaboration among diverse groups in data mapping.



Makeshift practices

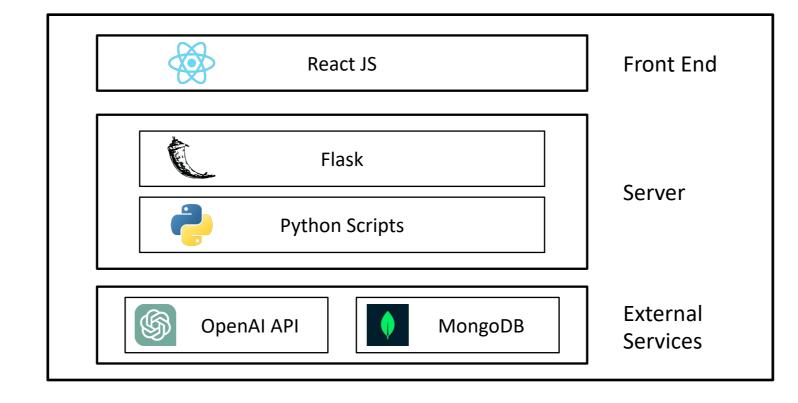
Inconsistent data and heavy reliance on manual work without dedicated software lead to challenges in updating fields.



Ad hoc inquiries

Manual modifications and filtering of views in response to stakeholder inquiries consume valuable resources and divert attention from productive discussions.

Design





User-Friendly Interface



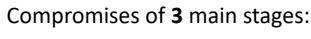
Centralized and Structured Data



AI-Enabled Efficiency

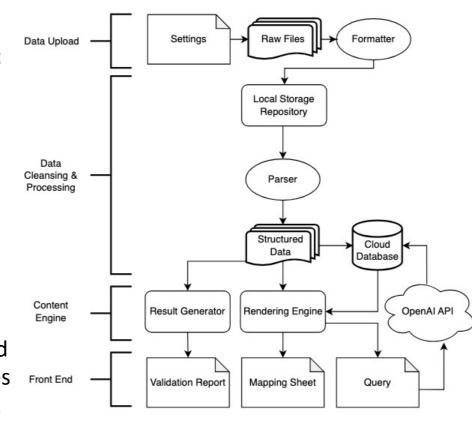
The goal of this software is to solve the challenge of **fragmented** software solutions by creating an application with a user-friendly interface. It aims to centralize and structure data, ensuring consistency and minimizing the need for manual interventions. Additionally, the integration of AI capabilities enables efficient ad hoc querying of changes and updates, ultimately enhancing the overall **efficiency** of the system.

System Architecture



- 1. Data Upload;
- 2. Data Cleansing & Processing;
- 3. Content Engine

Each stage plays a role in handling and transforming the raw files uploaded by users, resulting in **structured data** and providing various functionalities Front End for data analysis and querying.



User Interface



Features



Mapping Sheet



Automated

Instead of using Excel files, users can use the optimized mapping display, which categorizes and shows only the most important information, provides speedy searches, and offers version control capabilities.

Users simply upload documents received from MPFS, then all functionalities will be automatically initiated, without the need to further process the documents, reducing manual errors and saving time.



AI-Enabled



The query function allows users to use natural language to query the mapping sheet, saving time on manual filtering and freeing up time to do more value-added work.

Instant statistics

A validation overview provides an overview of the results of extracted and transformed data, showing fields such as solved errors, persistent errors, and new errors.