Recommendation System Enhancement Report

# Overview

This document summarizes the changes made to the Flask-based Recommendation System backend to improve the quality and structure of restaurant and product recommendation data stored in MongoDB.

# Key Improvements

- Removed Redis caching entirely from the system.

- Restaurant and product recommendation data is now saved in MongoDB only.

- Two separate GET endpoints `/recommendations/restaurants` and `/recommendations/products` generate and store recommendations.

- Two separate GET endpoints `/stored/recommendations/restaurants` and `/stored/recommendations/products` fetch stored recommendations.

- Stored restaurant data now includes: `\_id`, `nom`, `averageRating`, `latitude`, `longitude`, `averagePreparingTime`, `logo`, `maincuisineType`, `internationalCuisine`, and `description`.

- Stored product data now includes all fields available in the `Products` MongoDB collection.

# Files Modified

1. `api.py`: Main Flask API with enhanced routes and Mongo-only logic.

2. `orchestrator.py`: Fixed KeyError issues by using safe dict lookups for restaurant IDs.

# How to Push Changes to GitHub

1. Ensure you're in your project directory and on the correct branch.

2. Stage the changes:

git add .

3. Commit the changes:

git commit -m "Refactored recommendation system: removed Redis, added full MongoDB save of restaurants and products"

4. Push to your existing GitHub repository:

git push origin your-branch-name

# Date of Update

2025-06-13 14:24:20