# FINAL PROJECT

## COFFEE SHOP

# BIG DATA STORAGE

## Group K

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The purpose of this report was to identify a service or product suitable for storage in a MongoDB database, as well as explain design decisions and outcomes obtained during the project's development phase.

The data collections used, store information about **customers** (name, email, home store, loyalty card number, date of first purchase, birth date), **products** (id, group, category, type, description, retail price, tax), **staff** (id, name, position, start date, location), **receipts**.

After an extended analysis, it was determined by the group that these data collections can be inserted into a MongoDB database since they all have a semi-structured data form (data that does not conform to a rigid, predefined structure like traditional relational databases but still exhibit some level of organization).

In New York City, where almost eight million people live and work, "life moves fast". Whether rushing to the office or getting the kids to school, people want their coffee quick and well-made by professionals. That's where coffee shops like this one come in handy—they're a lifesaver in this huge community of hardworking people.

The use of NoSQL database, such as the one being used, proves highly beneficial. Its open-source nature cost-effective yearly subscription model make it a smart choice for businesses. Moreover, it offers flexibility and scalability by enabling storage and analysis of huge amounts of data across multiple servers. Additionally, its document-oriented storage approach with the usage of indexes accelerates query response time, enhancing overall efficiency.

In addition, it is also possible for the company to develop targeted mobile applications, such as the ones tracking client loyalty and online delivery services.

With the implementation of this NoSQL database to the provided data, the group ensures that the coffee shop will have numerous benefits such as:

- Real-time analytics
- Personalized customer experience
- Development of targeted campaigns
- Identification of trends
- Data-driven decisions on marketing campaigns and new menu offers
- Optimization of the store's operations
- Reduction of products store waste