

# MEMENTO

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# Outline

## Table of content

- Introduction
- Architecture
- Implementation
- Summary
- Future works

# Problem statement

## INTRODUCTION

- Choose the places to visit
- Tour guides on demand
- Inconsistency in the trip timeline

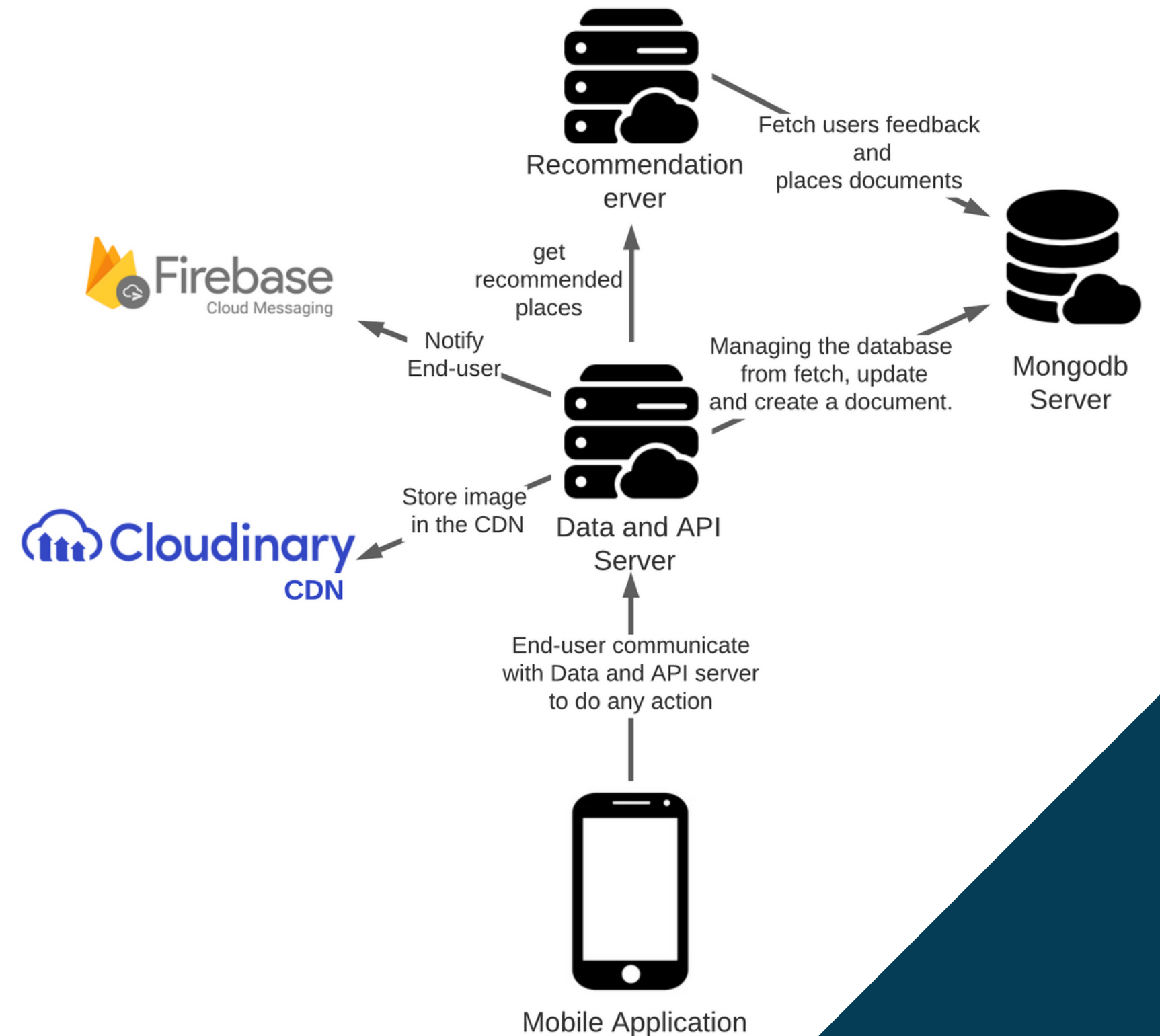
# Contribution

INTRODUCTION (CONT.)

- Sharing personal experiences
- Provide personalized recommended places
- Arrange trip timeline
- Preserve trip memories

# Architecture

- Mobile Application
- Data and API server
- Recommendation Server
- Database server
- Third-party software



# Implementation

- Data collection
- Application development

# Data collection

## IMPLEMENTATION

- Source:
  - Kaggle
  - Places API
  - Here API
- Result:
  - 372 cities
  - 41 countries
  - ~ 37000 places

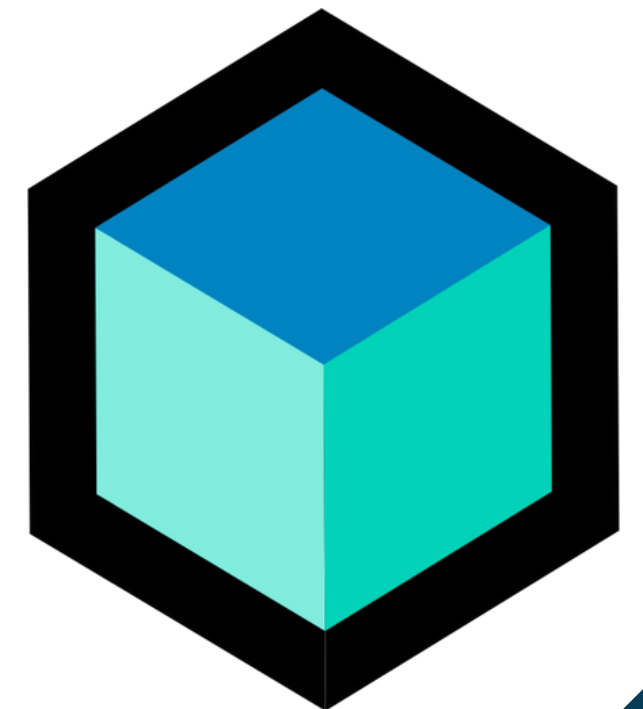
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{
  "place_id": "ChIJUTIz35rzLogRNq8gj7rvSG0",
  "name": "Four Points by Sheraton London",
  "geometry": {
    "location": {
      "lat": 42.9304147,
      "lng": -81.2190968
    }
  },
  "rating": 4.3,
  "user_ratings_total": 1323,
  "types": [
    "lodging",
    "restaurant",
    "food",
    "point_of_interest",
    "establishment"
  ],
  "photos": [
    {
      "photo_reference": "ATtYBwLRjGz14ROByZhVSOUmj9k"
    }
  ]
}
```

# Moblle

# Application

IMPLEMENTATION (CONT.)

- Flutter
  - Cross-platform
  - Material design
- State management
  - Bloc

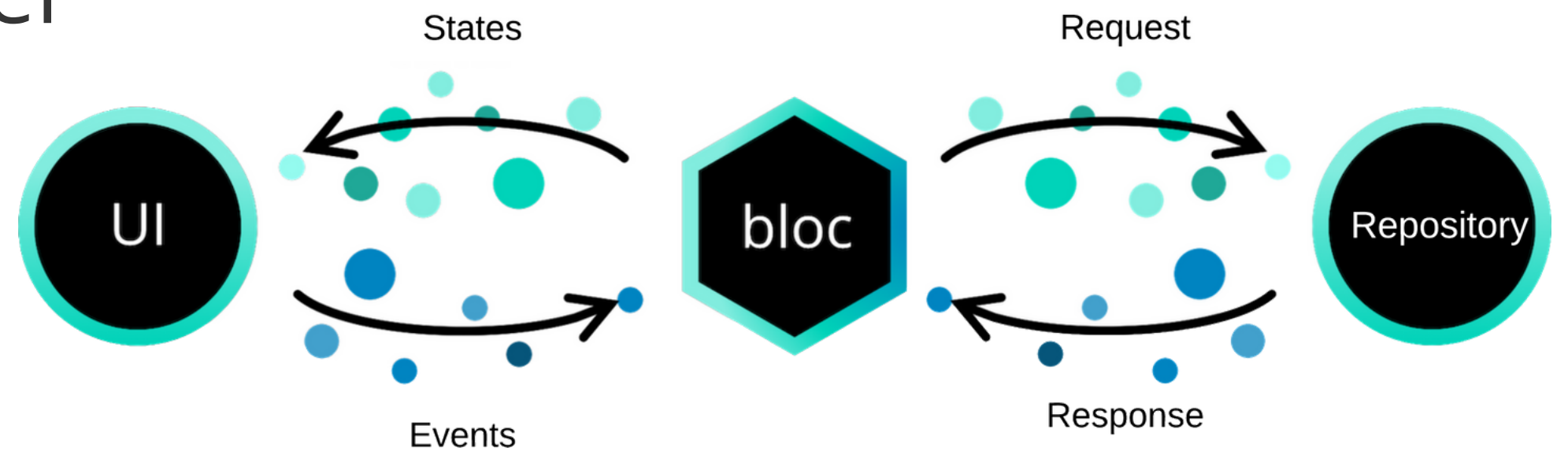


# Moblle

# Application

IMPLEMENTATION (COUNT.)

- Separate presentation from business logic
- Record every single user interaction
- Increase reusability



# Database server

IMPLEMENTATION (COUNT.)

- MongoDB
- MongoDB Atlas



# Data & API server

IMPLEMENTATION (COUNT.)

- RESTful API
- Authentication
- Mongoose ODM
- Create and modify a document



Express

mongoose



Passport

# Recommendation server

IMPLEMENTATION (COUNT.)

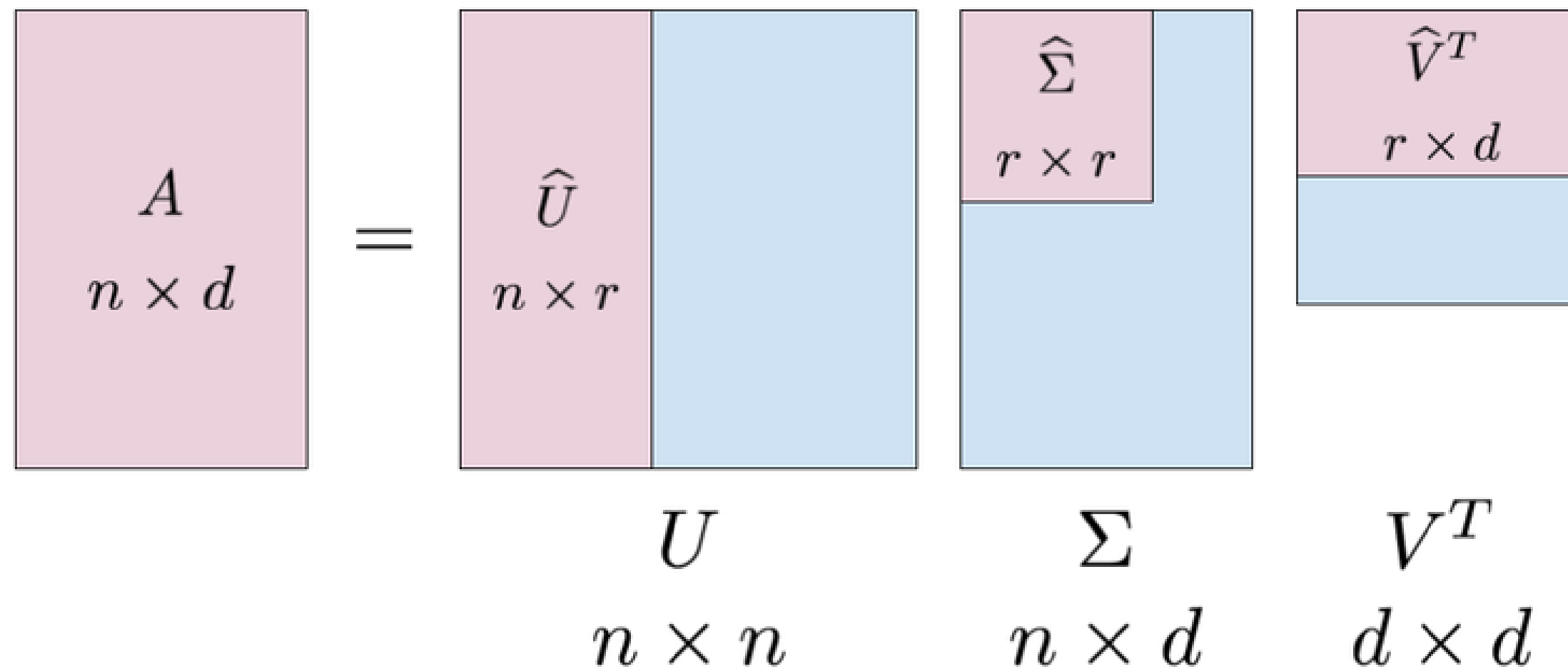
- RESTful API
- Matrix factorization



# Recommendation server

Matrix factorization

IMPLEMENTATION (COUNT.)



# Third party softwares

IMPLEMENTATION (COUNT.)



# Summary

- Mobile Application
  - Cross-platform
  - Facilitates your trip
- Recommendation System

# Future Work

- Implement chat
- Support publish video
- Share trips with group of people

**THANK YOU**