

---

## Sprint 2 – Deliverable

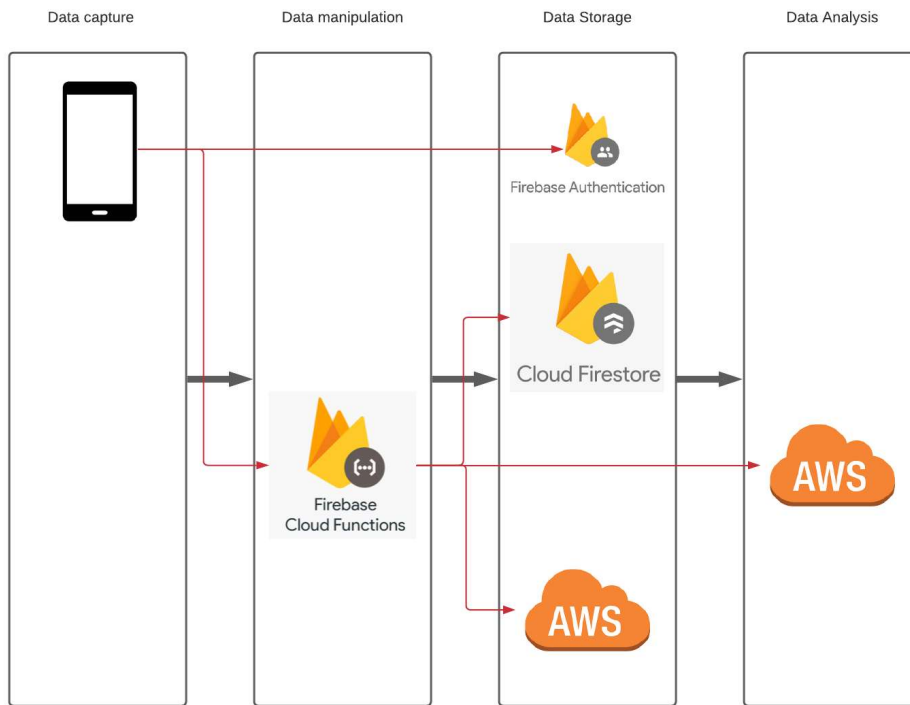
### Business Questions

---

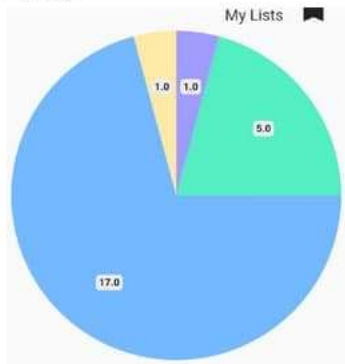
1. What is the percentage of the recommended movies liked by the user? [Type 3] (Juan Camilo Villamarin)
2. How long do users stay on the app?[Type 4] (Julian Oliveros Forero)
3. What is the distribution of genres liked by the user ? This will be presented on a Pie chart [type 2] (Luis Perez)
4. What are the top 5 genres mostly liked by the app's users? [Type 4] (Sebastian Baquero)
5. How many suggestions does the user pass before the first like on average? [type 3] (Kevin Blanco)
6. How much time does the system take to generate a recommendation, This will be presented in a scale by time [type 1] (Tobia Gasparoni)

### Analytics pipeline

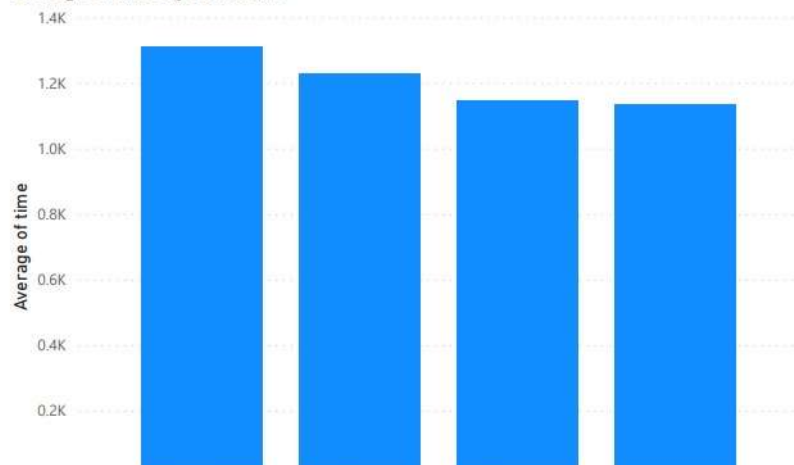
---



- Type 2: pie chart about the user tastes in genres (from liked or watched)
  - What is the distribution of genres liked by the user ? This will be presented on a Pie chart



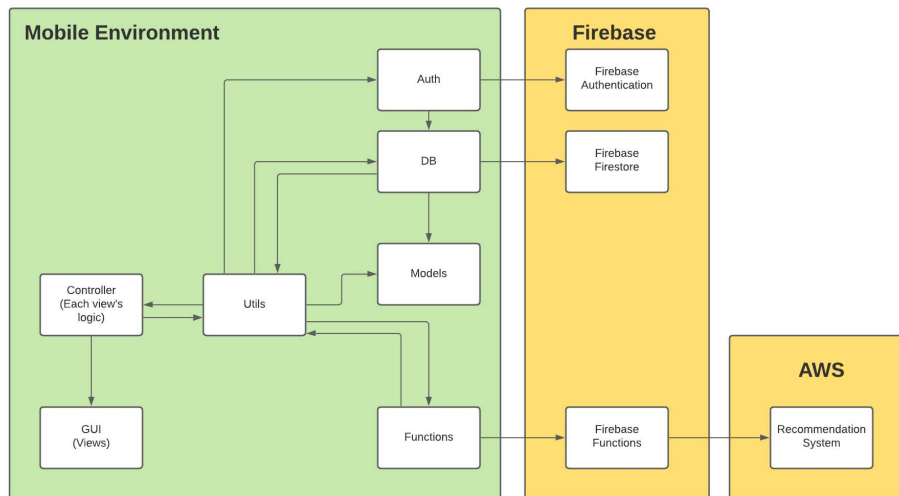
Average of time by funcname





!

## Architectural Design



Our ideal architecture includes several design decisions that will aid development further down the road:

- MVC: Allows the separation of where the data is displayed (GUI (View)), where it is being processed (Functions and Firebase Functions), and the steps in between (Utils).
- Singleton: The Utils class is singly implemented so that there is only one instance of the Authentication and Database modules.
- Facade: Multiple layers of interfaces were implemented. For example, the Utils functions allowed their implementation to change, without modifying its endpoint necessarily.

## Implemented features

- Smart Feature: A movie recommendation system has been partially implemented. This smart feature takes into account the movies that a specific user likes. This is visible by clicking the random button on the navbar.
- Authentication: The authentication system has been implemented using firebase. The app checks if a user is logged in the session, if not it will show the login and register screen, otherwise, the home screen will be shown
- External Service: The app communicates with firebase storage and function services. The storage is used to save lists, users, and likes. On the other hand, the functions are used to integrate the data stored in firebase storage with the recommendation system, which is hosted in an AWS EC2.
- Context-Aware: The context-aware feature has not been implemented yet, but the team had in mind, to ask the user how he was feeling, and depending on the answer, the app would show certain movies and not show others.