

## Project Design Phase

### Solution Architecture & Data Flow Diagram

Date	29 October 2023
Team ID	Team - 591023
Project Title	News Headline App

### Solution Architecture -

#### Model Used - MVVM Model (Model - View - ViewModel)

- ❖ User Interaction :
  - Initiated through Jetpack Compose UI.
- ❖ View :
  - Reacts to user actions and communicates with the ViewModel.
- ❖ ViewModel :
  - Manages user actions and orchestrates communication with the Model.
- ❖ Model:
  - Handles data operations: API requests, response processing, and temporary storage.
- ❖ Data Flow :
  - Processed data from the Model is sent back to the ViewModel.
  - ViewModel updates the UI with the processed information.
- ❖ Authentication and Cloud Services :
  - Utilizes Firebase for authentication and other cloud services.
- ❖ Personalization :
  - Tailors news content based on user preferences, enhancing the user experience.
- ❖ Local Storage :
  - Uses MySQL for local storage of user preferences, prioritizing privacy.
- ❖ Benefits :
  - Separation of concerns for a modular and maintainable codebase.
  - MVVM facilitates organized data-related logic.

## Data Flow Diagram -

