

# DigiProf Design Document

Group 13

## Guidelines

- a. The development will be done using Android Studio Version 3.6.2/Flutter
- b. The deployable application will have a minimum Software Development Kit (SDK) of Marshmallow 6.0 which corresponds to the Application Programming Interface (API) level of 23
- c. Firebase, for system and program.
- d. Publitio, media database.
- e. Chewie, media player plug-in
- f. Ethics:
  - i. The user's data and video and personal information must always be kept private. We must consider how we can always keep that information private and keep that information secure.
  - ii. Because we are using a third-party database, we may need to inform the user of which company is storing our data, and how it is being stored.
  - iii. The user agrees to give rights once they have posted a video on our application. And we have all the copyright to the videos.

## System Diagrams

**Use case UML** - This is a diagram to demonstrate how users will interact with the app and outline the features of the app, such as logging in, saving/sending videos.

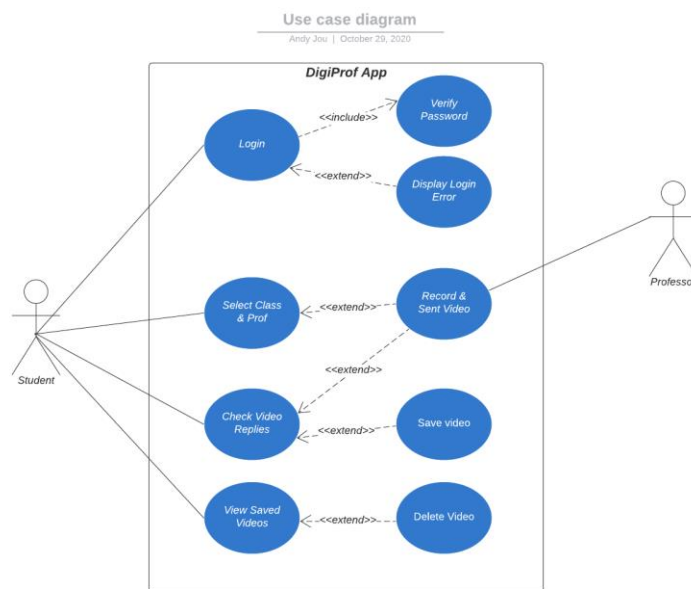


Figure 1 Use Case UML

**Class UML** - This is a class UML graph that will roughly dictate how different parts of the code would interact with each other. The diagram is created with an object-oriented programming design.

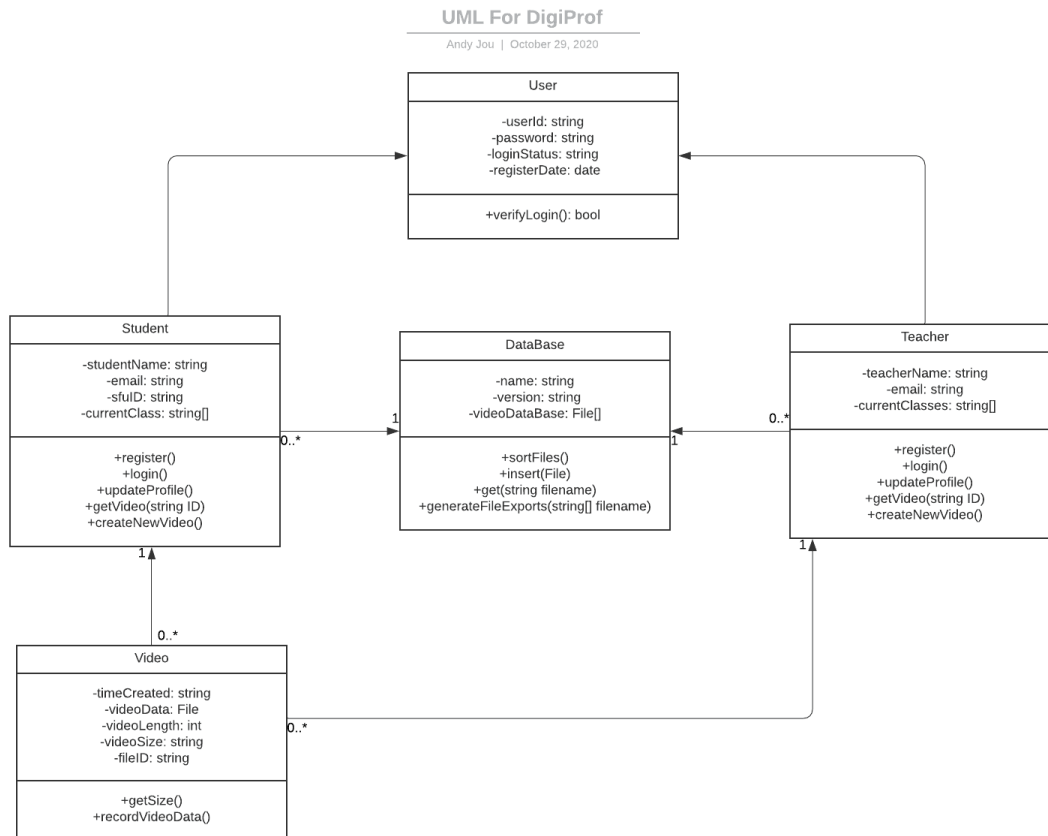


Figure 2 Class UML

## Data Requirements

- a. **Firebase:** The serverless real-time database, for storing and syncing video metadata between clients. The codebase should be Java-based.
- b. **System language:** We will automatically detect between two different default system language, English and French. And the inputs of the keyboard should work for both languages for user sign-ups and logins.
- c. **Chewie:** This is the visual output, where it translates the mp4 files into videos for students and teachers.

- d. **Touch input:** This is how users will interact with the application. They will use this input to navigate and access features.
- e. **Publito:** This is where we store and sent our video. The video format will be mp4

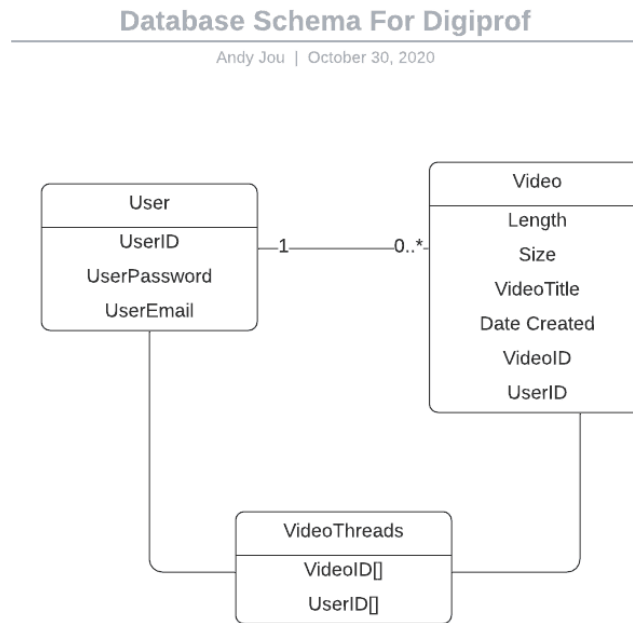


Figure 3 Database Schema

## Feature Priority

### Version 1:

- Creating different users and login
- Recording a video and save locally
- Able upload to the database
- View the uploaded videos in the database with another device

### Version 2:

- Sent a video to a specific recipient.
- Create grouping for students and professors
- Create groups for different classes.
- Search ID for students and professors.
- Professors can delete videos.

### Version 3:

- Able to sort video by date, length, views.
- Keeping track of the video replies with IDs, like a thread. Saving threads of video.
- Deleting a local video (implemented here because only in version 3 that users can save videos to local)

## Figures

Figure 1: <https://app.lucidchart.com/invitations/accept/fe5f0d7a-3eba-49ee-8566-5369719e3059>

Figure 2: <https://app.lucidchart.com/invitations/accept/c0b692e3-2f6a-4856-87e6-edd2d33c3ad2>

Figure 3: <https://app.lucidchart.com/invitations/accept/5193ac7f-0b61-4af7-880b-b3494c1b803a>