Laboratory of Advanced Programming

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Web-app where users can publish videos to share them with other users.

System Objectives

- Present landing page with latest published videos;
- Manage user authentication;
- Present profile page user-dedicated;
- Allow users to publish, search and watch videos;
- Allow users to subscribe to their favourite content creators to easily access their videos.

Potential Users

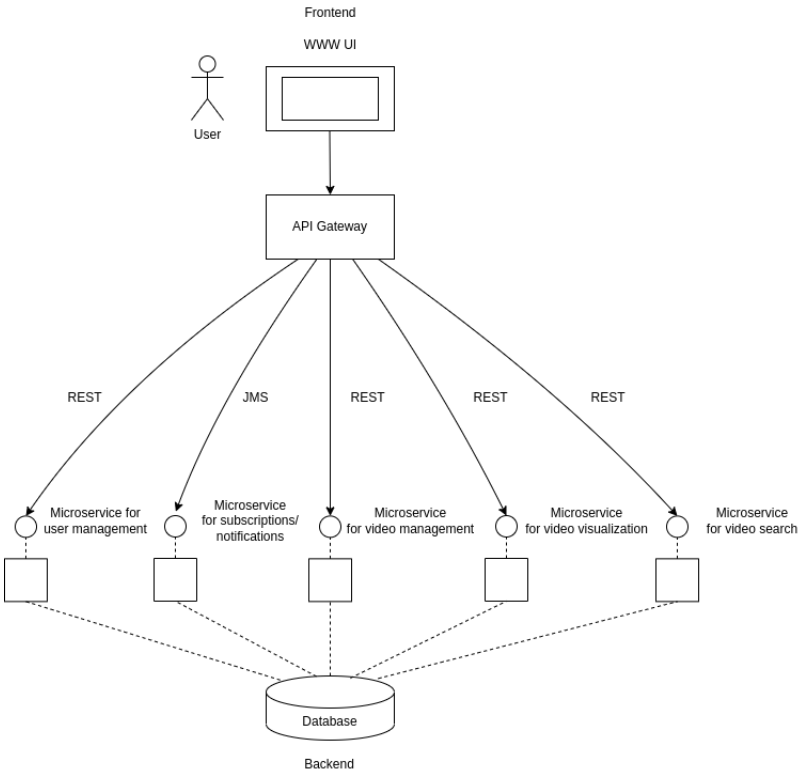
- People interested in watching videos from their favourite content creators;
- Content creators willing to create and share videos.

Use Cases

- User registers to the app;
- User logins to the app;
- User accesses the home page, visualizing the latest videos published by other users he subscribed to;
- User can subscribe to/unsubscribe from other users;
- User can upload a video;
- User can edit/delete a video he previously uploaded;
- User can navigate to his/another user profile and view his details and his published videos;
- User can be notified whenever one of his subscriptions uploads a new video;
- User can search videos;
- User can like/dislike/comment a video;
- User can manage his profile;
- User logouts;
- User deletes his account and all videos uploaded;

Technical Architecture

Our architecture is based on the orchestration of the micro-services each running on its own Docker Container and each accessing its own data.



- **User Management**: handles authentication/registration/access to the user profile;
- **Subscriptions/Notifications**: handles the subscriptions issued by each user, allowing the user to be notified whenever one of his subscription uploads a new video.
- **Video management**: handles the upload of a new video. Also allows the user to modify the details of the video.
- **Video visualization**: Allows the user to watch a video. Also handles Likes/Dislikes/Comments.
- **Video search**: Relies on ElasticSearch.

The back-end Database follows the Database per Service pattern.