AWS cloud based skill share

1. Introduction

Our team is developing an AWS cloud based skill share. This application will help people to enhance their skills, who are interested to learn skills in free time, and also for connecting with professional experts. This application will be usefull for showcasing skills of professionals or individuals.

2. Project Objectives

- Implement application for skill share

- Allow users to create and share profiles and videos

-Allow to connect and communication between users.

- Allow others to rate, review,like for the videos.

- Store data, information, videos on cloud .

- Ensure secure user authentication , API access and other information of user.

3. System Architecture

3.1 Components

Frontend: Web interface (HTML, CSS, JavaScript) for application user interface.

Backend: python,djanho,postgreSQL for developing logic.

AWS Services:

- AWS S3 (for storing uploaded videos).

- AWS Cognito (User Authentication & Management)

3.2 Workflow

-User uploads some videos through the web interface.

-The videos are stored in an AWS S3 bucket.

-The backend logic helps in managing the video for public access and scrolling.

-Ml used to analyse the video whether is skill based or entertainment based.

-The results are stored in PostgreSQL.

-The user receives the analysis output via the web interface or API response.

4. Technical Requirements

4.1 Backend Requirements

- Django Framework

- PostgreSQL Database

- python

- API integration with AWS Cognito and S3

4.2 Frontend Requirements

- HTML, CSS, JavaScript

- Fetch API or Axios for API calls

- User authentication UI

4.3 AWS Requirements

- AWS S3 (to store images)

- AWS Cognito

- IAM roles for secure access

5. Security Measures

AWS IAM Roles & Policies: Secure access to AWS services.

Authentication & Authorization: JWT-based authentication for API access.

Data Encryption: Secure storage for videos and user information.

6. Expected Outcomes

- A fully functional web application for cloud based skill share.

- Secure and efficient ml/ai for video analysis.

- A web interface for user interaction.

-proper application where anyone can learn and share skills