

**Project Synopsis**

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| **Elective** | **CLOUD COMPUTING** |
| **Date of Submission** |  |

* **Title**
  + State the title/headline that is associated with your project objective.
* **Problem Statement (200 words)**
  + Introduce and then elaborate on the problem statement.
* **Goals and objectives (2 or more objectives)**
  + Clear articulation of the project's overall goals and specific objectives.
  + Alignment of goals and objectives with the identified problem statement.
* **Key Features / Expected Results (500 words)**
  + Identification and description of key features, requirements or functionalities to be implemented.
  + Alignment of expected results with the stated goals and objectives.
* **Preliminary Findings on the likely AWS services to be used(200 words)**
  + Conduct the preliminary research aimed at identifying the most suitable AWS services / offerings that would support this project's requirements.
  + Explain the reasoning behind choosing these specific AWS services.

**Context**

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**Problem Statement**

EchoMateLite is designed to offer essential social media functionalities in a simplified manner, focusing on users' ability to create profiles, post messages, and view feeds. The challenge lies in effectively deploying this platform on the cloud while ensuring robust user authentication, efficient profile management, seamless post creation and viewing, and maintaining overall system reliability and performance. Implementing these features requires a comprehensive approach that addresses both backend services and frontend user experience.

**Cloud Deployment:** The first step involves choosing a suitable cloud service provider (such as AWS, Google Cloud, or Azure) and setting up the necessary infrastructure. This includes provisioning servers, databases, and storage solutions to handle user data and media files. Scalability and security considerations must be prioritized to accommodate potential growth in users and to protect sensitive information.

**User Authentication:** Implementing a secure authentication mechanism is crucial. Utilizing cloud-based identity services like AWS Cognito, Firebase Authentication, or Azure AD B2C can simplify this process. These services offer features like multi-factor authentication, social sign-ins, and token-based authentication to enhance security.

**Profile Management:** Users should have the ability to create and manage their profiles easily. This requires developing a comprehensive user management system that allows for profile creation, updating personal information, and managing privacy settings. Data consistency and integrity must be ensured throughout the profile lifecycle.

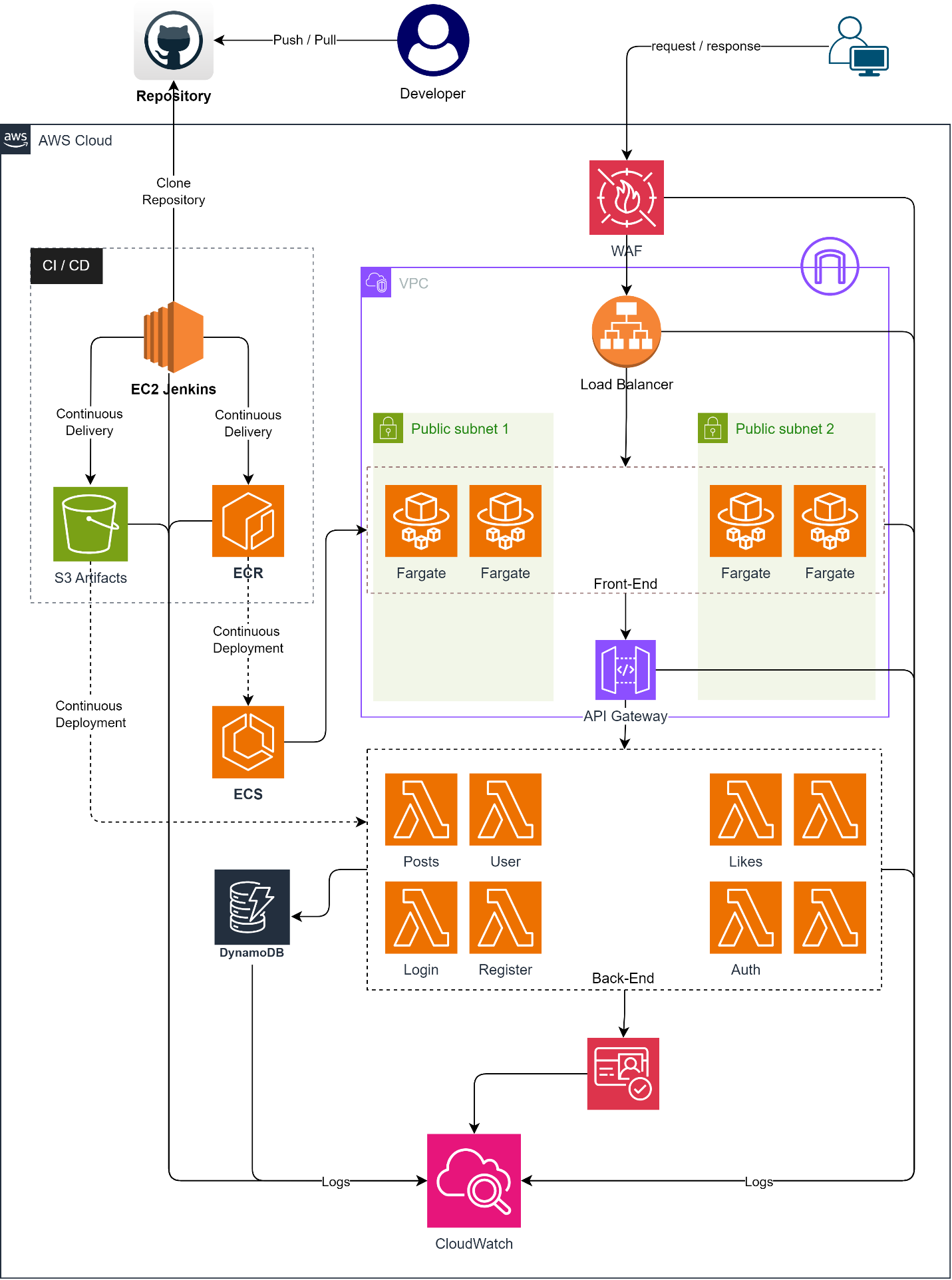
**Post Creation and Viewing:** Implementing features for users to create, edit, and view posts necessitates designing intuitive interfaces and developing backend services to handle data storage and retrieval efficiently. The system should support real-time updates and ensure a seamless user experience.

**Conclusion:** By addressing these aspects, EchoMateLite can be successfully deployed on the cloud, providing users with a secure and user-friendly platform to engage in basic social media activities. This ensures that the platform remains lightweight yet functional, catering to users seeking a streamlined social media experience.

**What do we want to achieve?**

**Key Features**

**Required Amazon Web Services (AWS) are:**

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