SERVERLESS TASK TRACKER APP

Project Report

Submitted By: Praneet Biswal
Technology: AWS Serverless
Project Type: Internship Project

1. Project Overview

The Serverless Task Tracker App is a cloud-based web application developed using AWS serverless services. It allows users to securely register, log in, and manage tasks without managing servers.

2. Objective of the Project

To understand serverless architecture, build secure applications using AWS services, and perform CRUD operations using Lambda and DynamoDB.

3. System Architecture

User → S3 Frontend → Cognito → API Gateway → Lambda → DynamoDB → Frontend

4. AWS Services Used

Amazon S3, AWS Lambda, Amazon API Gateway, Amazon DynamoDB, AWS Cognito

5. Project Approach

The project follows a fully serverless architecture. The frontend is hosted on Amazon S3, authentication is handled by AWS Cognito, APIs are exposed via API Gateway, and backend logic is executed using AWS Lambda with DynamoDB.

6. Application Workflow

Users authenticate via Cognito, API requests are validated by API Gateway, Lambda functions process requests, and data is stored in DynamoDB.

7. Core Functionalities

User Authentication, Task Management (CRUD), Secure Access Control

8. Advantages of Serverless Architecture

Automatic scaling, cost efficiency, no server maintenance, high availability

9. Skills Gained

Serverless development, AWS service integration, NoSQL data modeling, cloud deployment

10. Conclusion

This project demonstrates a real-world serverless application using AWS, providing hands-on experience in scalable and secure cloud-native development.