

Computer Engineering Department

A.P. Shah Institute of Technology

— G.B.Road, Kasarvadavali, Thane(W), Mumbai-400615 UNIVERSITY OF MUMBAI Academic Year 2022-2023

Cloud Computing Lab Project SolveIt

Submitted in partial fulfillment of the degree of Bachelor of Engineering(Sem-VI)

in

Computer Engineering

By

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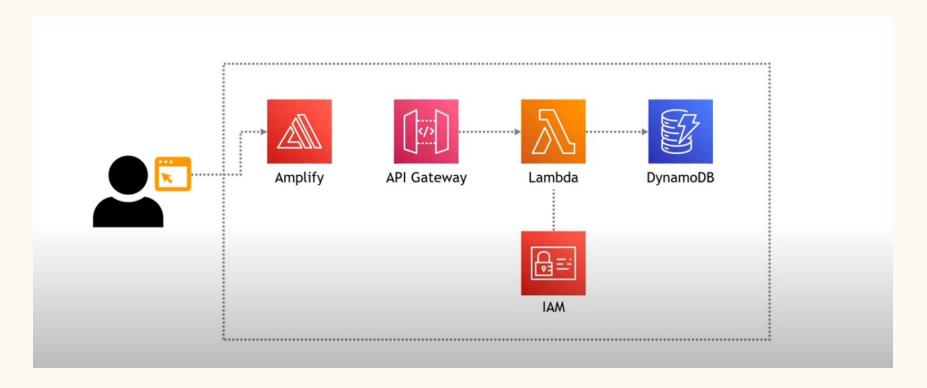
1. Problem Definition

- To deploy a responsive webapp (SolveIt) on AWS using Amplify
- SolveIt will perform some mathematical calculations and return the solution in form of a response

2. Objectives

- Deploy SolveIt using Amplify
- Use Lambda Functions to perform the operations and manage event
- Use DynamoDB to store the solutions of the performed operations
- Use API Gateway to send request and receive response between webapp and database

3. Design



4. AWS services used:

- Amplify Deployment
- Lambda Function
- DynamoDB Database
- API Gateway

5. Amplify

AWS Amplify is a complete solution that lets frontend web and mobile developers easily build, ship, and host full-stack applications on AWS.

Developer can either upload project or build project with Amplify.

Amplify supports almost all frameworks and languages used for developing projects

6. Lambda Function

AWS Lambda is an event-driven, serverless computing platform provided by Amazon as a part of Amazon Web Services. It is a computing service that runs code in response to events and automatically manages the computing resources required by that code.

7. DynamoDB

Amazon DynamoDB is a fully managed proprietary NoSQL database service that supports key—value and document data structures and is offered by Amazon as part of the Amazon Web Services portfolio.

8. API Gateway

Amazon API Gateway is an AWS service for creating, publishing, maintaining, monitoring, and securing REST, HTTP, and WebSocket APIs at any scale. API developers can create APIs that access AWS or other web services, as well as data stored in the AWS Cloud

10. Conclusion

Thus we have deployed our simple responsive webapp on AWS Cloud and used variety of AWS cloud services. AWS has a very user friendly interface and provides wide range of functionalities for the developer to explore.