**Capstone 3:**

**[Build a serverless web application using Amplify, Cognito, API Gateway, Lambda & DynamoDB](https://aws.amazon.com/getting-started/hands-on/build-serverless-web-app-lambda-apigateway-s3-dynamodb-cognito/" \o "" \t "_blank)**

* Architecture diagram

Timeline

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-*AWS Amplify :* is a set of tools/services which will help front end web application to build full stack application. Here it will help in continuous development and hosting static web resources including HTML,CSS,JAVA Script and image files which will be loaded to User’s browser.

*Amazon Cognito :* it will provide user management and authentication functions to secure backend API

*Amazon API Gateway, AWS Lambda*

: JavaScript executed in the browser sends and receives data from a public backend API built using Lambda and API Gateway

*Amazon DynamoDB :* DynamoDB provides a persistence layer where data can be stored by the API's Lambda function

Implementation Screenshot with brief description for every screenshot.

1. **Host a Static Website :**
2. *Manage the Source code through AWS Code Commit :*

Step1 : Create a Git Repository :

* **Create codecommit repository** :

Graphical user interface, text, application, email

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* **Create Git credentials for HTTPS connections to CodeCommit**

Graphical user interface, text, application, email, website

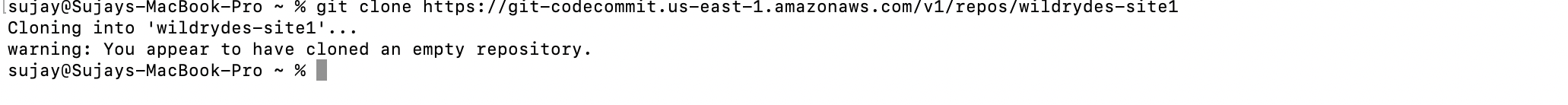
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## **Connect to the CodeCommit console and clone the repository**

Graphical user interface, text, application, email

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* **Clone the repository in Git**



Step 2: Populate Git Repository

Commit the files to your Git service

Letter

Description automatically generated with medium confidence

Step 3 :Enable Web Hosting with AWS Amplify Console :

Graphical user interface, text, application

Description automatically generated

1. Manage User thru Cognito :
2. Build a serverless Backend :
3. Deploy RESTFUL API :

Cost Analysis of the implemented Solution – Assume your solution is used by 1000 users for a month, and give monthly billing estimates.

Lessons & Observations