AWSomeday Technical Document – Team Mars

Contents

[*1.* *Proposed Solution for problem statement* 2](#_Toc16188246)

[*2.* *Flow Diagram* 3](#_Toc16188247)

[3. Technical Flow Diagram 4](#_Toc16188248)

[4. Technical Stack 5](#_Toc16188249)

[5. Effort Estimated with Project Plan 5](#_Toc16188250)

# Proposed Solution for problem statement

* UI to be deployed in AWS S3 with appropriate privileges to access S3 bucket through bucket policy.
* Lambda will be used to do computing logic which can be accessed through an API.
* Lambda & API gateway will be deployed using AWS in built CI/CD mechanism.
* Lambda will read data from Dynamo DB, and prepare the necessary data into JSON format which will be used to render the graphs.
* Based on the data, required graphs will be displayed in an html file using JavaScript libraries that help to create graphs.
* Dynamo DB will be placed in a private subnet inside custom VPC which can be accessed only by the lambda function.
* Lambda will validate the user authentication before fetching value from DB.
* Cloud Watch will be used for monitoring and logging.
* Regular DB backup will be done.

# Flow Diagram

Login

Authentication

API

Compute

Results in Http Page

Error Message

Failed

Success

# Technical Flow Diagram

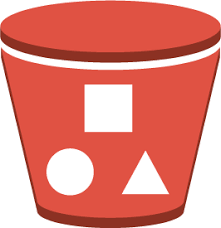
API(AWS)

Lamda

**CI/CD**

Browser

User



S3



Dynamo DB

# Technical Stack

* Node Js
* Java 8
* Maven 3.6.1
* Tortoise git&Git
* Tomcat 9.0.22
* Docker
* Jenkins
* Visual Studio
* Npm
* DynamoDB / MySQL 8.0.17

# Effort Estimated with Project Plan

|  |  |
| --- | --- |
| Stages | Effort (In Hrs) |
| Data migration to AWS | 1 |
| Build and deployment | 2 |
| Testing | 1 |