Capstone Project Weekly Progress Report

Project Title	MEALBUDDY
Group Name	GROUP_G
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Reporting Week	15 JUNE 2020 - 21 JUNE 2020
Faculty Supervisor	WILLIAM POURMAJIDI

1. Tasks Outlined in Previous Weekly Progress Report

- **Create API Gateway for connecting UI with backend and work with api client.**
- **Create a Lambda function named 'LF1' which handles three main intents namely greeting intent,dining suggestion intent and thank you intent from Lex.**

2. Progress Made in Reporting Week

Category	Component	Purpose	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Frontend	JS & AWS SDK	To setup UI												
	AWS S3	To host the frontend												
	AWS Congito	For authentication												
Backend	AWS ElasticSearch Service	To quickly get restaurant ids based on the user preferences of cuisine collected												

		from SQS												
	AWS SQS	To store user requests on a first-come bases												
	AWS SNS	To send restaurant suggestions to users through SMS												
	DynamoDB	To store the restaurant data collected using Yelp API												
	Lambda	To send data from the frontend to API and API to Lex, validation, collecting restaurant data, sending suggestions using SNS.												
Chatbot	**AWS Lex**	To create bot												
	Yelp API	To get suggestions for food												
	AWS API Gateway	To set up the API												
		Development												
		Unit and Integration Testing												
		Full System Testing												

- **Tried to create API gateway by using the API/Swagger specification. Tried to import the swagger yaml file by following the steps mentioned in https://docs.aws.amazon.com/apigateway/latest/developerguide/api-gateway-import-api.html**
- **Generated an SDK for API Gateway, which you can use in your frontend. It will take care of calling your API, as well as session signing the API calls.**
- **Amazon API Gateway is a fully managed service that makes it easy for developers to create, publish, maintain, monitor, and secure APIs at any scale. APIs act as the "front door" for applications to access data, business logic, or functionality from your backend services. Using API Gateway, you can create RESTful APIs and WebSocket APIs that enable real-time two-way**

communication applications. API Gateway supports containerized and serverless workloads, as well as web applications.

- Created a Lambda function named 'LF1' which handles three main intents namely greeting intent,dining suggestion intent and thank you intent from Lex. Added validation for the input json data (like phone number) in the python code. Tested the intents with three different test events (different json input).

3. Difficulties Encountered in Reporting Week

- Trouble while connecting UI (aws api client) with aws apigateway due to CORS (CORS policy: Response to preflight request doesn't pass access control check: It does not have HTTP ok status). Had to keep the task at pending.
- Creating different Json input for LF1 was difficult . Issues due to incorrect Json format while triggering LF1
- While coding in LF1 using python, we encountered some runtime problems.
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4. Tasks to Be Completed in Next Week

- Will be solving CORS issue for api client and api gateway
- Creating SQS for receiving the messages from LF1.
- Connect lambda(LF1) to lex.
- Access data from lambda(LF1) through lex and vice versa
- Will be sharing a architecture diagram