A Project Report On

Voice Enabled Skill

Submitted in partial fulfillment of the requirement
for the award of the degree

MASTER OF COMPUTER APPLICATIONS
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Dilip Kukadiya (195223693018)

Internal Guide
MRS.Nootan Padia

Marwadi Education Foundation's Group of
Institutions (MEFGI)

Rajkot-Morbi Road, At & PO: Gauridad, Rajkot 360 003. Gujarat. India.

General Introduction

Enrollment Number	195223693018
Company Name	Openeyes Software Solutions
Exteranl Guide Name	Mihir Kagrana
Internal Guide Name	Nootan Padia
Location	Vadodara

<u>Synopsis</u>

I am creating the voice enabled skill in Alexa developer console using aws lambda service. In this skill I put the survey skill which Alexa ask question and stored in the database using MongoDB cloud database.

The survey code is already in flask code but I am using lambda so create the fresh new survey skill using full lambda funtions.

Project Description

OpenEyes' Survey is an innovative new tool used for providing customer feedback.

While using this product you can review and rate these companies with intuitive and easy to follow
surveys which allow you to save your progress or resume where you left off.

After visiting your favourite retail establishments you will receive an email notifying you of this exciting new opportunity to provide feedback. Simply open the skill and enter the pin number provided from your notification where you will be presented with a list of new and incomplete surveys your involved in.

can also use a surveyID found on your receipt to go straight to the survey. Just open the skill and say the surveyID to jump straight into the action!

If you want to stop receiving notifications of a certain survey or even categories of survey use the opt-out feature! For example at any point while using this skill state:
- "Opt Out of Restaurant surveys"
- "Opt Out of Laptop surveys"

If you want to opt back in to a certain survey or category of surveys us the opt-in feature! To opt back in simply state:
- "Opt In to Restaurant surveys"
- "Opt in to Laptop surveys"

To reset the user experience at any point while using the skill, simply state:
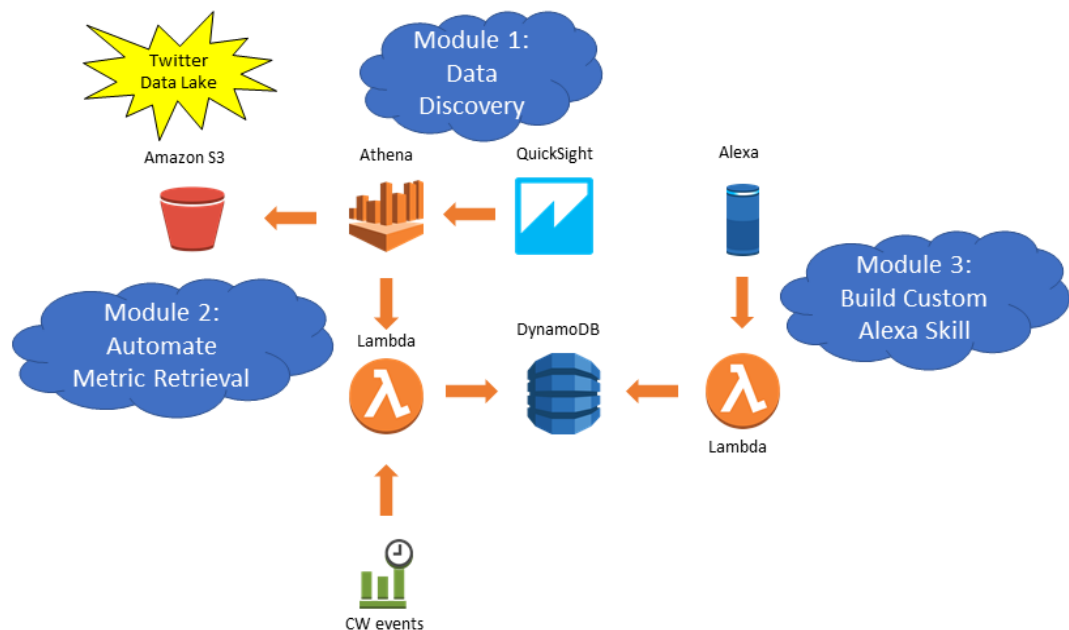- "Home"

To get more help at any point while using the skill, simply state:
- "Help"

Thank you for using OpenEyes' Surveys, the assessments you give will provide invaluable information and help improve the customer experience at your favourite retail locations.
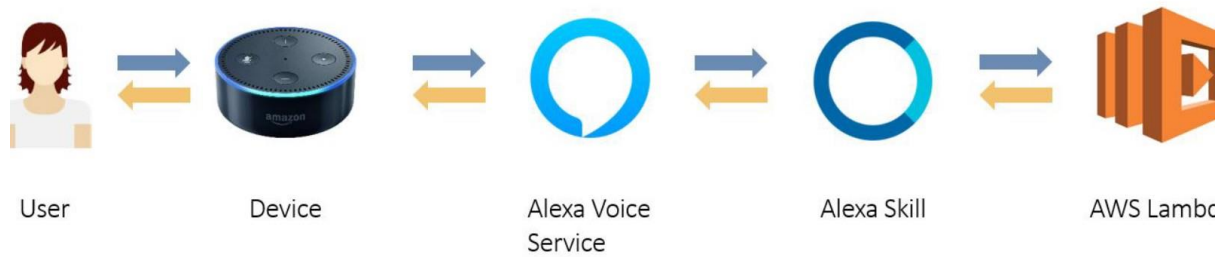
Modules in Alexa Skill

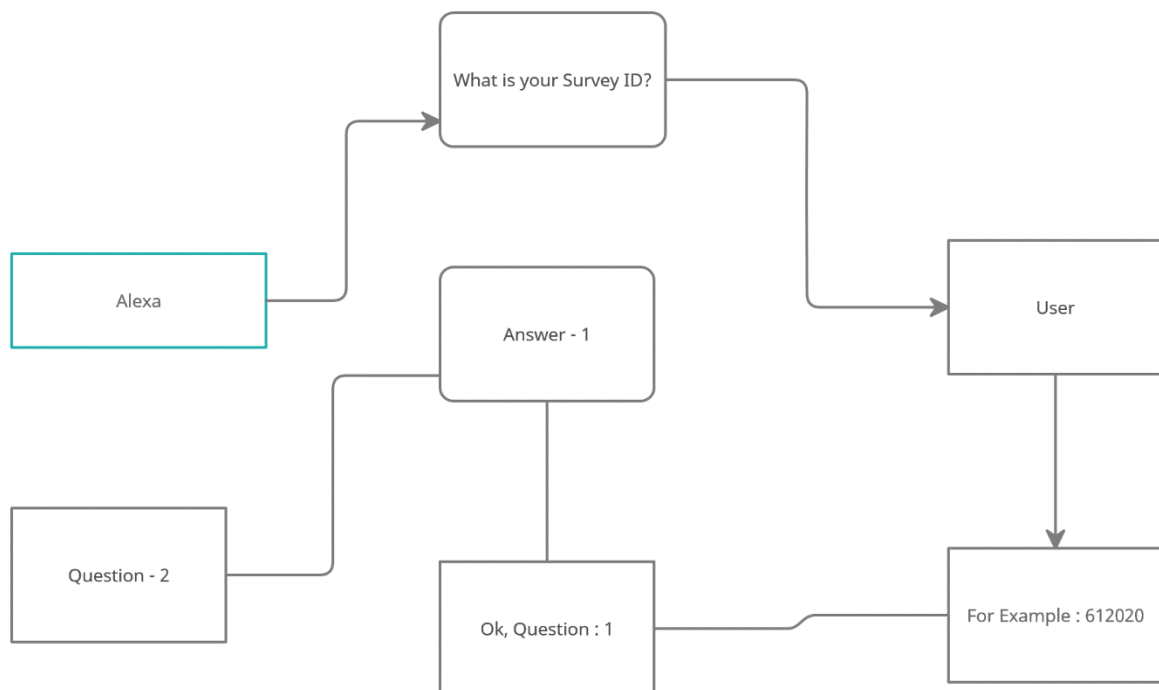There Are 3 modules in Alexa voice skill given below.

1. **Data Discovery:** Discovering the right business metric can be daunting without the right tooling and data unification. With Amazon QuickSight, you can analyze data through interactive visuals. QuickSight connects to Amazon Athena, which is a serverless interactive query service on Amazon S3 using standard SQL.

2. **Automate Query Retrieval**: Once the right metric is identified, you'll want a repeatable way to automate the metrics from your data lake and upsert into a data store for fast voice retrieval. AWS Lambda is a low-cost way to query your data lake and Amazon DynamoDB as a managed NoSQL data store is a great fit for querying data at low latency.

3. **Build a Voice-Enabled Alexa Skill:** Build your voice user interface (VUI) through the Alexa skills developer portal. The VUI will then be tied to your AWS backend to retrieve dynamic metrics.
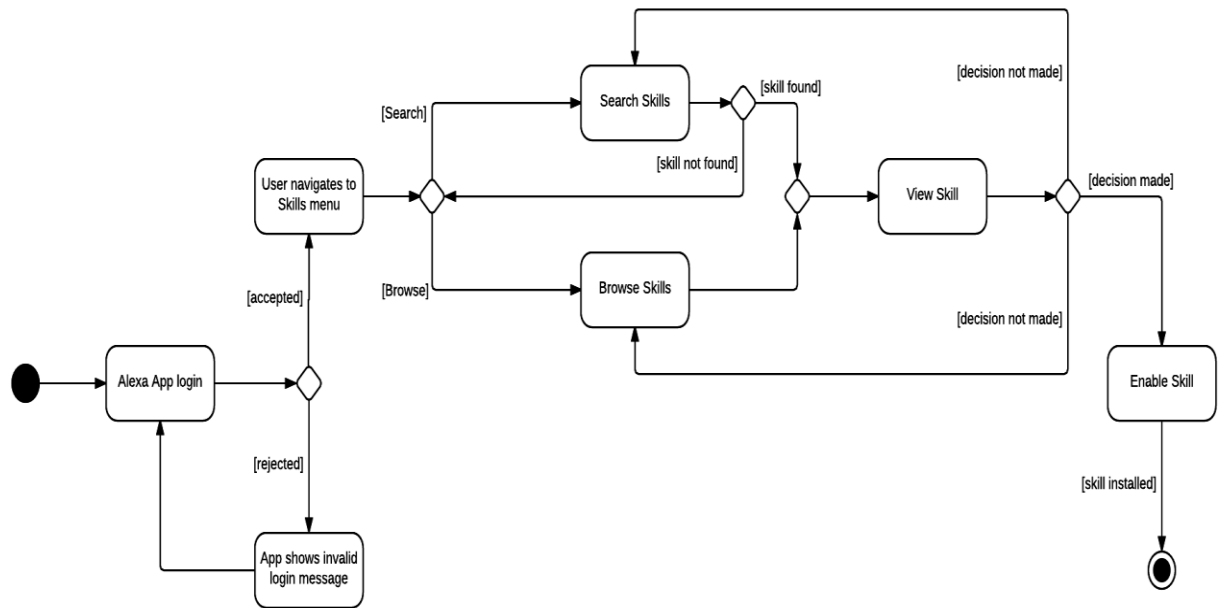
Pictorial Representation
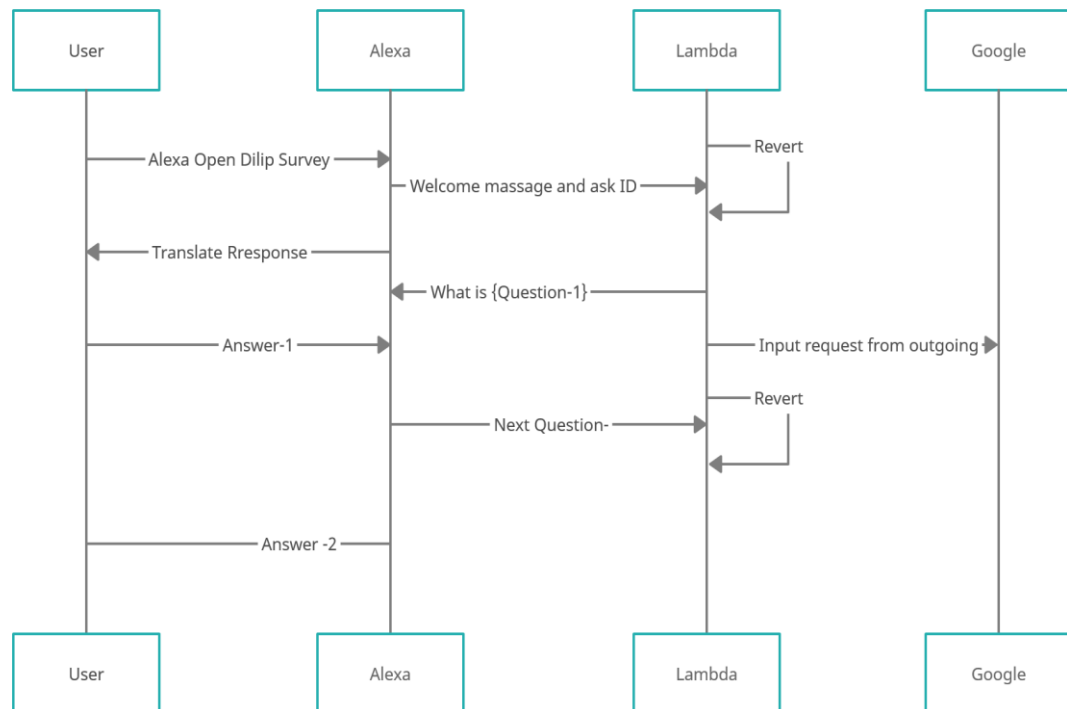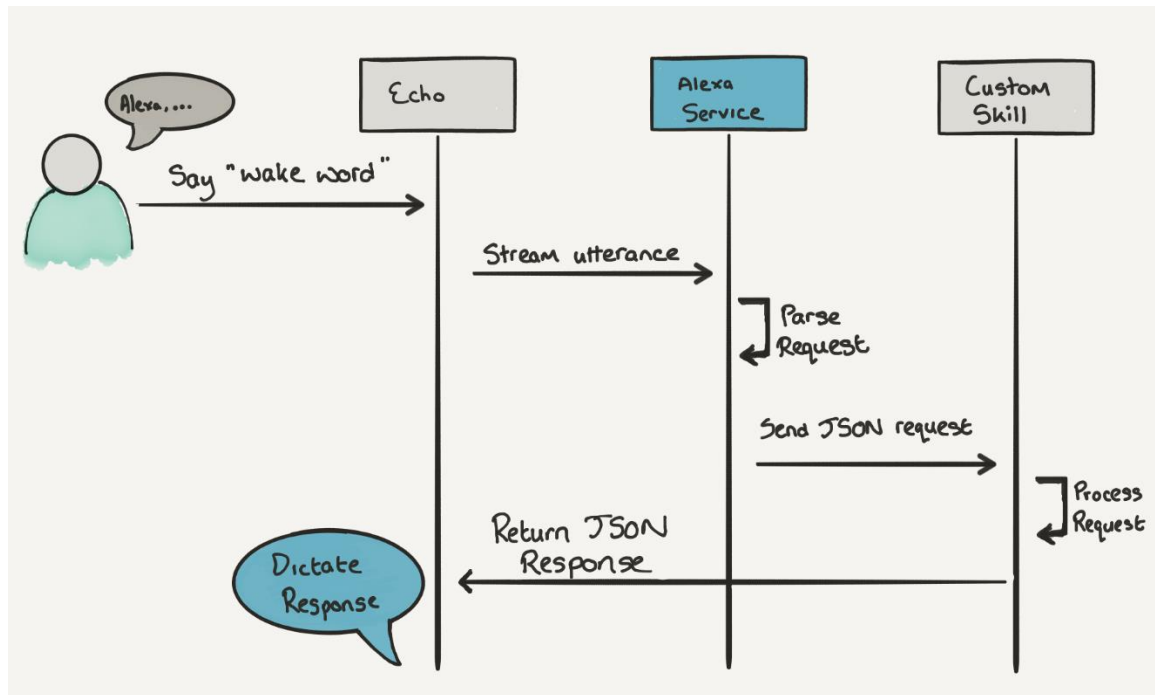
GUI of Alexa Device: -

| User | Device | Alexa Voice Service | Alexa Skill | AWS Lambda |

1.Data Flow Diagram: -

2. Activity Diagram: -

3.Sequential Diagram: -

4.Sequential Diagram-2: -

Database Structure

1. User Table: -
This table is used to store users

Column Name	Type	Constraints	Null?
UserId	String	Primary Key	No
FirstName	String		No
LastName	String		No
EmailAddress	String		No
Username	String		No
Password	String		No
CountryCodeIdMobile	Int64		Yes
ForgetPasswordCode	String		Yes
Profile	String		No
DisplayName	String		No
IsChecked	Boolean		No
IsActive	Binary		No
CreatedBy	String	FK-tblUser (UserId)	No
CreatedOn	Timestamp		No
UpdatedBy	String	FK-tblUser (UserId)	Yes
UpdatedOn	Timestamp		Yes

2. OpenSurvey Table: -
This table is used to store survey of OpenEyes

Column Name	Type	Constraints	Null?
SurveyId	String	Primary Key	No
Name	String		No
EmailId	String		No
Ratings	BSONSymbol		No
Review	String		No
SurveyStartDate	Timestamp		Yes
SurveyEndDate	Timestamp		Yes
IsChecked	Boolean		No
IsActive	Binary		No
CreatedBy	String	FK-tblUser (UserId)	No
CreatedOn	Timestamp		No
UpdatedBy	String	FK-tblUser (UserId)	Yes
UpdatedOn	Timestamp		Yes

3. Incomplete Survey Table: -
   This table is used to store incomplete survey

Column Name	Type	Constraints	Null?
IncompleteId	String	Primary Key	No
UserId	String	Primary Key	No
SurveyId	String	Primary Key	No
SurveyStartDate	Timestamp		No
SurveyEndDate	Timestamp		No
QuesNo	String		Yes
IsChecked	Boolean		No
IsActive	Binary		No
CreatedBy	String	FK-tblUser (UserId)	No
CreatedOn	Timestamp		No
UpdatedBy	String	FK-tblUser (UserId)	Yes
UpdatedOn	Timestamp		Yes

4. Complete Survey Table: -
This table is used to store complete survey

Column Name	Type	Constraints	Null?
CompleteId	String	Primary Key	No
UserId	String	Primary Key	No
SurveyId	String	Primary Key	No
IsChecked	Boolean		No
IsActive	Binary		No
CreatedBy	String	FK-tblUser (UserId)	No
CreatedOn	Timestamp		No
UpdatedBy	String	FK-tblUser (UserId)	Yes
UpdatedOn	Timestamp		Yes

5. Questions Table: -
This table is used to store survey questions

Column Name	Type	Constraints	Null?
QuestionId	String	Primary Key	No
QuestionType	String		No
Questions	String		No
IsChecked	Boolean		No
IsActive	Binary		No
CreatedBy	String	FK-tblUser (UserId)	No
CreatedOn	Timestamp		No
UpdatedBy	String	FK-tblUser (UserId)	Yes
UpdatedOn	Timestamp		Yes

6. Answers Table: -
This table is used to store survey answers

Column Name	Type	Constraints	Null?
AnswerId	String	Primary Key	No
QuestionId	String	FK-tblQuestion (QuesId)	No
UserId	String	FK-tblUser (UserId)	No
SurveyId	String	FK-tblSurvey (SurveyId)	No
Answers	String		No

Thank You