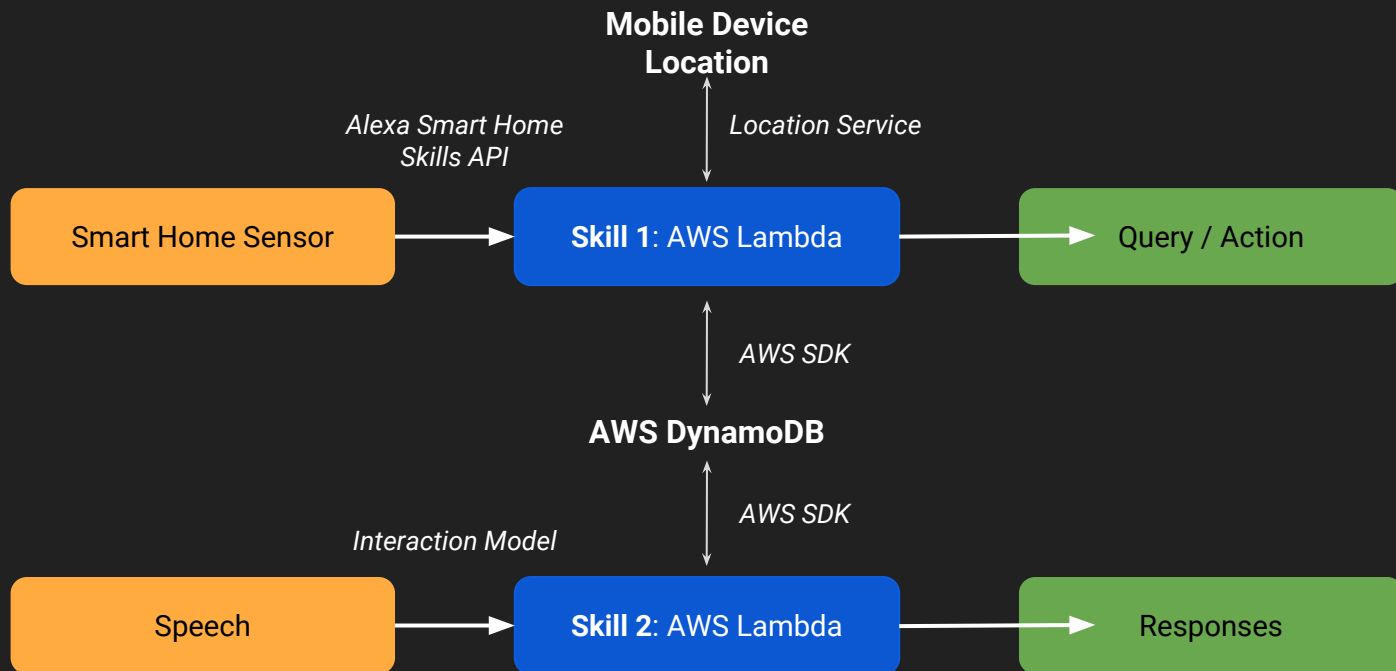# Aware Alexa

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# Project Overview

- *Goal*: Design an architecture for Alexa to be aware of its users, so that it can predict and perform action on behalf of the users

- Achieve this by collecting and utilizing

  - User preference, and location (GPS/Bluetooth/WiFi)

  - Smart home sensor data, etc.

- *Aim*: Create the architecture using AWS and Alexa Skill Kit

- *Aim*: Demonstrate the functionality of the architecture through examples

  - Greeting user when entering home and other idea

# Technical Approach



**Mobile Device Location**

*Alexa Smart Home Skills API*

*Location Service*

| Smart Home Sensor | → | **Skill 1**: AWS Lambda | → | Query / Action |

*AWS SDK*

**AWS DynamoDB**

*AWS SDK*

*Interaction Model*

| Speech | → | **Skill 2**: AWS Lambda | → | Responses |

# Initial Result

1.  Understand the workings of Alexa and Alexa Skills
2.  Discover and study important API and tools

    ○   [Alexa Smart Home API](#)

    ○   [Location Services for Alexa Skills](#)

    ○   AWS SDK & [DynamoDB](#)

3.  Create practice Alexa skills

4.  Study how to integrate Smart home sensors to work with Alexa

5.  *Next*: use "Welcome Home" as starting point to build the architecture