

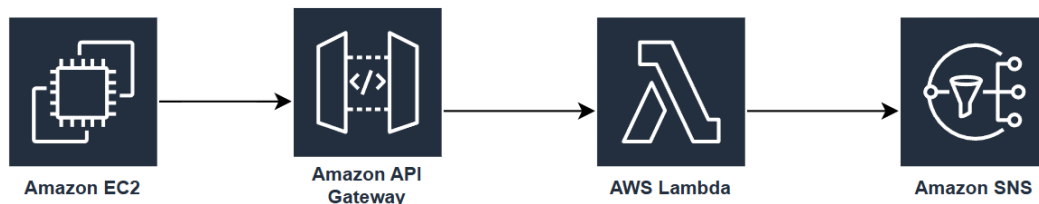
AWS Microservice Project Description

This project is a small-scale AWS-based microservice designed for a career application feature on a company website (e.g., www.examplecompany.com/careers). It utilizes four core AWS services: **EC2**, **API Gateway**, **Lambda**, and **SNS**.

- **EC2(Linux distribution)** hosts a lightweight **Flask** web server, serving a web page with a form containing four questions about the applicant's IT skills and professional experience.
- When the form is submitted, the data is sent through **API Gateway**, which acts as a secure entry point to the backend processing.
- **AWS Lambda** handles the backend logic—processing and validating the form input without the need for managing server infrastructure.
- After processing, Lambda triggers **SNS (Simple Notification Service)** to send an email notification with the form details to one or more HR recipients, based on the SNS configuration.

Roles of Each AWS Service:

- **EC2:** Hosts the front-end interface and handles the user-facing logic via Flask.
- **API Gateway:** Serves as the entry point for HTTP requests, securely routing form submissions to Lambda.
- **Lambda:** Provides scalable, serverless processing of form data, removing the need for dedicated backend servers.
- **SNS:** Ensures reliable and configurable email notifications to HR or other stakeholders.



Impact of AWS on Web Development:

By leveraging AWS, this microservice becomes **highly scalable**, **cost-efficient**, and **easy to maintain**. It reduces infrastructure overhead, enables modular service design, and ensures rapid response times. Such cloud-native architecture allows companies to build responsive and reliable application systems.