My Phonebook

A demonstration Project for Udacity Cloud DevOps Course

Intro

The demo is a result of putting into action the skills i have learnt during the 3 months of the Udacity Cloud DevOps challenge course. It implements a number of AWS concepts covered during the lectures taken as part of the challenge course.

The demo project is a basic web application with a Flask backend implementing a CRUD REST API for adding,updating,deleting records(phone numbers) from an Amazon DynamoDB database. The frontend is a React SPA.

AWS Concepts Covered

AWS CloudFormation - CloudFormation templates where used to deploy an EC2 into the default VPC. Security group that allows SSH and HTTP access to the EC2 instance also deployed.

SSH access to the EC2 instance required to install Python and Pip, Git . Flask and all other requirements for the backend installed on the EC2 instance.

AWS Boto3 installed into the EC2 Python environment. This is the glue between the Flask backend and the Amazon DynamoDB which is the datastore for the deployed application.

Further Improvements

- A more comprehensive cloudformation template that includes metadata to automate installation of all requirements for the app like Python and Flask during the EC2 deployment without manual SSH login.
- Automate the application deployment using AWS codepipelines
- More robust error handling for the Flask REST API handlers

Thanks!

Contact me:

Julius Kimuli
jkimuli@gmail.com
http://jkimuli.appspot.com