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Project-101 : Kittens Carousel Static Website deployed on AWS EC2 using Cloudformation

Description

Kittens Carousel is a static website application deployed with Apache Web Server on AWS Elastic Compute Cloud (EC2) Instance using AWS Cloudformation Service.

Problem Statement

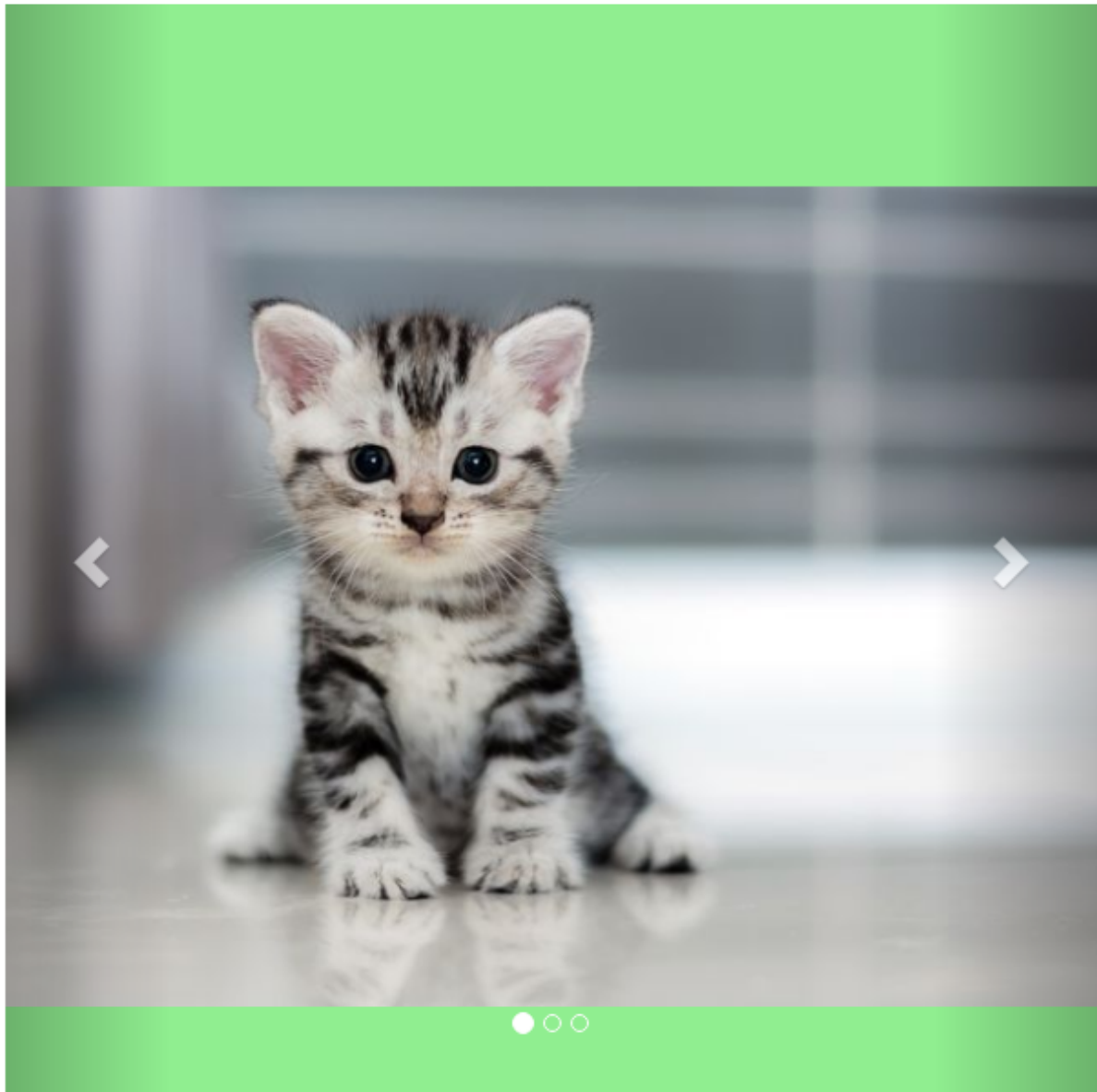
- Instance launched by Cloudformation should be tagged **Web Server of StackName**
- The Web Application should be accessible via web browser from anywhere.
- The Application files should be downloaded from Github repo and deployed on EC2 Instance using user data script within cloudformation template.
- Kittens Carousel Application Website URL should be given as output by Cloudformation Service, after the stack created.

Project Skeleton

```
101-kittens-carousel-static-website-ec2 (folder)
|
|----readme.md          # Given to the students (Definition of the project)
|----cfn-template.yml   # To be delivered by students (Cloudformation template)
|----static-web
|    |----index.html    # Given to the students (HTML file)
|    |----cat0.jpg      # Given to the students (image file)
|    |----cat1.jpg      # Given to the students (image file)
|    |----cat2.jpg      # Given to the students (image file)
```

Expected Outcome

Project: Student_Name's Kittens Carousel



*This static website is deployed by **Students Name** on AWS EC2 Instance using AWS Cloudformation Service.*

At the end of the project, following topics are to be covered;

- Apache Web Server Installation on Linux
- Static Website Deployment
- Bash scripting
- AWS EC2 Service
- AWS Security Groups Configuration
- AWS Cloudformation Service
- AWS Cloudformation Template Design
- Git & Github for Version Control System

At the end of the project, students will be able to;

- install Apache Web Server on Amazon Linux 2.
- improve bash scripting skills using **user data** section in Cloudformation to install and setup web application on EC2 Instance.
- configure AWS EC2 Instance and Security Groups.
- configure Cloudformation template to use AWS Resources.
- use AWS Cloudformation Service to launch stacks.
- use git commands (push, pull, commit, add etc.) and Github as Version Control System.

Steps to Solution

- Step 1: Download or clone project definition from **clarusway** repo on Github
- Step 2: Create project folder for local public repo on your pc
- Step 3: Prepare a cloudformation template to deploy your app on EC2 Instance

- Step 4: Push your application into your own public repo on Github
- Step 5: Deploy your application on AWS Cloud using Cloudformation template to showcase your app within your team.

Notes

- Customize the application by hard-coding your name instead of `student_name` within `index.html`.

Resources

- [AWS Cloudformation User Guide](#)