Week 5 Contribution - 21/3/21

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Assignment 1 – Pitch Presentation:

Contributed and completed the following slides:

- Project Scope
- User Needs & Requirements

Research:

GitHub Actions - What Are They?

GitHub Actions makes it easy to automate all your software workflows, with CI/CD. Build, test, and deploy your code right from GitHub. Make code reviews, branch management, and issue triaging work the way you want.

The main concept at the heart of GitHub actions is the workflow; this is done by creating a series of YAML files that contain a series of actions that determine our workflow in our repositories. These YAML files are stored in a special folder in the .github/workflows folder inside our repository.

GitHub Actions with AWS

When you push or merge into a specific branch (staging, master etc.) Github Actions will trigger CI Pipeline (Build & Test). If passed it will trigger CD Pipeline (Deployment). All of this are automated by Github Actions and AWS CodeDeploy.

What is Required:

- Launch EC2 Instance
- Create S3 Bucket
- Create IAM account
- Create IAM Role

Our Plan:

- 1. Create IAM Role for EC2 instance & CodeDeploy
- 2. Launch EC2 Instance for our application
- 3. Create S3 bucket for our application revision
- 4. Setup our project for CodeDeploy, PM2 and Github Workflows
- 5. Setup CodeDeploy
- 6. Create IAM account
- 7. Push code to Github, setup secrets key and test

Our Pipeline:

