SDEV 400 – Homework 4
Cloud9 Final Project

Overview:

In this homework, you will use AWS and the Cloud 9 environment to develop a simple yet unique and useful, Python menu driven application.

Assignment: Total 100 points, 17.5% of the overall class grade

Please get started early as this assignment will take you longer than you think.

Requirements:

For this assignment use your Cloud9 environment, to create a Python based interactive menu-driven application. The following components or functionality must be present in your application:

1. Uses at least one DynamoDB table
2. Uses at least one S3 bucket
3. Includes a Menu driven interface with at least 6 menu items.
4. Provides a user guide showing how to use the application, explains how the concept for your application was developed, and provides detailed testing for all components and functions used in your application

Other requirements:

- Your menu should check for user entry errors and be prompted for input again if needed
- Code must be written in Python
- Code must be written in the Cloud9 AWS environment provided
- Use boto3 as the main library using the AWS service
- Include code comments and document with who did what
- Test to make sure all functions, branches and functionality works

Some possible application thoughts include but are not limited to:

 - Game application (Q&A quiz, cards, rock-paper-scissors ...) with a leader board saved in DynamoDB

 - Stock market buy/sell tool

 - Weather app providing 10-day forecasts for user selected regions

 - Movie/Game/other e-commerce app for buying/trading/selling products

 - A wonderful, unique creation – (recommended)

Some tips:

1. Keep it simple - This could escalate to a month long project - don't let it.
2. Get started early.

Grading:

1. (80 points) Successfully complete a Python Code Project fulfilling all technical requirements including:

- Uses at least one DynamoDB table
- Uses at least one S3 bucket
- Includes a Menu driven interface with at least 6 menu items.
- Provides a user guide showing how to use the application, explains how the concept for your application was developed, and provides detailed testing for all components and functions used in your application
- Your menu should check for user entry errors and ask again if need be
- Code must be written in Python
- Code must be written in the shared collaborative environment provided
- Use boto3 as the main library using the AWS service

2. (20 points) Application is unique. Comment your code and document to include a test plan and simple user's guide.

Deliverables include:

1. All source code
2. All Word (or PDF) documentation.

Any submissions that do not represent work originating from the student will be submitted to the Dean's office and evaluated for possible academic integrity violations and sanctions.