

Assignment #3: AWS Core Services

In this Assignment, you will use **AWS core services** and learn to manage storage for your documents and data, create IAM roles, create Lambda functions, a serverless compute service that enables you to run code without managing servers, create Glue Crawlers to auto-load data into tables, and use Athena to query the tables.

The workflow consists of:

- **Creating Amazon S3 storage for the data.**
- **Create IAM roles.**
- **Create a Lambda function to auto-process the raw dataset.**
- **Use Glue Crawler to crawl the processed dataset.**
- **Query the crawled data using the Athena Trino SQL editor.**
- **Use EC2 to host a webpage to display the results of Athena Queries.**

GitHub Repo: <https://github.com/ITCS6190-Fall2025/ITCS-6190-Assignment-3.git>

!!! Submission Guidelines !!!

Submit:

- Your final README with explanations, approach, and a screenshot of the process after each significant step, following the instructions in each section of the README.
 - Amazon S3 Bucket Structure screenshot after the explanation in the readme.
 - A screenshot showing all IAM roles created.
 - A screenshot showing the created Lambda function.
 - A screenshot showing the configured Trigger.
 - A screenshot of the processed CSV file in the processed folder on S3.
 - A screenshot showing the Crawler CloudWatch.
 - A screenshot of the Athena query CSV files in the S3 enriched folder.
 - A screenshot showing the final Webpage result.