**TSS01:** As a product owner, I want to design the end-end model to detect women/minority owned businesses.

Sub tasks

1. Analyze problem statement
2. Create design document, identify libraries available
3. Feasibility study

**TSS02:** As a product owner, I want to design and develop the automation process to search for the organization in the web and collect the data for analysis.

Sub Task:

1. Web crawling using python open-source libraries.
2. Process the collected information and do the data segmentation.
3. Cleaning and processing the data for gender and minority diversity.

**TSS03:** As a product owner, I want design and develop the application to identify gender and minority diversity.

Sub Task:

1. Develop and train the model to identify the gender diversity using TensorFlow model.
2. Develop a process to identify the minority diversity.
3. Cleaning and pre-processing the data and derive the required data elements.

**TSS04:** As a developer, I want to implement the CI/CD process for the applications developed for identifying diversity.

1. Code check-in to GitHub public Repo.
2. Integrate the Pytest for unit test using GitHub Actions.
3. Create the CI/CD pipeline to build Docker image and deploy to Docker Hub using GitHub actions.
4. Pull the Docker image to Azure Container Instance to executes the process.

**TSS05:** As a developer, I want to orchestrate the end-end process on Azure Cloud.

1. Deploy and execute the end-end pipeline using Azure container.
2. Deploy and execute the pipeline using Azure Databricks and Data Factory.

**TSS06:** As a developer, I want to perform the validation test to verify the derived or resultant data.

1. Verify the company pages and match the output results.
2. Verify the company leaders on LinkedIn and other sources.
3. Verify the leaders on community pages for the diversity identification.