- **Contents:**
  - GitHub link
  - Read_me file
  - Export of Jupyter notebooks
  - Source code
  - Screenshots.
- **Step by Step Execution of the Assessment:**
  - **Understanding the project requirements:**
    - Created a new project folder titled “2023_04_10_Assessment” on the desktop.
    - Created the following folder structure inside the project folder:
    - Project_Specifications
    - Read Me
    - Screenshots
    - SRC - to host the source code
    - Downloaded the assessment specification files to the Project_Specifications folder.
    - Read the instructions provided in the assignment.
- **Setting up the development environment:**
    - Decided to use Python 3 (based on Anaconda Distribution) for development.
    - Installed Anaconda distribution on the iMac system from https://www.anaconda.com/.
    - Checked Python Version using “python --version” command on terminal. Python 3.9.13 was installed.
    - Used the ‘jupyter notebook’ command on the terminal to start a new Jupiter notebook in the project folder.
    - Started a new Python 3 (ipykernel) in the project folder using the user interface.
    - Installed Docker desktop from the Docker website on the macOS system with Intel chip.
    - Signed up for a Docker hub account.
    - Logged into Docker Hub account using the command line.
    - Downloaded MySQL Docker image using the command: “docker run --name assessment-mysql -p 3306:3306 -e MYSQL_ROOT_PASSWORD=my-secret-pw -d mysql”.
    - Tested the connection, and the connection request was successful.
    - Downloaded MySQL Workbench.
    - Created a connection using the following credentials:
    - Name: assessment-mysql (name of the connection)
    - Password: MYSQL_ROOT_PASSWORD=my-secret-pw (password for the connection) as used while creating the Docker MySQL image.
    - Created a schema in the connection.
    - Tested the schema.
    - Installed MySQL Connector using the command: “pip install mysql-connector-python”.

    - Made a copy of fastfood.csv in the SRC folder.
    - Initialized a Git Repository using the ‘git init’ command.
- **Execution of the project:**
    - The project was almost entirely completed on Jupyter Notebooks and MySQL Workbench.
    - All the tasks were completed successfully.
- **Challenges:**
    - The Docker image for MySQL downloaded from Docker Hub was corrupt. It was not able to run certain queries. Hence, the Docker was discarded and the development environment was changed from MacOS to Windows.
    - The question on classification of food items was somewhat open-ended. An assumption was made that all items less than 700 calories will be considered side dishes and the rest will be classified based on their contents.
    - PASSWORD for ‘root’ user in mysql was changed to ‘password’.