Phase:1

1.Define problem statement

The new york Airbnb dataset a well-known dataset in the field of ML and data analysis contains measurements of different types of room. This project aims to perform an in depth exploratory data analysis and statistical analysis of the new york Airbnb dataset to gain insight into the characteristics of the room, and price, logtitude and latitude room type neighbourhood make meaningful conclusion

2. New york Airbnb dataset

Create project plan and product backlog

* Creating a project plan and product backlog for an analysis of the New York Airbnb dataset involves defining tasks, goals, and priorities. simplified example:
* Project Plan:

1. Project Initiation:

* - Define the scope of the project.
* - Assemble the project team.

2. Data Collection and Preparation:

* - Acquire the New York Airbnb dataset.
* - Clean and preprocess the data.
* - Explore the data to gain insights.

3. Data Analysis:

* - Identify key factors influencing Airbnb rental prices.
* - Develop predictive models for price estimation.
* - Validate and fine-tune models.

4. Product Development:

* - Develop a user interface or application for end-users.
* - Implement the predictive model within the application.

5. Testing:

* - Conduct testing to ensure the application's functionality and model accuracy.

6. Deployment:

* - Deploy the application or solution for use.

7. Documentation:

* - Document the project for future reference.

8. Training and Support:

* - Train users on how to use the application.
* - Provide ongoing support.
* Product Backlog:
* User Stories:

1. As a user, I want to access the New York Airbnb dataset for analysis.

2. As a data scientist, I want to clean and preprocess the dataset to remove inconsistencies.

3. As a data analyst, I want to explore the dataset to understand its characteristics.

4. As a data scientist, I want to identify key factors affecting Airbnb rental prices in New York.

5. As a developer, I want to build a predictive model for estimating rental prices.

6. As a tester, I want to validate the model's accuracy and fine-tune it.

7. As a developer, I want to create a user interface for users to interact with the model.

8. As a developer, I want to implement the model within the application.

9. As a tester, I want to test the application's functionality.

10. As a project manager, I want to deploy the application for public use.

11. As a documenter, I want to document the project details and results.

12. As a trainer, I want to provide training for users on using the application.

13. As a support team member, I want to offer ongoing support to users.

3. Creation of git repository submission (word document)

* Creating a Git repository and submitting a Word document through Git involves several steps. Here's a simplified guide:

1. Create a Git Repository:

* - Open a Git client (e.g., Git Bash, Git GUI, GitHub Desktop).
* - Navigate to the directory where you want to create your repository.
* - Run the following commands to create a Git repository:
* git init

2. Add and Commit Your Project:

* - Place your project files, including the Word document, in the repository directory.
* - Use the following commands to add and commit your changes:
* git add .
* git commit -m "Initial commit"

3. Create a Remote Repository:

* - Create a remote repository on a platform like GitHub, GitLab, or Bitbucket.
* - Follow the platform-specific instructions for creating a new repository.

4. Connect Local and Remote Repositories:

* - Link your local repository to the remote one by adding a remote URL:
* git remote add origin <remote-repo-URL>

5. Push Your Local Repository to the Remote:

* - Push your local repository to the remote one:
* git push -u origin master
* Replace `master` with the appropriate branch name if you're using a different branch.

6. Submission in Word Document:

* - Create a Word document with your project details, including a description, project plan, and product backlog.
* - Save the Word document in your local repository.

7. Commit and Push the Word Document:

* - Add the Word document to your repository:
* git add your-document.docx
* git commit -m "Add project documentation"
* - Push the changes to your remote repository:
* git push

8. Submission Confirmation:

* - Once your changes are pushed to the remote repository, you can provide the remote repository URL as your submission.
* Your Word document and project details will be accessible through the remote Git repository. Ensure that your document is well-organized and contains all the necessary project information. Share the remote repository link with your intended recipients for submission confirmation.