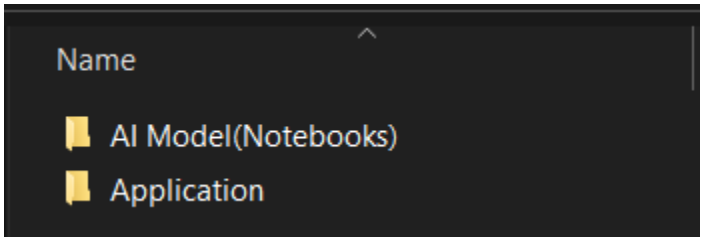
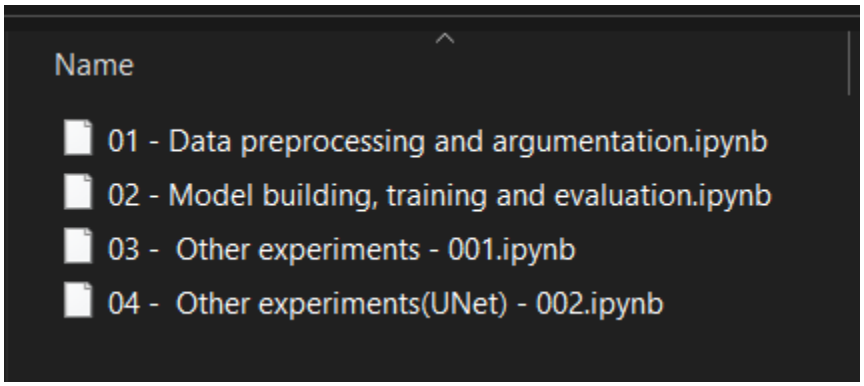
1 Project directory structure.



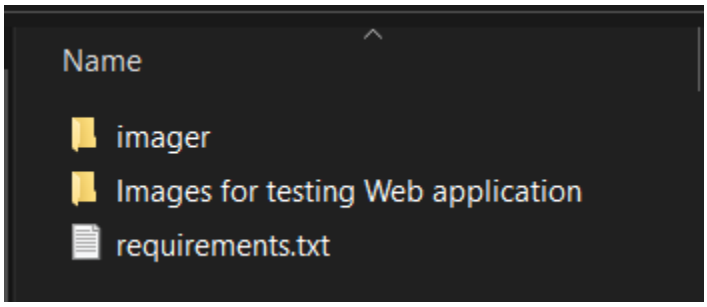
The project is divided into two sub-folders. One contains notebooks that were used during training of restoration model.

2 AI Model(Notebooks)



Inside this folder we have 4 notebooks. The purpose of each notebook is clearly intended by their name. You can use Jupyter notebook to view them or use google colab to view them.

3 Application



The first **imager** directory contains application code. This app was written with Django framework.

The second directory contains images that can be used to test the web application.

The third file i.e. **requirements.txt** contains all the dependencies require to run the application.

4 Running the application

4.1 Requirements

1. Python 3.7 or above.

4.2 Steps

Step 1: Setting up the environment

We need some python libraries to be installed before running this application. For that we will create virtual environment where we will install all the dependencies. To do that we will download virtualenv package by running the following command in your terminal. The terminal should be opened in the same directory where the file **requirements.txt** is located.

```
pip install --user virtualenv
```

After installing this package we need to create virtual environment with the following command inside the project root directory.

```
python -m venv env
```

Step 2: Launching environment

On windows platform:

```
.\env\Scripts\activate
```

On Linux:

```
source env/bin/activate
```

Step 3: Installing dependencies

Now, we will install all the dependencies for this project using the following command.

```
pip install -r requirements.txt
```

Step 4: Running the project

Open the imager directory using `cd imager` or `chdir imager` and run the following command.

```
python manage.py runserver
```

Now, open the URL link provided on the terminal using browser and use the application. For restoring image it is mandatory to sign in.