

Steps to run the application from terminal: (Read through the entire document before beginning any setup)...

1. Unzip the content into a separate folder.

You will see a 2 files and one folder

- main.py - file
- Saved\_model\_rf\_clf.pkl - file
- Templates folder - consisting of home.html

2. Navigate to the folder where these files are unzipped and open command-prompt/terminal from here.
3. Install “flask” by using “**pip install flask**”. You can check if the install was successful by using the command “**flask --version**”. You will be able to see a output as follows:

```
C:\Windows\System32\cmd.exe - flask run
Microsoft Windows [Version 10.0.19043.1348]
(c) Microsoft Corporation. All rights reserved.

D:\IIT Bombay\Semester 1\Foundations of Machine Learning\FML GUI>flask --version
Python 3.9.6
Flask 2.0.1
Werkzeug 2.0.1
```

4. Set the “**FLASK\_APP**” environment variable by using the following command:  
“**set FLASK\_APP=main.py**”

```
Werkzeug 2.0.1

D:\IIT Bombay\Semester 1\Foundations of Machine Learning\FML GUI>set FLASK_APP=main.py
```

**Note:** the above command is for windows machines. For linux based systems you can use “export FLASK\_APP=main.py” . (or) google “How to change env variables for your OS”

5. You can run the app now by using the command:  
“**flask run**” after running this command you will get a link in the terminal where you app is hosted. Copy and paste it in your preferred browser.

```
D:\IIT Bombay\Semester 1\Foundations of Machine Learning\FML GUI>flask run
* Serving Flask app 'main.py' (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
127.0.0.1 - - [22/Nov/2021 16:13:43] "GET / HTTP/1.1" 200 -
```

### Potential Errors:

1. If you are running the app for the first time when you do “**flask run**” you might encounter some error stating:  
<No module named ‘flask\_wtf’> (or) something in those lines. This is because we need to install some packages before running the app.

```

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* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
Usage: flask run [OPTIONS]
Try 'flask run --help' for help.

Error: While importing 'main', an ImportError was raised:

Traceback (most recent call last):
  File "c:\users\ayush\appdata\local\programs\python\python39\lib\site-packages\flask\cli.py", line 256, in locate_app
    __import__(module_name)
  File "D:\IIT Bombay\Semester 1\Foundations of Machine Learning\FML GUI\main.py", line 2, in <module>
    from flask_wtf import FlaskForm
ModuleNotFoundError: No module named 'flask_wtf'

```

2. To resolve such errors simply run “**pip install flask\_wtf**” and then run the “flask run” command.
3. Packages required for the app to run are:
  - flask - pip install flask
  - flask\_wtf - pip install flask\_wtf
  - wtfforms - pip install wtfforms
  - numpy - pip install numpy
  - joblib - pip install joblib
  - pandas - pip install pandas
  - sklearn - pip install sklearn

You can easily install all of these running “**pip install <packagename>**” from the command prompt. (Suggested: Do all these installations within the project folder). You can either install all of them before running “flask run”. Or alternatively, a better approach can be to run the “flask run” multiple times and whenever an error pops up simply resolve it. Once all the errors are resolved your application will be deployed.