

# Getting started with django

# Install an IDE

We can use

- pycharm or
- Visual Studio Code

# Working with Pycharm

Download and the pycharm ide in your computer from the below link –

<https://www.jetbrains.com/pycharm/download/#section=windows>

# Pycharm Additions

There are three additions in pycharm –

- Community edition
- Professional edition
- Education Edition

Community and education additions are free.

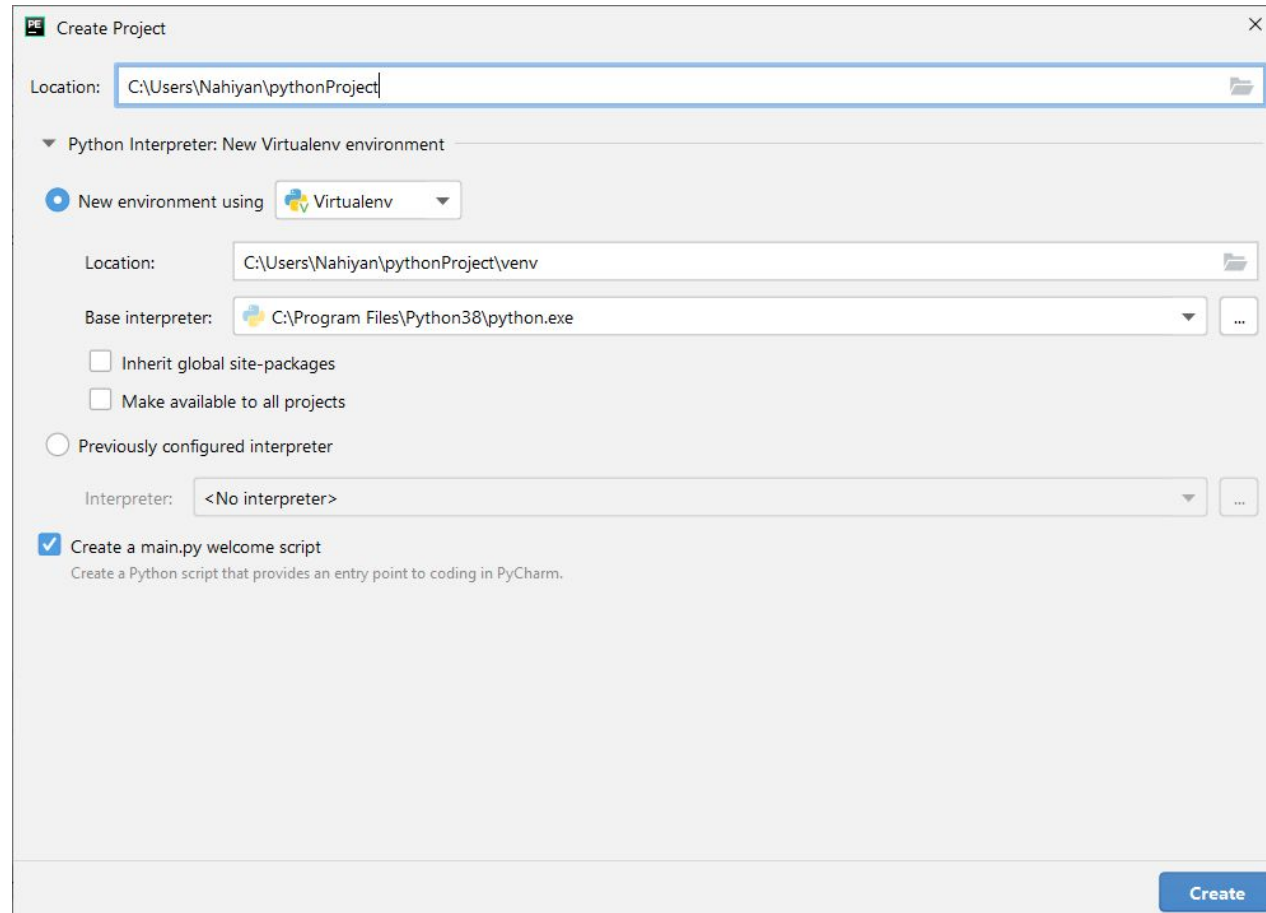
Professional addition requires subscription fee.

We can download the Professional addition using our academic email account.

# Pycharm Community addition

- For general purpose we will see everything from a community addition view

# Creating a project



The image shows the 'Create Project' dialog in PyCharm. The 'Location' field is set to 'C:\Users\Nahiyar\pythonProject'. Under the 'Python Interpreter' section, the 'New Virtualenv environment' option is selected. The 'New environment using' dropdown is set to 'Virtualenv'. The 'Location' for the virtual environment is 'C:\Users\Nahiyar\pythonProject\venv'. The 'Base interpreter' is 'C:\Program Files\Python38\python.exe'. The options 'Inherit global site-packages' and 'Make available to all projects' are unchecked. The 'Previously configured interpreter' option is also unchecked. The 'Interpreter' dropdown is set to '<No interpreter>'. The 'Create a main.py welcome script' checkbox is checked. A 'Create' button is at the bottom right.

Create Project

Location: C:\Users\Nahiyar\pythonProject

Python Interpreter: New Virtualenv environment

New environment using Virtualenv

Location: C:\Users\Nahiyar\pythonProject\venv

Base interpreter: C:\Program Files\Python38\python.exe

☐ Inherit global site-packages

☐ Make available to all projects

☐ Previously configured interpreter

Interpreter: <No interpreter>

☒ Create a main.py welcome script  
Create a Python script that provides an entry point to coding in PyCharm.

Create

# Installing django

Open the terminal in in your Django project and run the following commands

```
$ pip install django
```

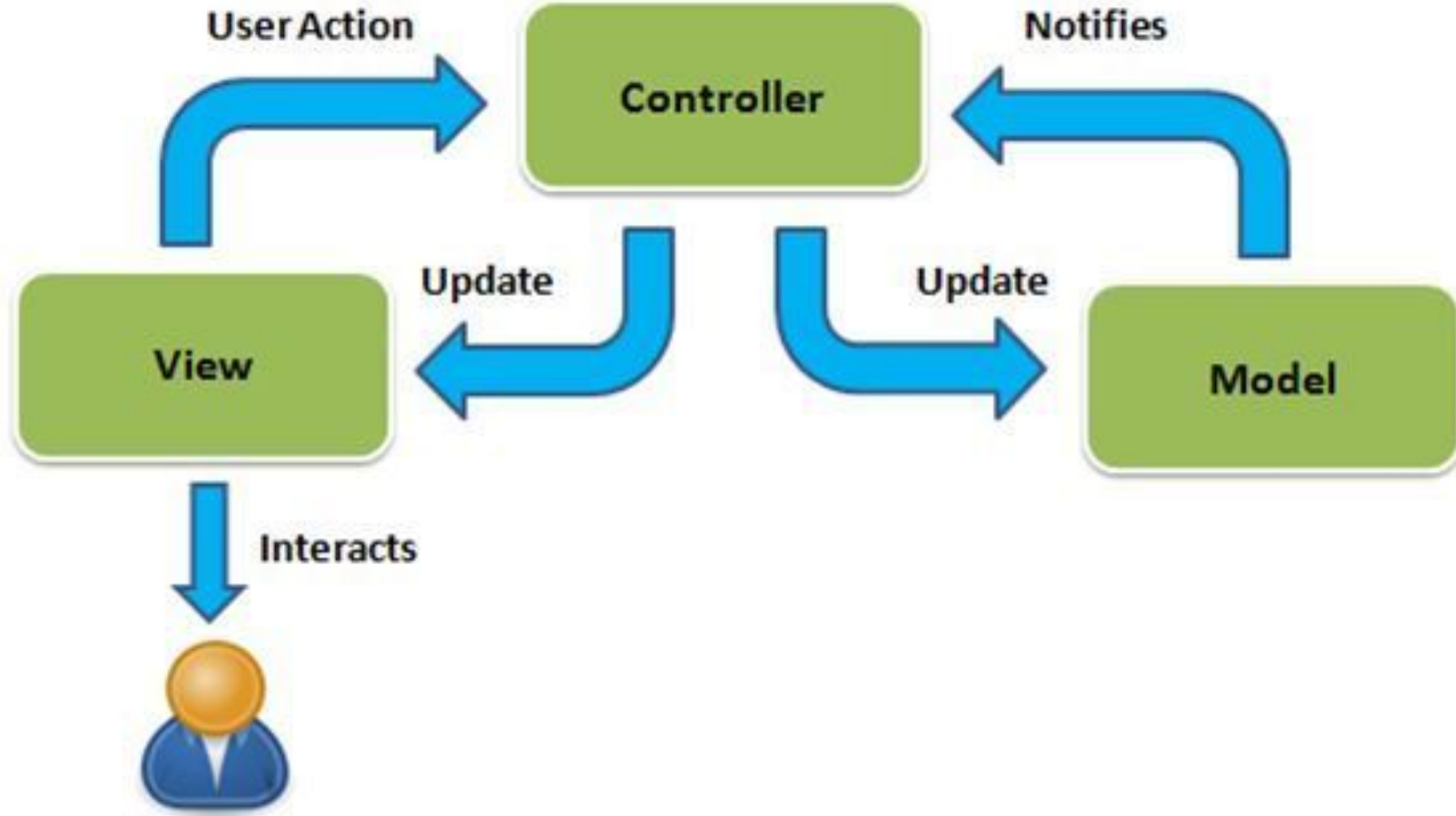
```
$ django-admin startproject pythonProject .
```

```
$ django-admin startapp demo
```

To run the server-

```
$ python manage.py runserver
```

# MVC Pattern





# django mvc

- urls.py
- models.py
- views.py

# Create Sub-systems (apps)

- `django-admin startapp demo`
- `python manage.py startapp demo2`

# Front-End (client) – Back-End (server)

- Frond-End
- Back-End
- Full-Stack

Front-End -> Request -> Back-End

Back-End -> Response -> Front-End

- `Httprespond()`
- `render()`