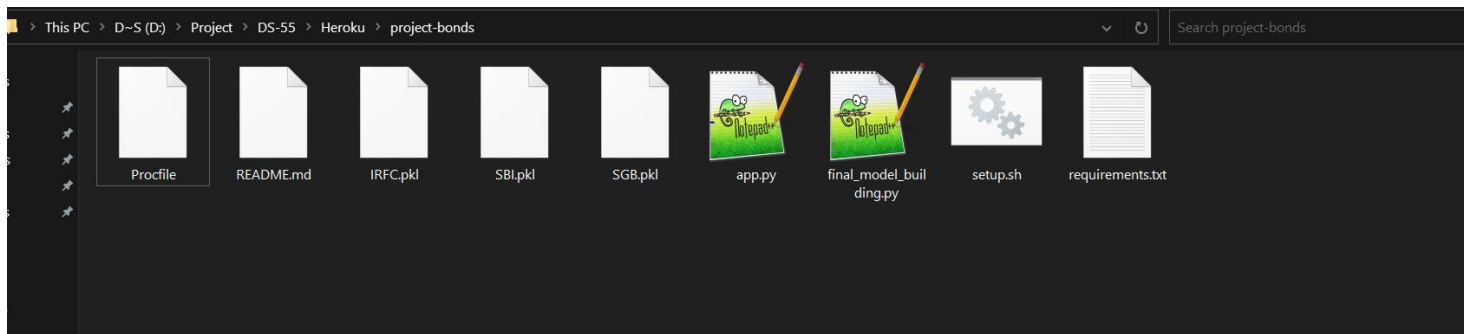


Heroku Deployment

1. Webapp Files



For deploying our app on Heroku platform we have to create 2 more additional files.

- A. Procfile
- B. setup.sh
- C. requirements.txt

- For creating the Procfile, create 'Procfile.txt' then enter below text in it and save it.
- Then rename it and remove extension (.txt)

```
Procfile - Notepad
File Edit Format View Help
web: sh setup.sh && streamlit run app.py
```

- Create new text file with name 'setup.txt' and enter below text in it.
- Then rename it as 'setup.sh'.

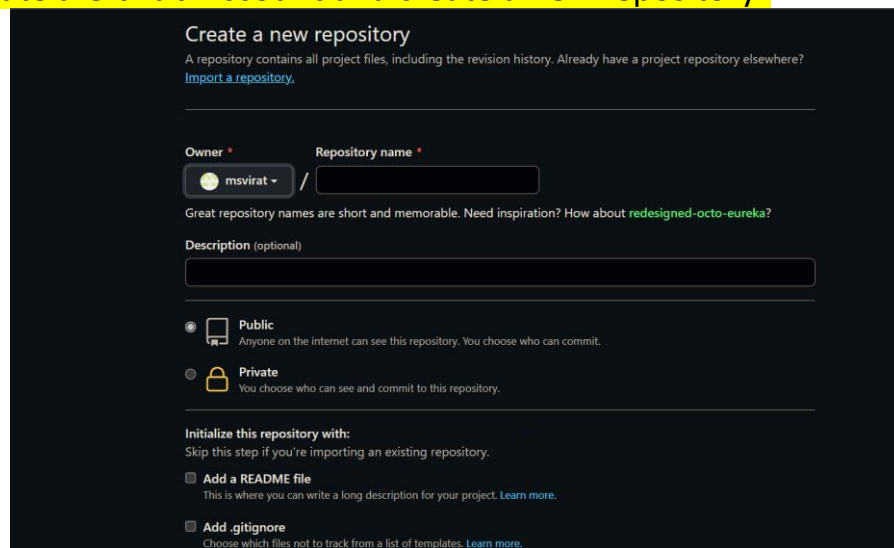
```
setup.sh - Notepad
File Edit Format View Help
mkdir -p ~/.streamlit/

echo "\
[server]\n\
headless = true\n\
port = $PORT\n\
enableCORS = false\n\
\n\
" > ~/.streamlit/config.toml
```

Note: 3 files are important for deployment

1. requirements.txt
2. Procfile
3. setup.sh

2. Create a GitHub Account and create a new repository.

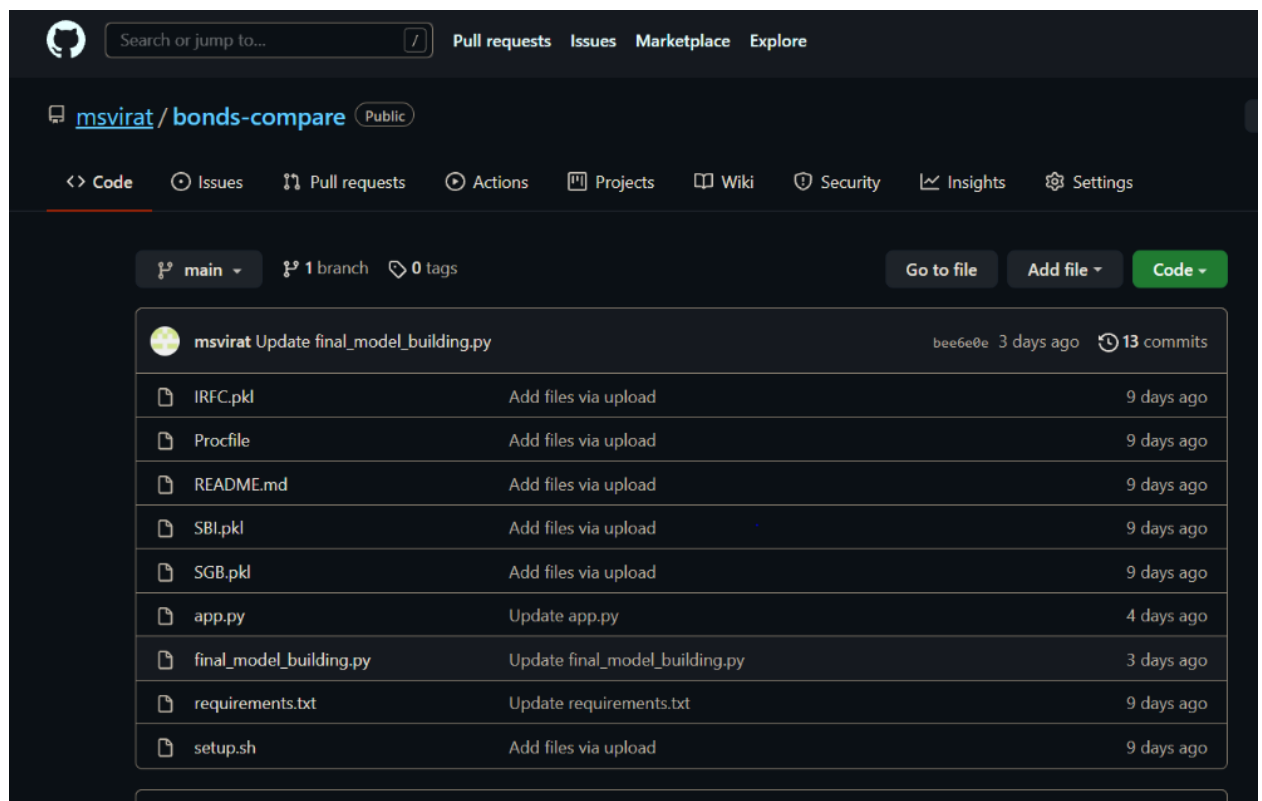


The screenshot shows the 'Create a new repository' page on GitHub. At the top, it says 'Create a new repository' and 'A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)'. Below this, there are two input fields: 'Owner' (with a dropdown menu showing 'msvirat') and 'Repository name' (an empty text box). A hint below these fields says 'Great repository names are short and memorable. Need inspiration? How about [redesigned-octo-eureka?](#)'. There is a 'Description (optional)' text area. Below that, there are two radio buttons for 'Public' (selected) and 'Private'. The 'Public' option says 'Anyone on the internet can see this repository. You choose who can commit.' and the 'Private' option says 'You choose who can see and commit to this repository.' At the bottom, there is a section 'Initialize this repository with:' with two checkboxes: 'Add a README file' (selected) and 'Add .gitignore' (not selected). Below these checkboxes are links to 'Learn more'.

Enter the name for your repository.

Note: My repo name is 'bonds-compare'

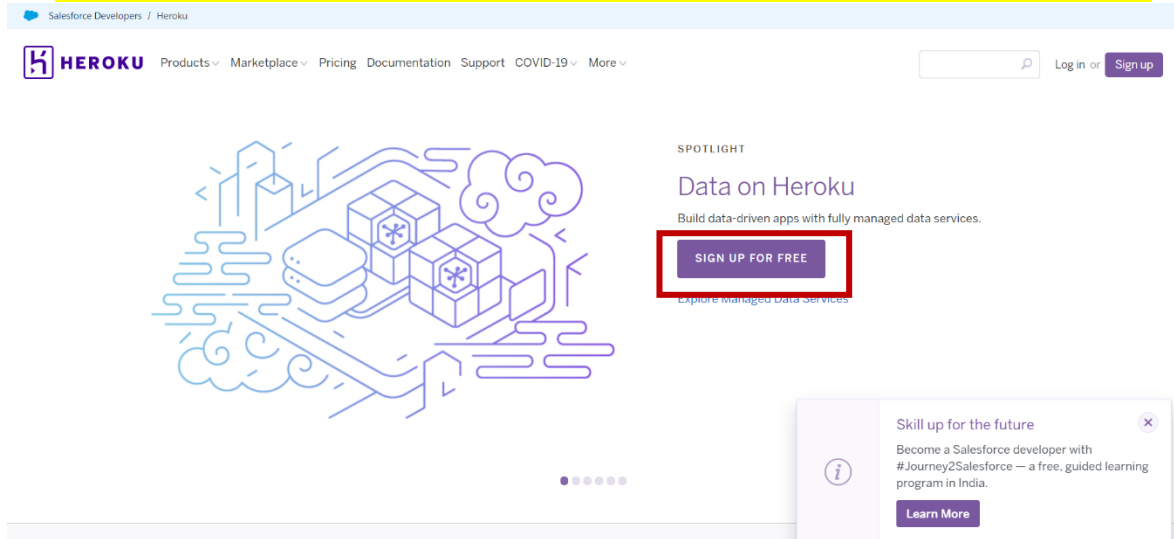
3. Upload all the files from your local system to that repository. This can be done by simple 'Drag-Drop' or using 'Git'.



The screenshot shows the GitHub repository page for 'msvirat / bonds-compare'. The repository is public. The page has a navigation bar with links to 'Pull requests', 'Issues', 'Marketplace', and 'Explore'. Below the navigation bar, there are tabs for 'Code', 'Issues', 'Pull requests', 'Actions', 'Projects', 'Wiki', 'Security', 'Insights', and 'Settings'. The 'Code' tab is selected. Below the tabs, there is a section for the repository's files. It shows a list of files with their names, the action taken (e.g., 'Add files via upload', 'Update app.py'), and the time since the last commit. The files listed are: IRFC.pkl, Procfile, README.md, SBI.pkl, SGB.pkl, app.py, final_model_building.py, requirements.txt, and setup.sh. The repository has 1 branch (main) and 0 tags. There are buttons for 'Go to file', 'Add file', and 'Code'.

| File Name | Action | Time |
|-------------------------|--------------------------------|------------|
| IRFC.pkl | Add files via upload | 9 days ago |
| Procfile | Add files via upload | 9 days ago |
| README.md | Add files via upload | 9 days ago |
| SBI.pkl | Add files via upload | 9 days ago |
| SGB.pkl | Add files via upload | 9 days ago |
| app.py | Update app.py | 4 days ago |
| final_model_building.py | Update final_model_building.py | 3 days ago |
| requirements.txt | Update requirements.txt | 9 days ago |
| setup.sh | Add files via upload | 9 days ago |

4. Open Heroku Site and create the account. <https://www.heroku.com/>

The image shows the Heroku account creation form. The form is divided into two main sections. The left section contains three cards: 'Free account' (Create apps, connect databases and add-on services, and collaborate on your apps, for free.), 'Your app platform' (A platform for apps, with app management & instant scaling, for development and production.), and 'Deploy now' (Go from code to running app in minutes. Deploy, scale, and deliver your app to the world.). The right section contains a form with the following fields: First name (required), Last name (required), Email address (required), Company name, Role (required), Country (required), and Primary development language (required). Each field has a corresponding input box or dropdown menu.

Enter all the details and confirm your email. After that create password and then again login using your credentials.

After login, click on 'Accept' and don't make any other changes.

[Terms of Use \(Default\)](#), unless the Heroku Elements Marketplace provider has furnished to Heroku a separate terms of use, in which case such provider's terms of use govern the use or purchase of the applicable Heroku Elements. [Additional Terms](#) apply to credit card customers of the Heroku Services.

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If you are or become a Heroku Elements Marketplace Provider, you further agree that your participation in the Heroku Elements Marketplace is governed by the [Salesforce License and Distribution Agreement for the Heroku Elements Marketplace](#).

Italian Customers

Are you domiciled in Italy?

☐ No.

Accepted

August 27, 2021

5. Click on create New app.

Personal New 

You don't have any apps yet

Every app and pipeline you create or become a collaborator on will appear here

Create new app

Looking for help getting started?

Get started by reading one of our language guides in the Dev Center

Choose a language guide... 


6. Enter name for your app and click on 'Create app'.

Create New App

App name

app-name

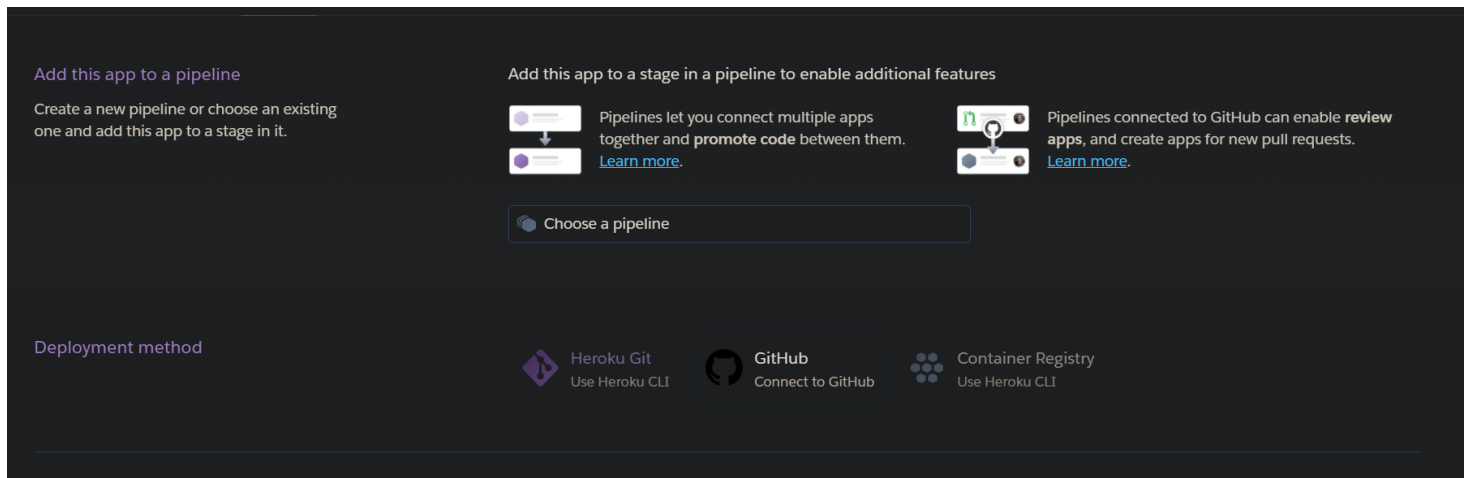
Choose a region

 United States 

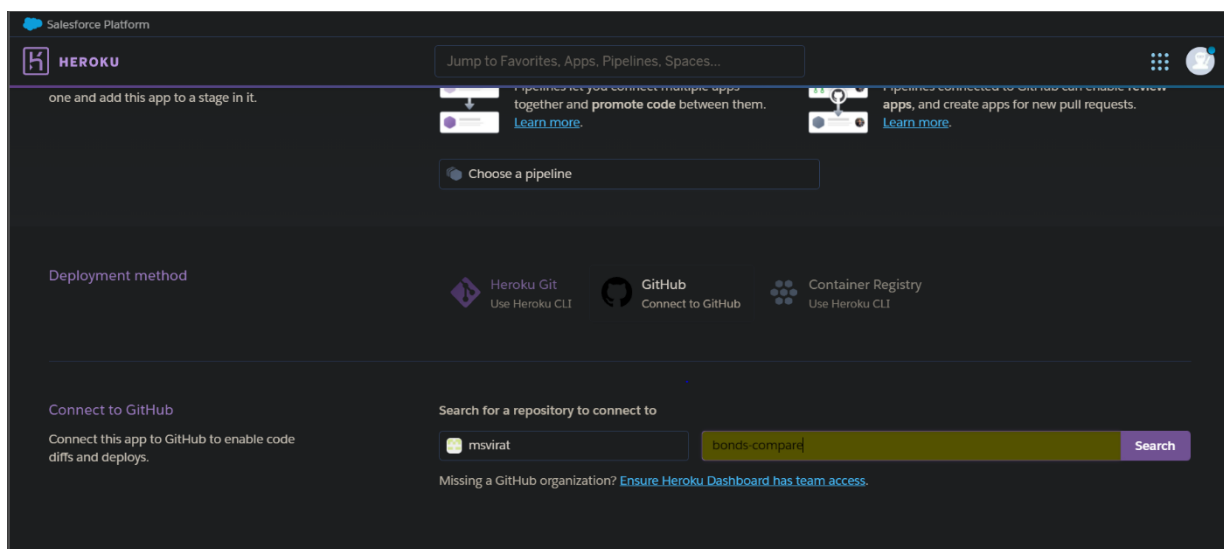
Add to pipeline...

Create app

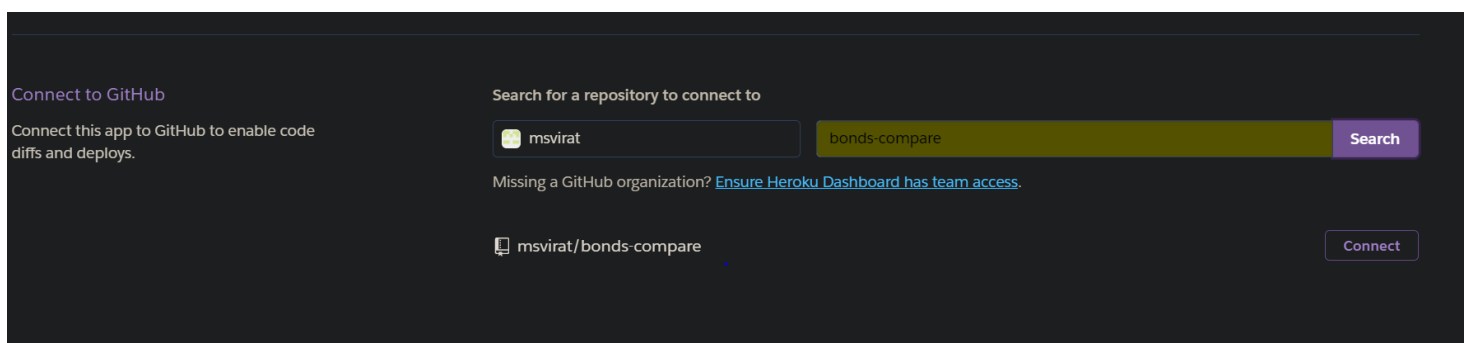
7. In Deployment Method block select 'Connect to GitHub' option.



8. Below enter your GitHub profile URL and search for your created webapp repository or enter the repo name.




9. Press 'Search' and then press 'Connect'.



10. Now connection is made between Heroku and GitHub.

App connected to GitHub

Code diffs, manual and auto deploys are available for this app.

Connected to  [msvirat/bonds-compare](#) by  [msvirat](#)

Disconnect...

↔ Releases in the [activity feed](#) link to GitHub to view commit diffs

11. Next 'Enable Automatic Deploys'.

Automatic deploys

Enables a chosen branch to be automatically deployed to this app.



You can now change your main deploy branch from "master" to "main" for both manual and automatic deploys, please follow the instructions [here](#).

Enable automatic deploys from GitHub

Every push to the branch you specify here will deploy a new version of this app. Deploys happen automatically; be sure that this branch is always in a deployable state and any tests have passed before you push. [Learn more](#).

Choose a branch to deploy

 main

☐ Wait for CI to pass before deploy

Only enable this option if you have a Continuous Integration service configured on your repo.

Enable Automatic Deploys

12. Click on 'Deploy branch'.

Note: Don't change the branch.

Manual deploy

Deploy the current state of a branch to this app.

Deploy a GitHub branch

This will deploy the current state of the branch you specify below. [Learn more](#).

Choose a branch to deploy

 main

Deploy Branch

13. Rest of the process is automatic, Heroku will download all the dependencies and launch the App.


Manual deploy

Deploy the current state of a branch to this app.


Deploy a GitHub branch


This will deploy the current state of the branch you specify below. [Learn more.](#)

Choose a branch to deploy

 main

Deploy Branch

Receive code from GitHub 

Build **main** bee6e0e5 

```
Collecting ipykernel>=5.1.2; python_version >= 3.4
  Downloading ipykernel-6.4.2-py3-none-any.whl (124 kB)
Collecting decorator>=3.4.0
  Downloading decorator-5.1.0-py3-none-any.whl (9.1 kB)
Collecting typing_extensions>=3.7.4.3; python_version < "3.10"
  Downloading typing_extensions-3.10.0.2-py3-none-any.whl (26 kB)
Collecting gitdb<5,>=4.0.1
  Downloading gitdb-4.0.7-py3-none-any.whl (63 kB)
Collecting pytz>=2017.3
  Downloading pytz-2021.3-py3-none-any.whl (503 kB)
```

☒ Autoscroll with output [View build log](#)

Note: Wait for few minutes.

14. Click on 'View'.


Manual deploy

Deploy the current state of a branch to this app.

Deploy a GitHub branch

This will deploy the current state of the branch you specify below. [Learn more.](#)

Choose a branch to deploy

 main

Deploy Branch


Receive code from GitHub

Build main bee6e0e5

Release phase

Deploy to Heroku

Your app was successfully deployed.

 View

15. WebApp

Menu

Forecast

Investment on Bonds

Comparing Profit of Sovereign Gold Bond with General Bonds (Indian Railway Finance Corporation & SBI Life (Unit II Regular) - Bond Fund)

how many years you plan for investment:

5

Forecast