



PROJECT DEPLOYMENT

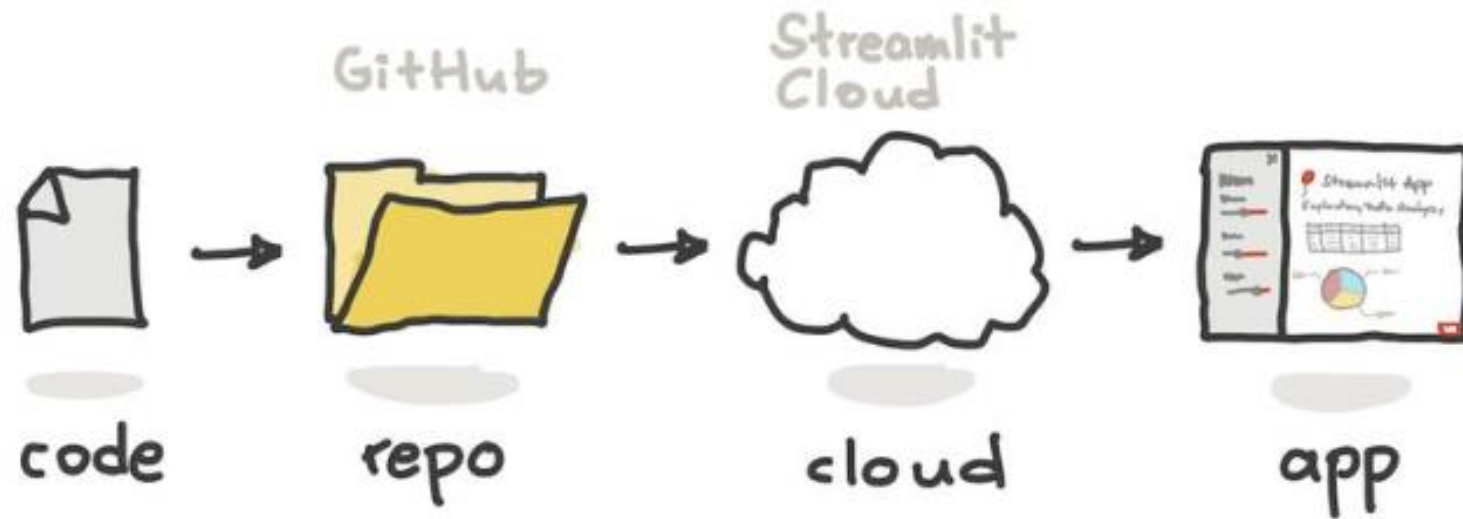
Hanif Noe Rofiq
Shofinurdin

PJJ Data Analytics BDK Makassar

OBJECTIVE

objective

DEPLOYMENT



TODO LIST

- Install dan Setting VSCode
- Membuat & export model
- Deploy di local
- Install git & upload project ke github
- Deploy Project di Streamlit Cloud

INSTALL & SETTING VSCODE

1. Download Install VScode
2. Install paket python di VSCode
3. Sinkron vscode python dan anaconda di virtual env
4. Membuat Virtual environment
5. Aktifkan virtual environment

Sinkronisasi Terminal dengan anaconda

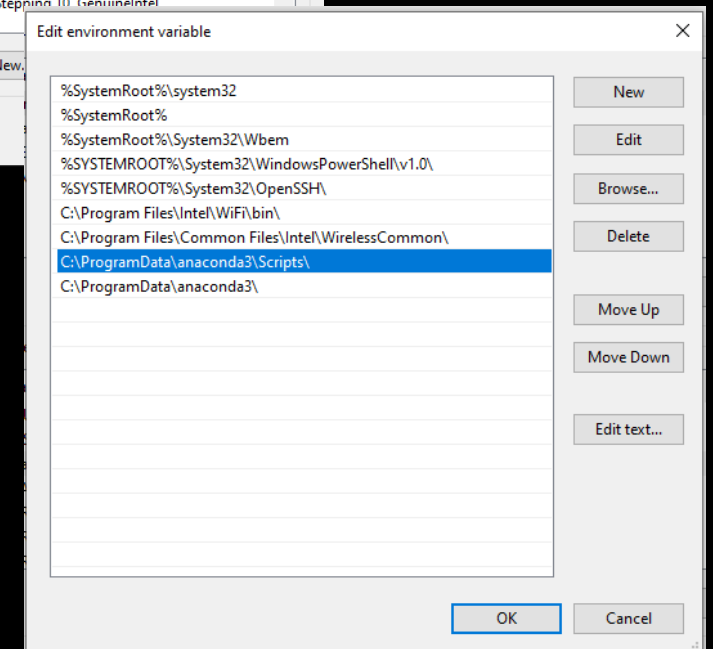
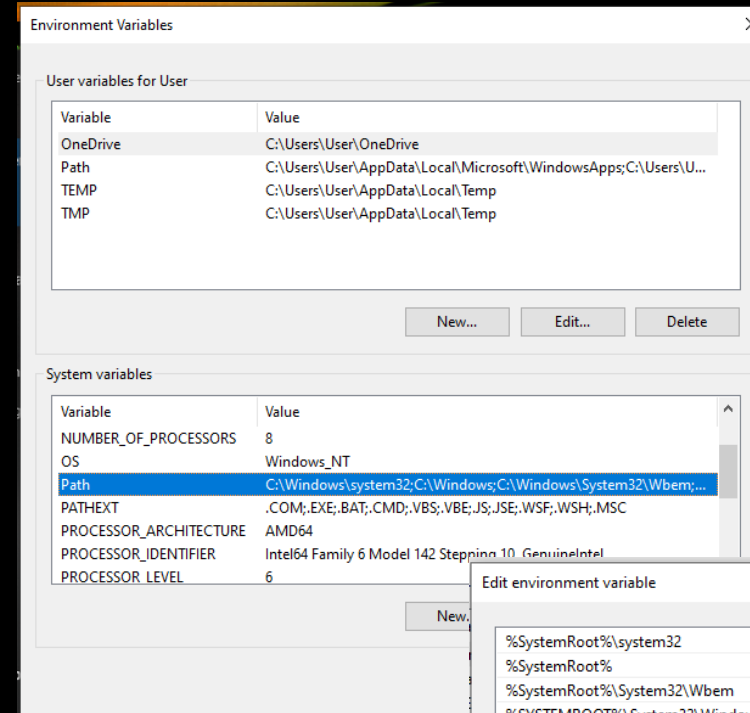
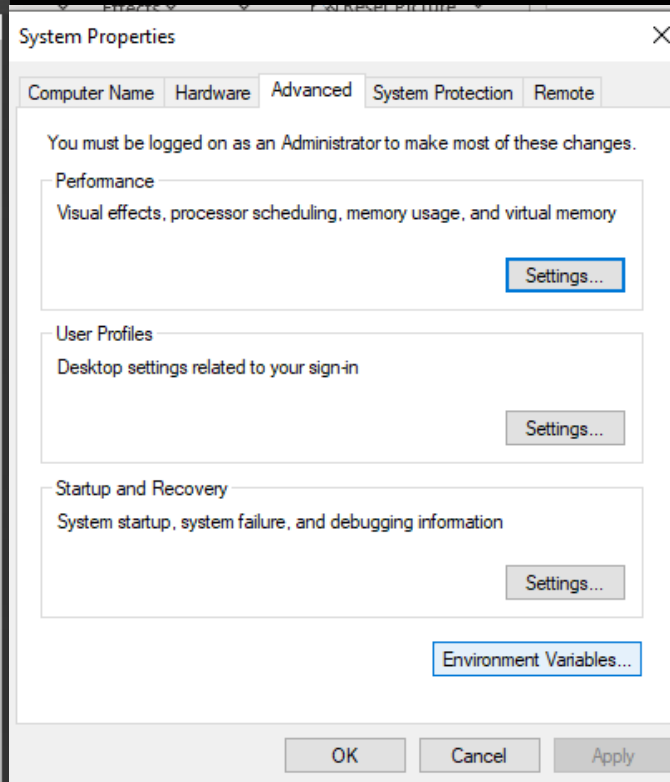
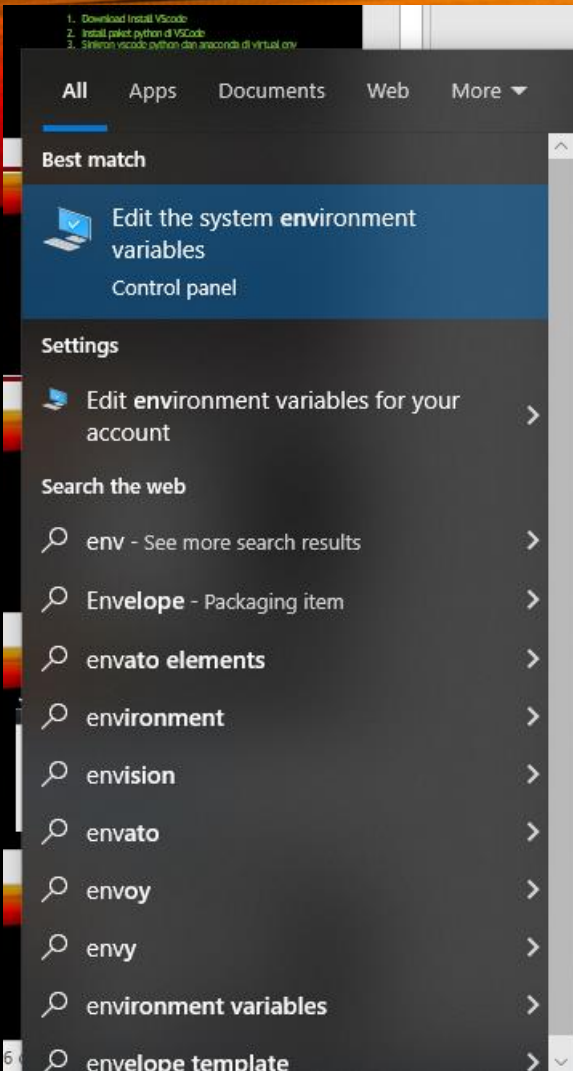
```
Anaconda Prompt

(base) C:\Users\User>where conda
C:\ProgramData\anaconda3\Library\bin\conda.bat
C:\ProgramData\anaconda3\Scripts\conda.exe
C:\ProgramData\anaconda3\condabin\conda.bat

(base) C:\Users\User>where python
C:\ProgramData\anaconda3\python.exe
C:\Users\User\AppData\Local\Microsoft\WindowsApps\python.exe


(base) C:\Users\User>_
```

Membuat path di environment variable



DOWNLOAD & INSTALL VSCODE

<https://code.visualstudio.com/Download>

 **Visual Studio Code** Docs Updates Blog API Extensions FAQ Learn


Search Docs

Download


Version 1.89 is now available! Read about the new features and fixes from April.

Download Visual Studio Code

Free and built on open source. Integrated Git, debugging and extensions.



Windows
Windows 10, 11



.deb
Debian, Ubuntu

.rpm
Red Hat, Fedora, SUSE


.deb x64 Arm32 Arm64

.rpm x64 Arm32 Arm64

.tar.gz x64 Arm32 Arm64

Snap Snap Store

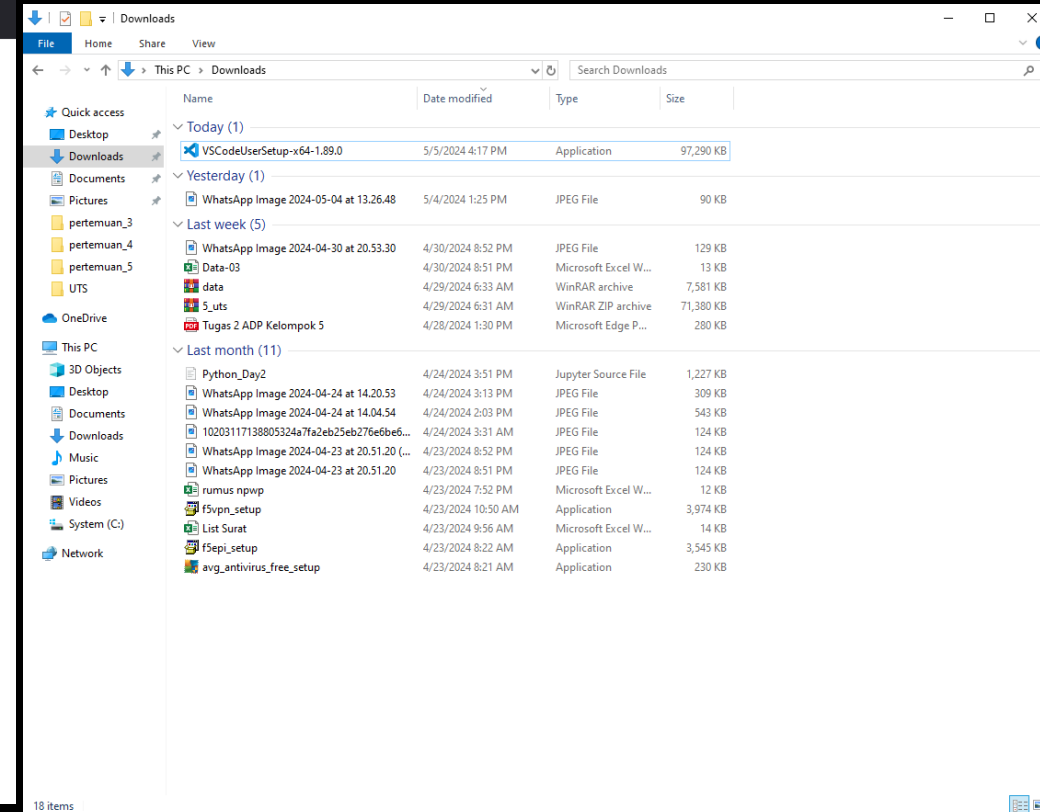
CLI x64 Arm32 Arm64

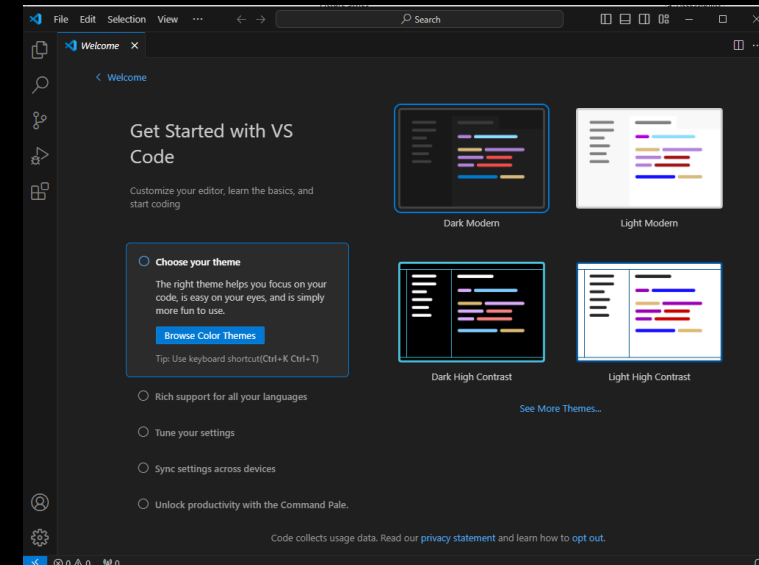
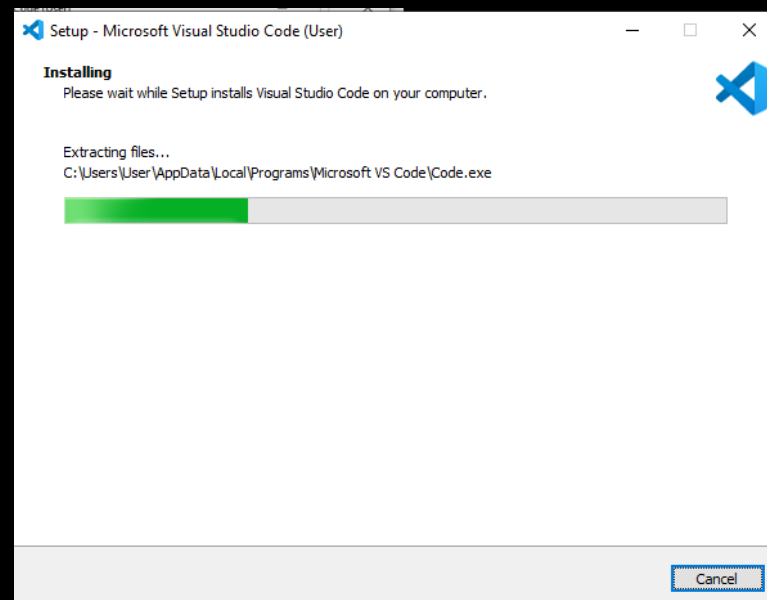
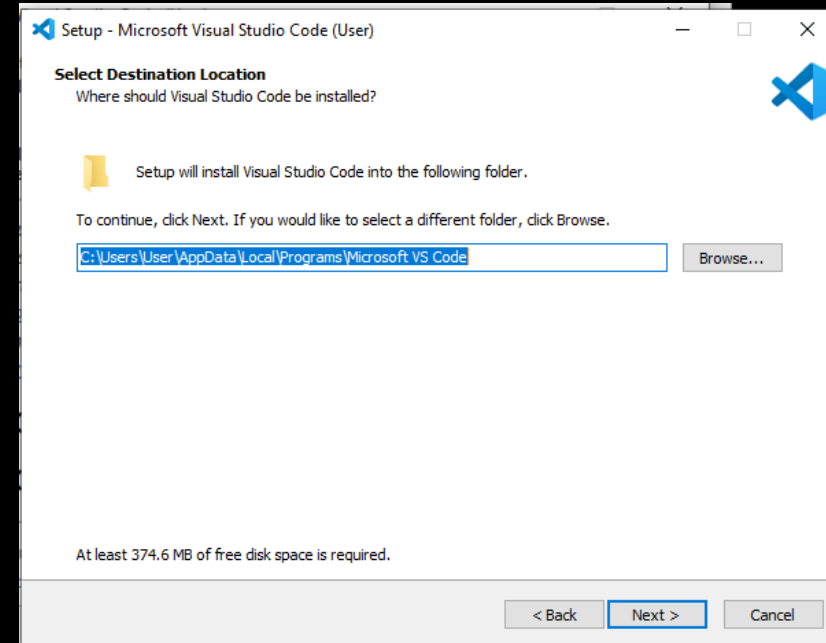
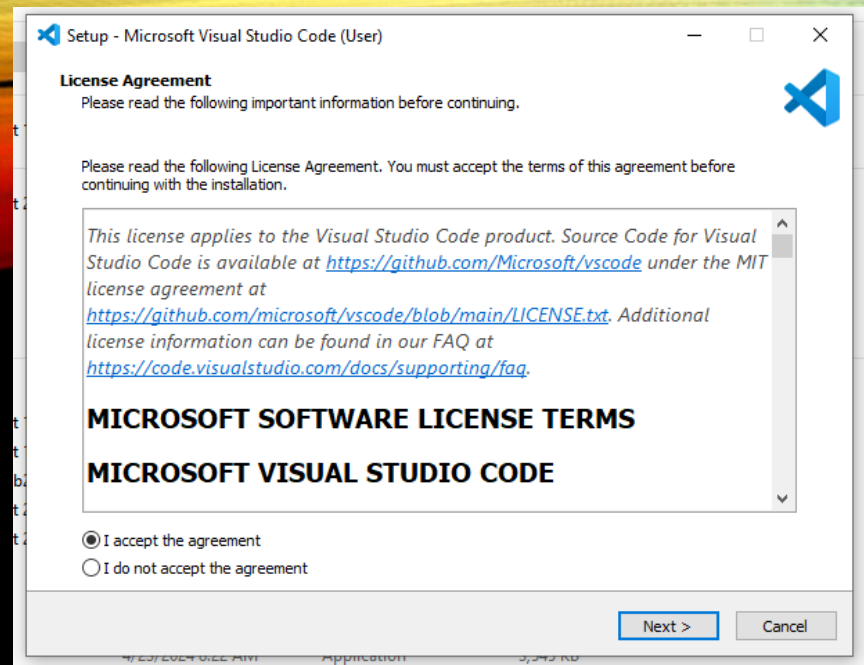


Mac
macOS 10.15+

.zip Intel chip Apple silicon Universal

CLI Intel chip Apple silicon





Install paket extension python

The screenshot displays the Visual Studio Code interface with the Python extension being installed. The left sidebar shows the 'EXTENSIONS: MARKETPLACE' view with a search for 'python'. The main editor area shows the 'Python' extension details, including its version (v2024.6.0), publisher (Microsoft), and a list of features. The right sidebar shows the 'Categories' section with 'Programming Languages' and 'Debuggers' selected, and the 'Resources' section with links to the Marketplace, Issues, Repository, License, and Microsoft.

EXTENSIONS: MARKETPLACE

python

- Python** (121.4M ★ 4) - Python language support with extension access points for IntelliSense...
Microsoft [Install](#)
- Python** (189K ★ 5) - Extensions for Python shiro [Install](#)
- Python Debugger** (27.5M ★ 5) - Python Debugger extension using debugpy.
Microsoft [Install](#)
- Python Extension Pack** (8.2M ★ 4.5) - Popular Visual Studio Code extensions for Python
Don Jayamanne [Install](#)
- Python for VSCode** (5.4M ★ 2) - Python language extension for vscode
Thomas Haakon Townsend [Install](#)
- Python Environment Manager** (7.6M ★ 3.5) - View and manage Python environments & packages.
Don Jayamanne [Install](#)
- Python Indent** (9.2M ★ 4.5) - Correct Python indentation
Kevin Rose [Install](#)
- autoDocstring - Python Docstring Generator** (9M ★ 5) - Generates python docstrings automatically
Nils Werner [Install](#)
- Python-Preview** (1.6M ★ 4.5) - Provide Preview for Python Execution.

Python v2024.6.0
Microsoft [microsoft.com](#) | 121,478,067 | ★★★★★ (588)
Python language support with extension access points for IntelliSense (Pylance), Debugging (Python Debugger), linting, formatting, refactoring, un...

[Install](#) [Settings](#)

[DETAILS](#) [FEATURES](#) [CHANGELOG](#) [EXTENSION PACK](#)

Python extension for Visual Studio Code

A [Visual Studio Code extension](#) with rich support for the [Python language](#) (for all [actively supported Python versions](#)), providing access points for extensions to seamlessly integrate and offer support for IntelliSense (Pylance), debugging (Python Debugger), formatting, linting, code navigation, refactoring, variable explorer, test explorer, and more!

Support for [vscode.dev](#)

The Python extension does offer [some support](#) when running on [vscode.dev](#) (which includes [github.dev](#)). This includes partial IntelliSense for open files in the editor.

Installed extensions

The Python extension will automatically install the following extensions by default to provide the best Python development experience in VS Code:

- [Pylance](#) - to provide performant Python language support
- [Python Debugger](#) - to provide a seamless debug experience with debugpy

These extensions are optional dependencies, meaning the Python extension will remain fully functional if they fail to be installed. Any or all of these extensions can be [disabled](#) or [uninstalled](#) at the expense of some features. Extensions installed through the marketplace [^](#) :

Categories

- Programming Languages
- Debuggers
- Data Science
- Machine Learning

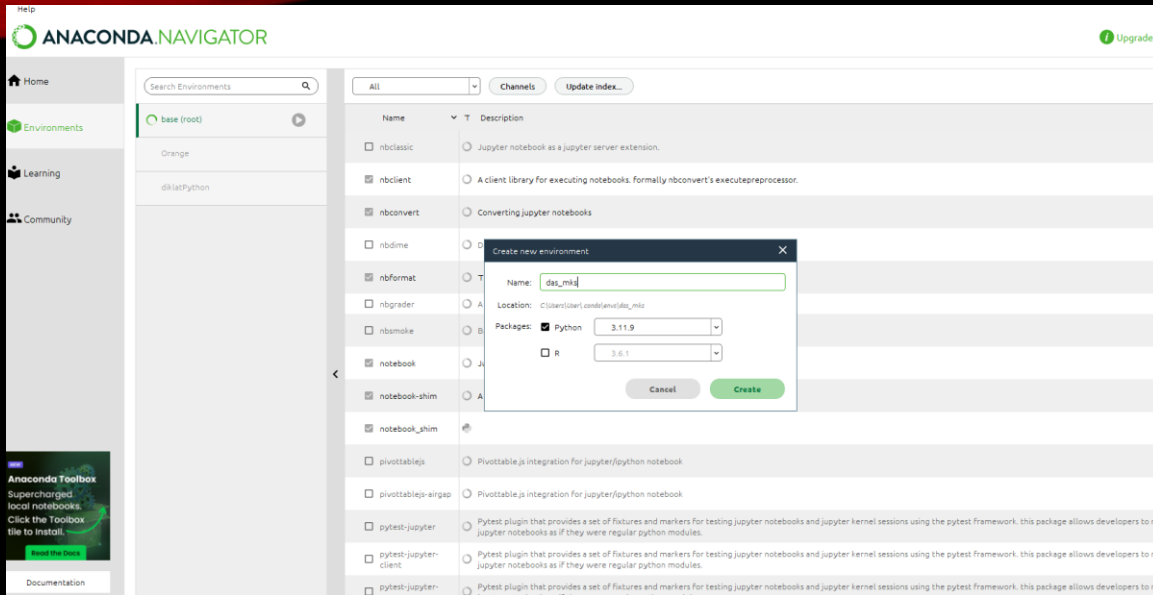
Resources

- [Marketplace](#)
- [Issues](#)
- [Repository](#)
- [License](#)
- [Microsoft](#)

More Info

Published	2016-01-19, 22:03:11
Last released	2024-05-03, 17:20:10
Identifier	ms-python.python

Membuat virtual environment



```
Anaconda Prompt - conda create --name das_mks

(base) C:\Users\User>conda env list
# conda environments:
#
base                  * C:\Program Files\Orange
diklatPython          C:\ProgramData\anaconda3
                      C:\Users\User\.conda\envs\diklatPython

(base) C:\Users\User>conda create --name das_mks
Retrieving notices: ...working... done
Channels:
 - defaults
Platform: win-64
Collecting package metadata (repodata.json): done
Solving environment: done

## Package Plan ##

environment location: C:\Users\User\.conda\envs\das_mks

Proceed ([y]/n)?
```

Mengaktifkan virtual environment

```
(base) C:\Users\User>conda activate das_mks

(das_mks) C:\Users\User>conda env list
# conda environments:
#
base                  * C:\Program Files\Orange
das_mks               * C:\ProgramData\anaconda3
diklatPython          C:\Users\User\.conda\envs\diklatPython
                      C:\Users\User\.conda\envs\das_mks

(das_mks) C:\Users\User>conda activate das_mks

(das_mks) C:\Users\User>
```

Select python interpreter

Select and activate an environment **Python:**

Select Interpreter command from the **Command Palette** (Ctrl+Shift+P).

> python: s

Python: Select Interpreter

Python: Build Workspace Symbols

Python: Run Selection/Line in Django Shell

Python: Run Selection/Line in Python Terminal

Python: Select Linter

Python: Show Unit Test Output

Python: Start REPL

Selected Interpreter: python

+ Create Virtual Environment...

Enter interpreter path...

Python 3.11.7 ('anaconda3') C:\ProgramData\anaconda3\python.exe Conda

Python 3.9.19 ('diklatPython') ~\conda\envs\diklatPython\python.exe

Python 3.9.12 ('Orange') C:\Program Files\Orange\python.exe

Python 3.9.12 ('base') C:\ProgramData\Miniconda3\python.exe

Python ('das_mks') ~\conda\envs\das_mks

Pyt

Install library

- Install jupyter notebook
- Install nb_conda_kernels / ipython kernel
- Install streamlit dll (requirements.txt)

```
(das_mks) C:\Users\User>conda install notebook  
Collecting package metadata (current_repodata.json): \
```

```
(das_mks) C:\Users\User>conda install nb_conda_kernels  
Collecting package metadata (current_repodata.json): done  
Solving environment: 
```

```
(base) C:\Users\User>pip install ipykernel
```

```
(base) C:\Users\User>python -m ipykernel install --user --name=das
```

```
(das_mks) C:\Users\User>conda install streamlit  
Channels:  
- defaults  
Platform: win-64  
Collecting package metadata (repodata.json): done  
Solving environment: done
```

```
## Package Plan ##
```

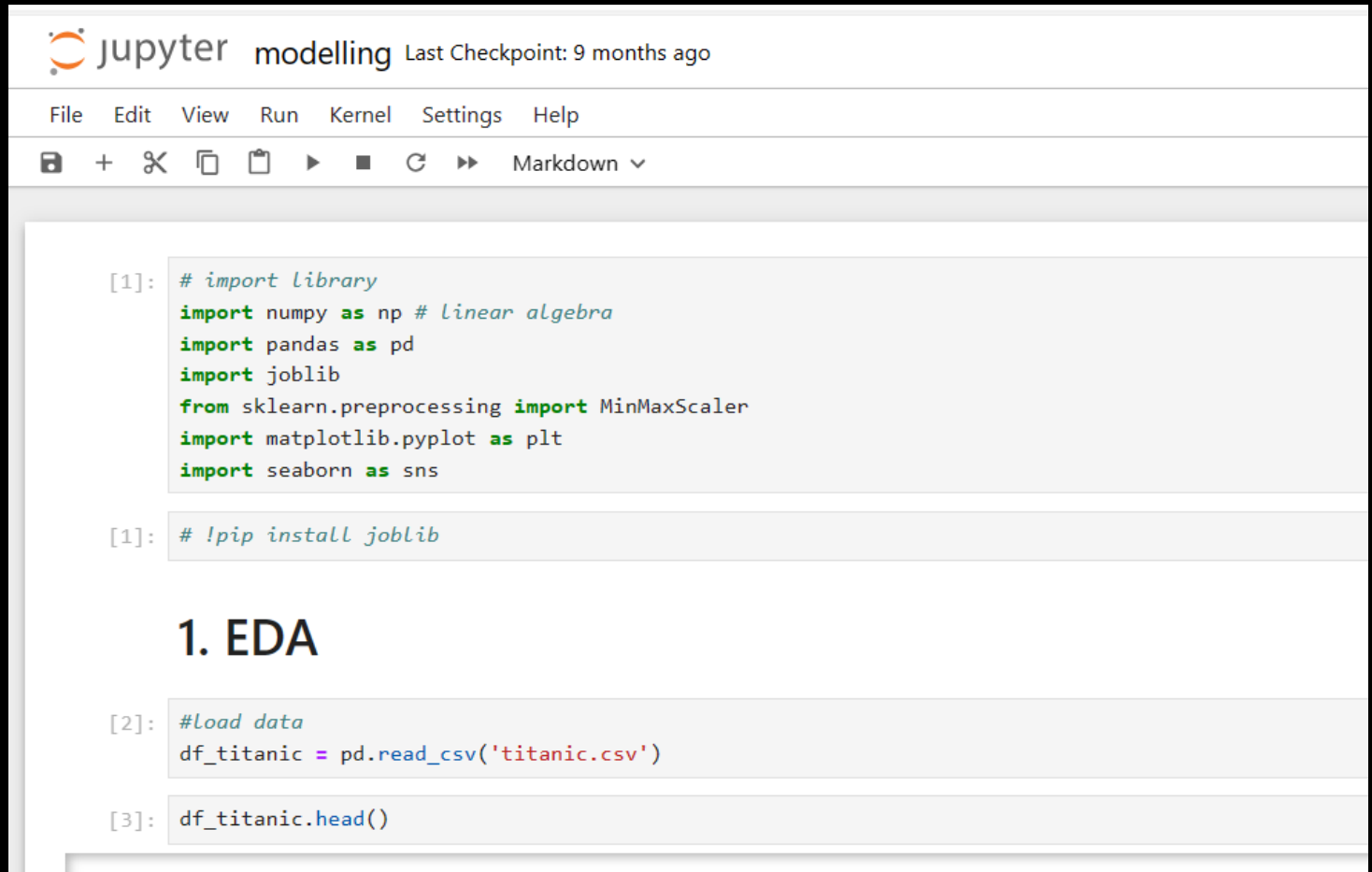
```
environment location: C:\Users\User\.conda\envs\das_mks
```

MODELLING

- Membuat model
- Export model

MODELLING

1. Membuat EDA
2. Membuat Model
3. Export Model

A screenshot of a Jupyter Notebook interface. The top bar shows the Jupyter logo, the name 'modelling', and 'Last Checkpoint: 9 months ago'. Below this is a menu bar with 'File', 'Edit', 'View', 'Run', 'Kernel', 'Settings', and 'Help'. A toolbar contains icons for file operations and execution. The notebook area shows three code cells. The first cell contains import statements for numpy, pandas, joblib, sklearn, matplotlib, and seaborn. The second cell contains a command to install joblib. The third cell contains code to load the 'titanic.csv' dataset and view its first few rows. The text '1. EDA' is written below the second cell.

```
[1]: # import library
import numpy as np # linear algebra
import pandas as pd
import joblib
from sklearn.preprocessing import MinMaxScaler
import matplotlib.pyplot as plt
import seaborn as sns

[1]: # !pip install joblib

1. EDA

[2]: #load data
df_titanic = pd.read_csv('titanic.csv')

[3]: df_titanic.head()
```




PROJECT LOCAL

1. Halaman Home
2. Halaman EDA
3. Halaman Predict

Deploy

Menu

Home ▾

Titanic Machine Learning

PJJ DAS II 2023

Home Menu



UPLOAD KE GITHUB

1. Membuat akun github
2. Membuat repository
3. Instal gitlab
4. Upload project ke github

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Required fields are marked with an asterisk (*).

Owner *

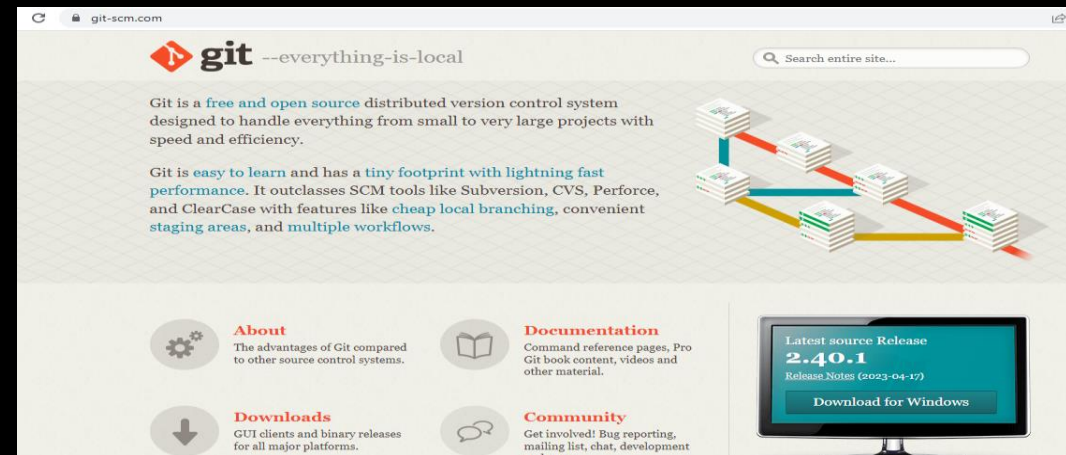
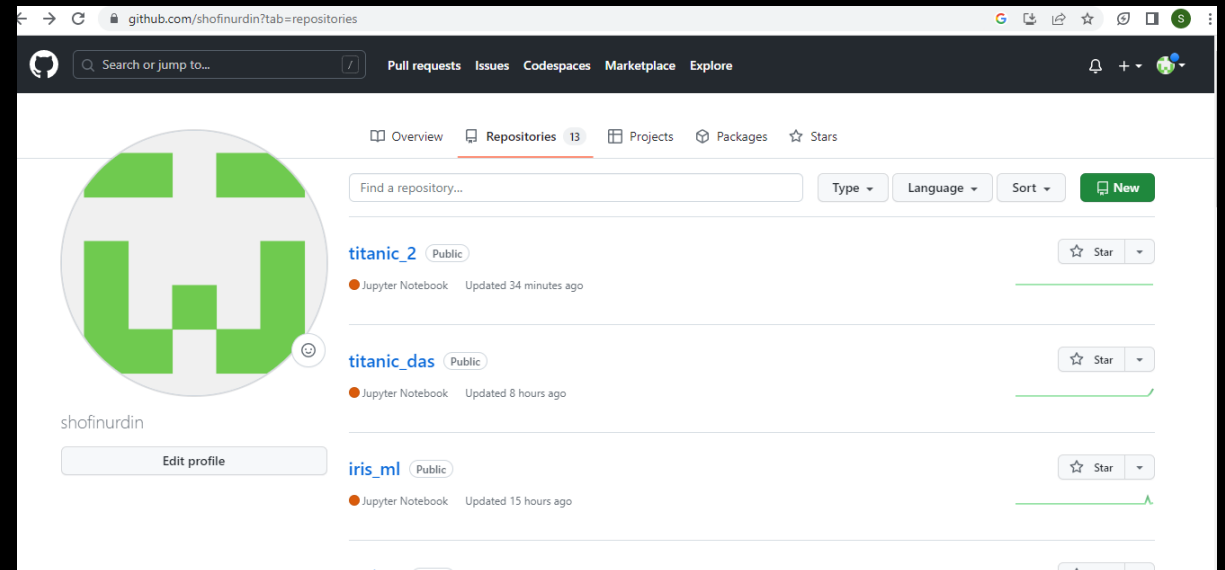
Repository name *

shofinurdin

/ das_mks_titanic

das_mks_titanic is available.

Great repository names are short and memorable. Need inspiration? How about [urban-parakeet](#) ?



UPLOD PROJECT

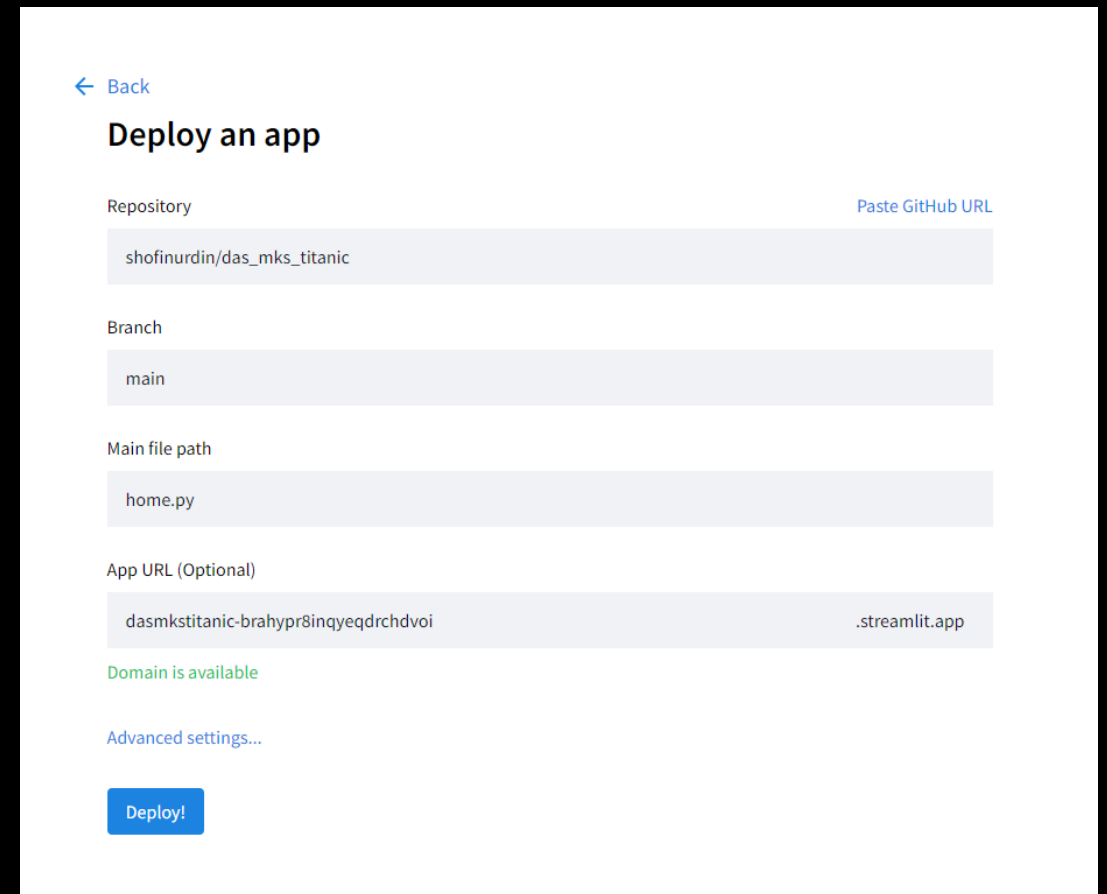
```
(base) C:\Users\User\Documents\pusidkeu\Project-Deployment\day_2\bahan_titanic>git config --global user.email "shofinurdin@gmail.com"
(base) C:\Users\User\Documents\pusidkeu\Project-Deployment\day_2\bahan_titanic>git config --global user.name "shofinurdin"
(base) C:\Users\User\Documents\pusidkeu\Project-Deployment\day_2\bahan_titanic>git init
Initialized empty Git repository in C:/Users/User/Documents/pusidkeu/Project-Deployment/day_2/bahan_titanic/.git/
```

```
(base) C:\Users\User\Documents\pusidkeu\Project-Deployment\day_2\bahan_titanic>git add .
(base) C:\Users\User\Documents\pusidkeu\Project-Deployment\day_2\bahan_titanic>git commit -m 'titanic'
```

```
(base) C:\Users\User\Documents\pusidkeu\Project-Deployment\day_2\bahan_titanic>git remote add origin https://github.com/shofinurdin/das_mks_titanic.git
(base) C:\Users\User\Documents\pusidkeu\Project-Deployment\day_2\bahan_titanic>git branch -M main
(base) C:\Users\User\Documents\pusidkeu\Project-Deployment\day_2\bahan_titanic>git push -u origin main_
```

DEPLOY PROJECT DI STREAMLIT CLOUD

1. Membuat akun streamlit
2. Create Project dari github



The screenshot shows the 'Deploy an app' interface on Streamlit Cloud. It includes a 'Back' link, a title 'Deploy an app', and several input fields: 'Repository' (shofinurdin/das_mks_titanic), 'Branch' (main), 'Main file path' (home.py), and 'App URL (Optional)' (dasmkstitanic-brahypr8inqyeqdrchdvoi). A 'Paste GitHub URL' link is next to the repository field. A green message 'Domain is available' is shown below the App URL field. At the bottom, there is an 'Advanced settings...' link and a blue 'Deploy!' button.

[← Back](#)

Deploy an app

Repository [Paste GitHub URL](#)

shofinurdin/das_mks_titanic

Branch

main

Main file path

home.py

App URL (Optional)

dasmkstitanic-brahypr8inqyeqdrchdvoi .streamlit.app

Domain is available

[Advanced settings...](#)

[Deploy!](#)

TUGAS

Deploy Iris Machine Learning

1. Membuat model
2. Eksport model
3. Import model di streamlit
4. Membuat halaman EDA
5. Membuat halaman predict
6. Upload ke github
7. Deploy ke streamlit cloud

Hasil.>>