Deployment Document

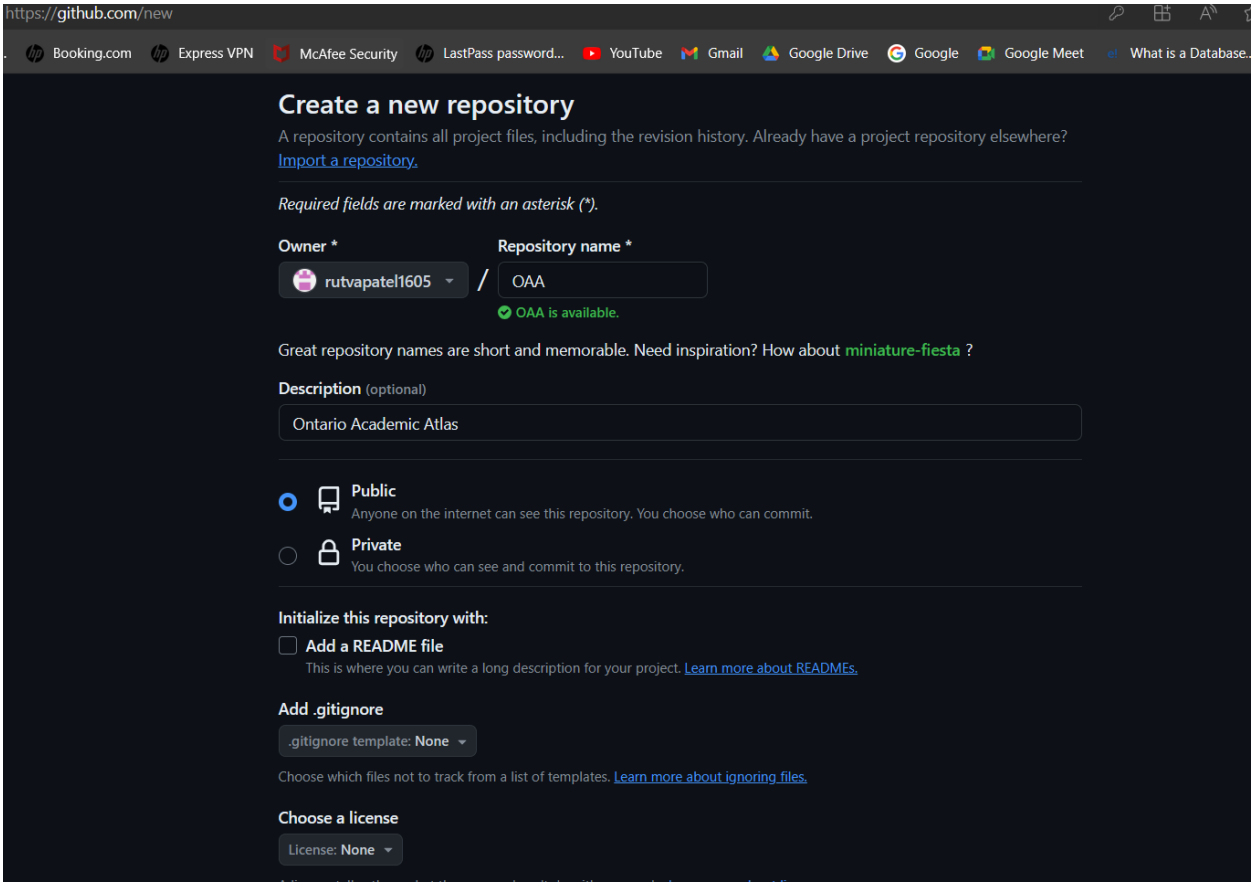
Ontario Academic Atlas

Introduction:

The deployment of the Ontario Academic Atlas project involves several steps to ensure a smooth transition from development to production. This document provides detailed instructions on how to push the Django project to a Git repository, set up a remote repository, and deploy the project on a server. Additionally, it includes information on how to download the project code from the Git repository and run it on a local machine.

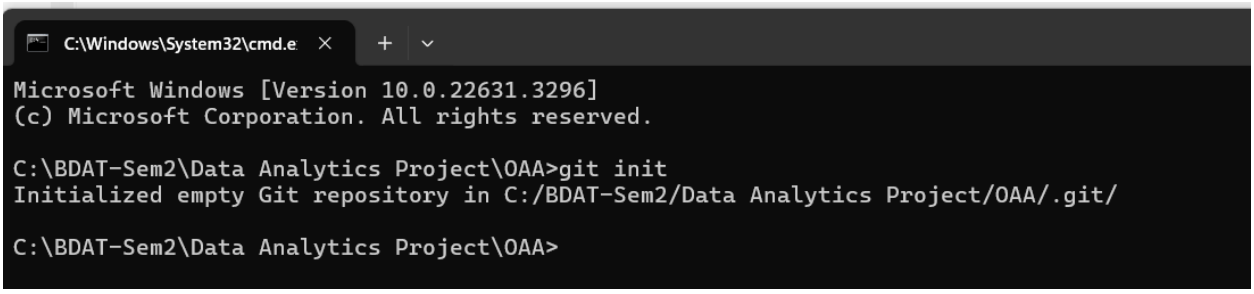
Step 1: Pushing the Code to Git Repository:

We created a repository in GitHub by logging into our GitHub account and navigating to the main page. From there, we clicked on the "+" icon in the top right corner and selected "New repository". We then filled in the repository name, description, and other settings as needed, and optionally added a README file, a .gitignore file, and a license. Finally, we clicked on the "Create repository" button to create the repository on GitHub.

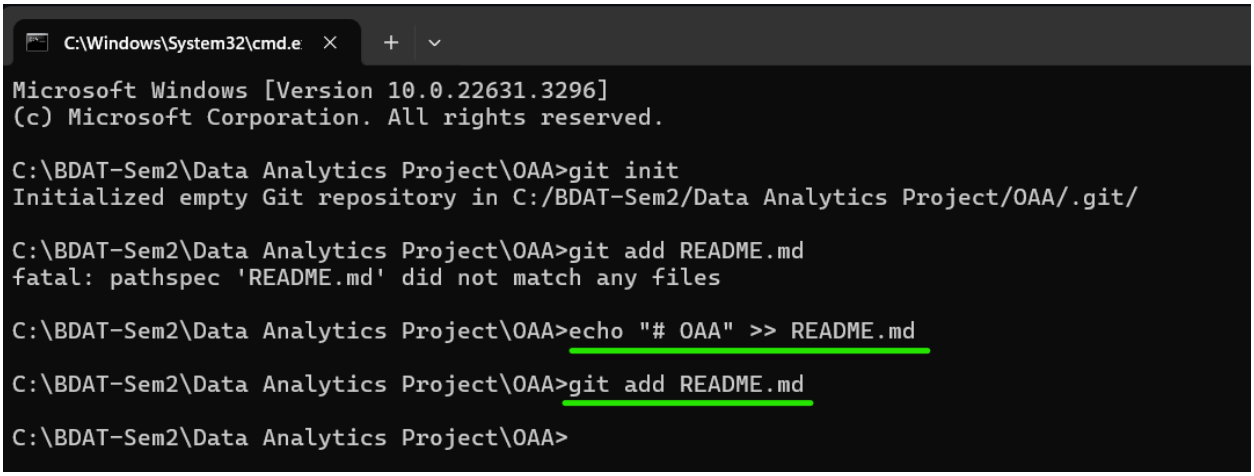


We initialize the Git repository by navigating to the root directory of the Django project using the command line.

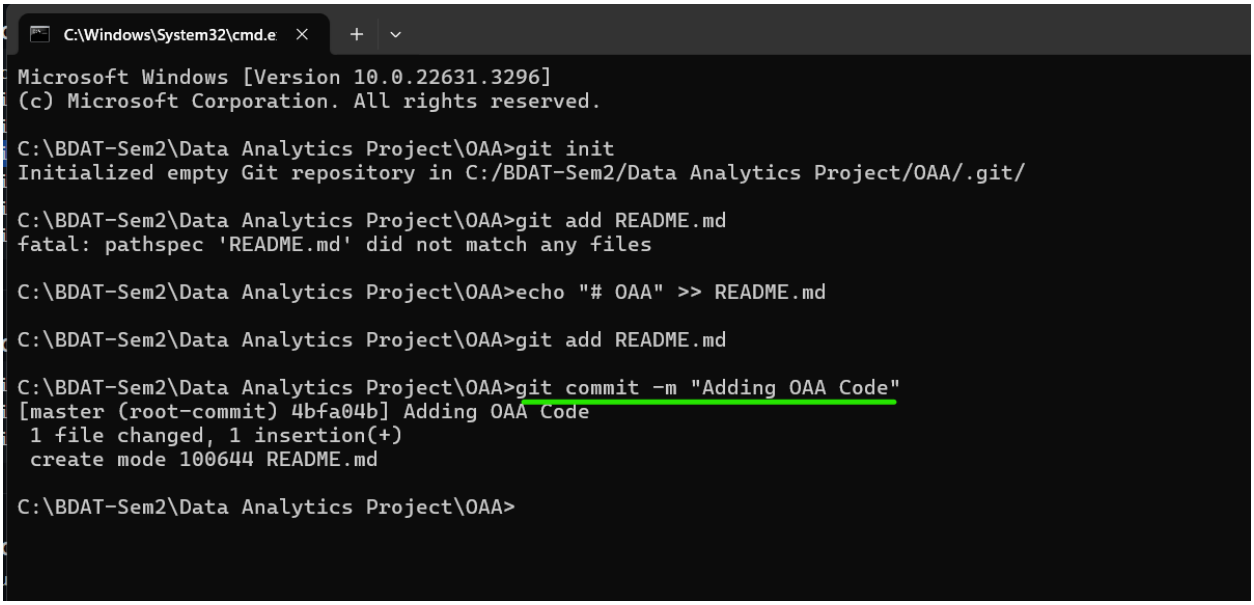
We initialize a Git repository with the command: `git init.`



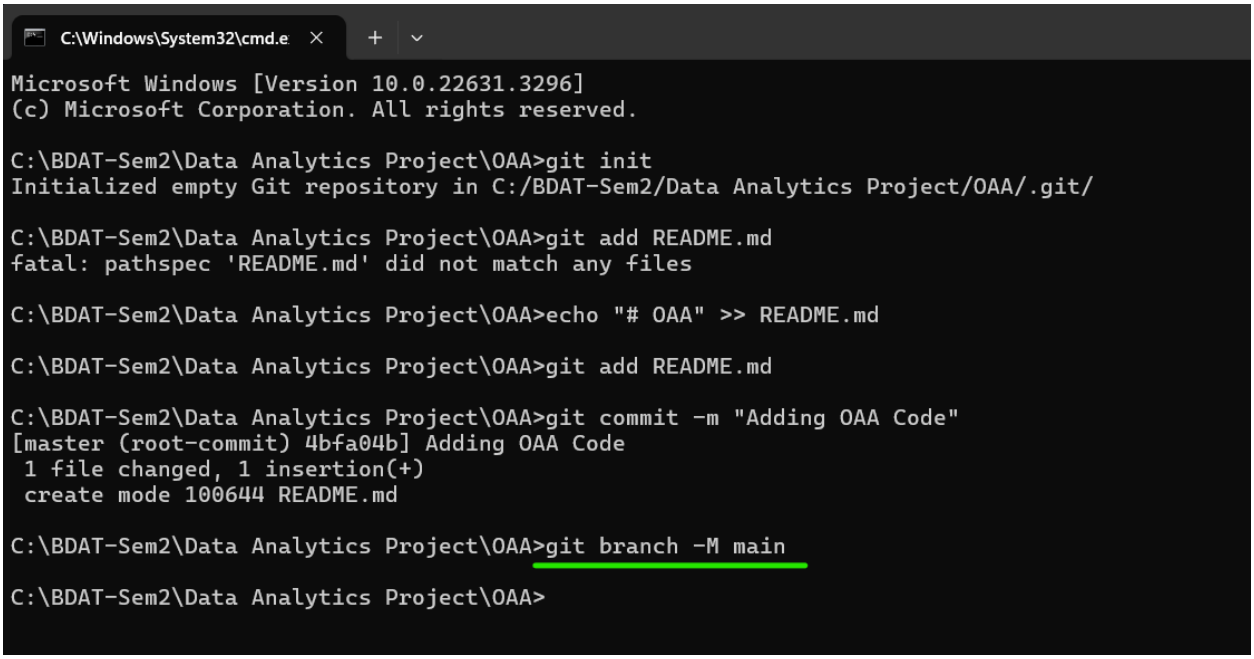
We add all files to the Git repository by executing: `git add ...`



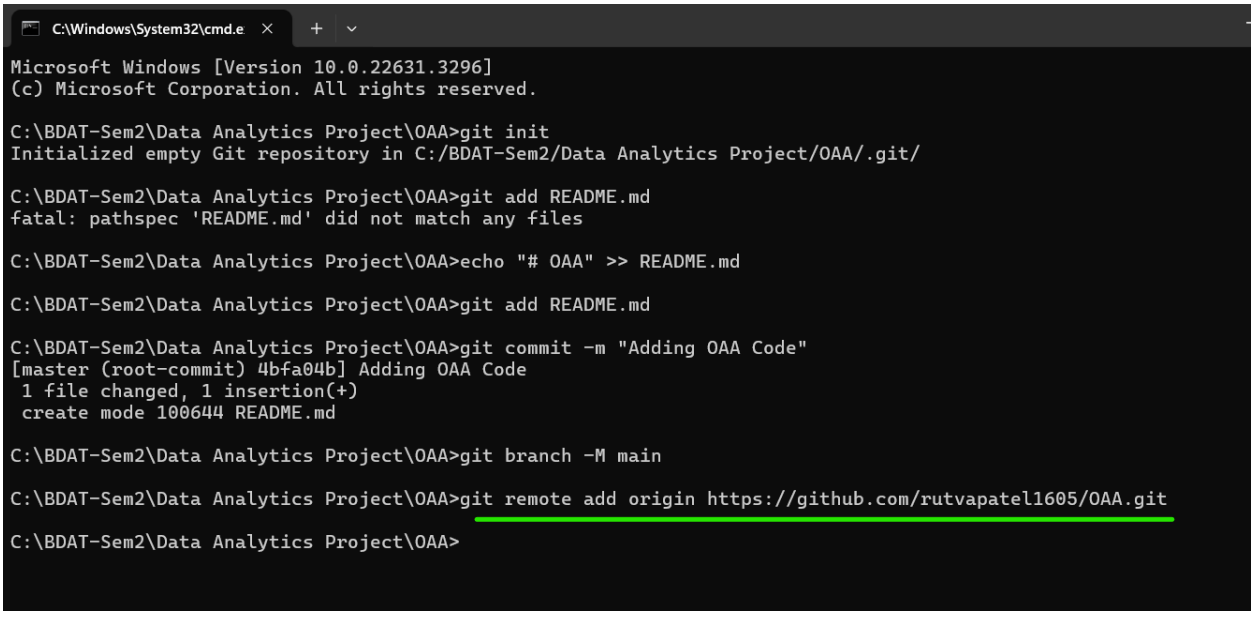
After making the necessary changes, we commit them with a meaningful message: `git commit -m "Initial commit".`



Next, we create a new repository on our preferred Git hosting service, such as GitHub.



Following the hosting service's instructions, we add the remote repository URL to our local repository.



Finally, we push the code to the remote repository using the command: `git push origin main`.

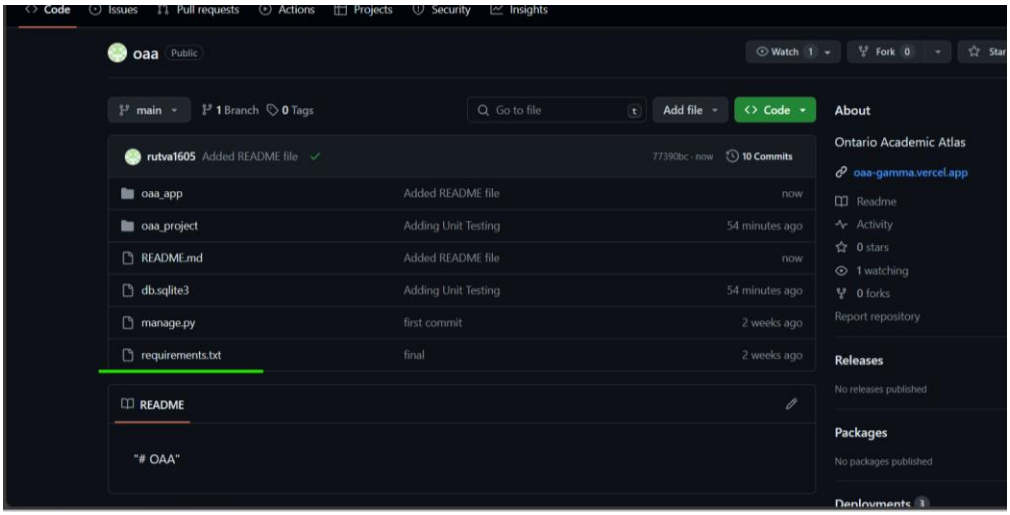
```
C:\Windows\System32\cmd.e

C:\BDAT-Sem2\Data Analytics Project\OAA>git init
Initialized empty Git repository in C:/BDAT-Sem2/Data Analytics Project/OAA/.git/

C:\BDAT-Sem2\Data Analytics Project\OAA>git add README.md
fatal: pathspec 'README.md' did not match any files

C:\BDAT-Sem2\Data Analytics Project\OAA>echo "# OAA" >> README.md

C:\BDAT-Sem2\Data Analytics Project\OAA>git add README.md

C:\BDAT-Sem2\Data Analytics Project\OAA>git commit -m "Adding OAA Code"
[master (root-commit) 4bfa04b] Adding OAA Code
 1 file changed, 1 insertion(+)
 create mode 100644 README.md

C:\BDAT-Sem2\Data Analytics Project\OAA>git branch -M main

C:\BDAT-Sem2\Data Analytics Project\OAA>git remote add origin https://github.com/rutvapatel1605/OAA.git

C:\BDAT-Sem2\Data Analytics Project\OAA>git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 227 bytes | 227.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/rutvapatel1605/OAA.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.

C:\BDAT-Sem2\Data Analytics Project\OAA>
```

Step 2: Deployment Process:

To deploy the project, we set up a server environment with all the necessary dependencies for running Django projects, including Python, Django, and a database server.

We clone the Git repository onto the server using the command: `git clone <repository_url>`.

Navigating to the project directory on the server, we install project dependencies via the command: `pip install -r requirements.txt`.

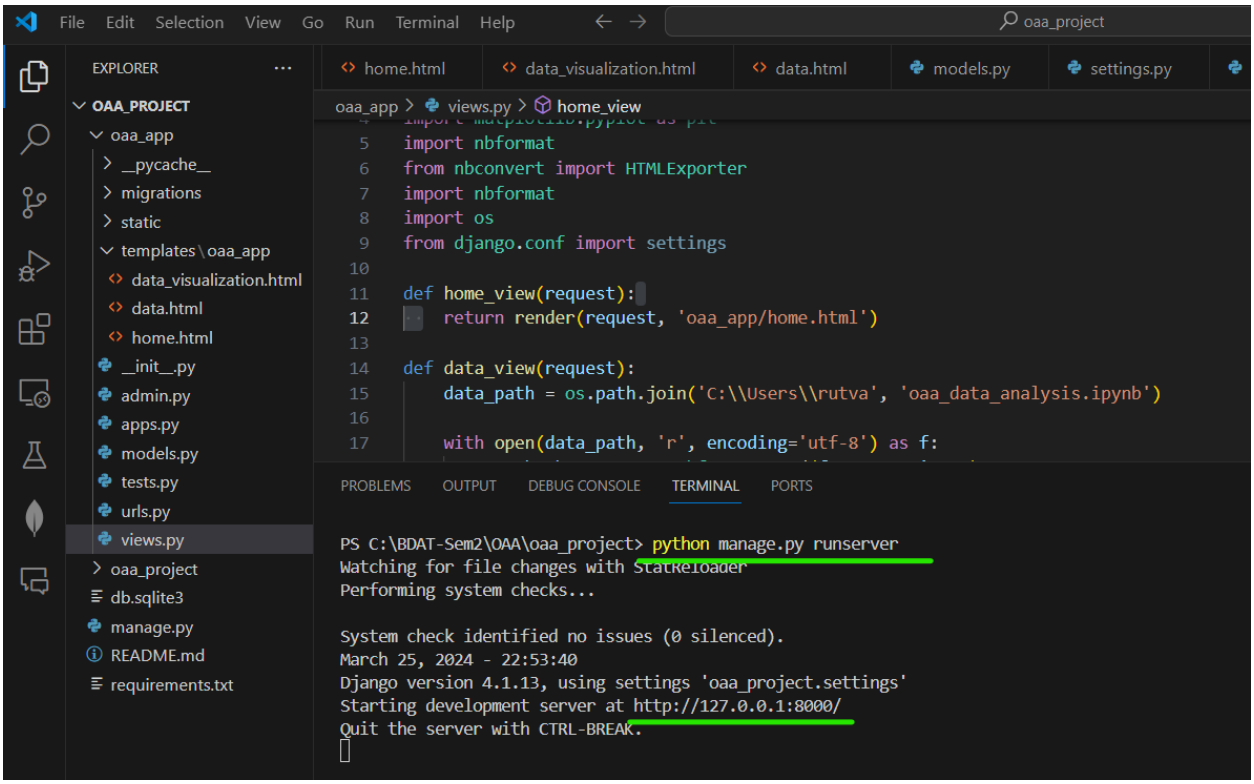


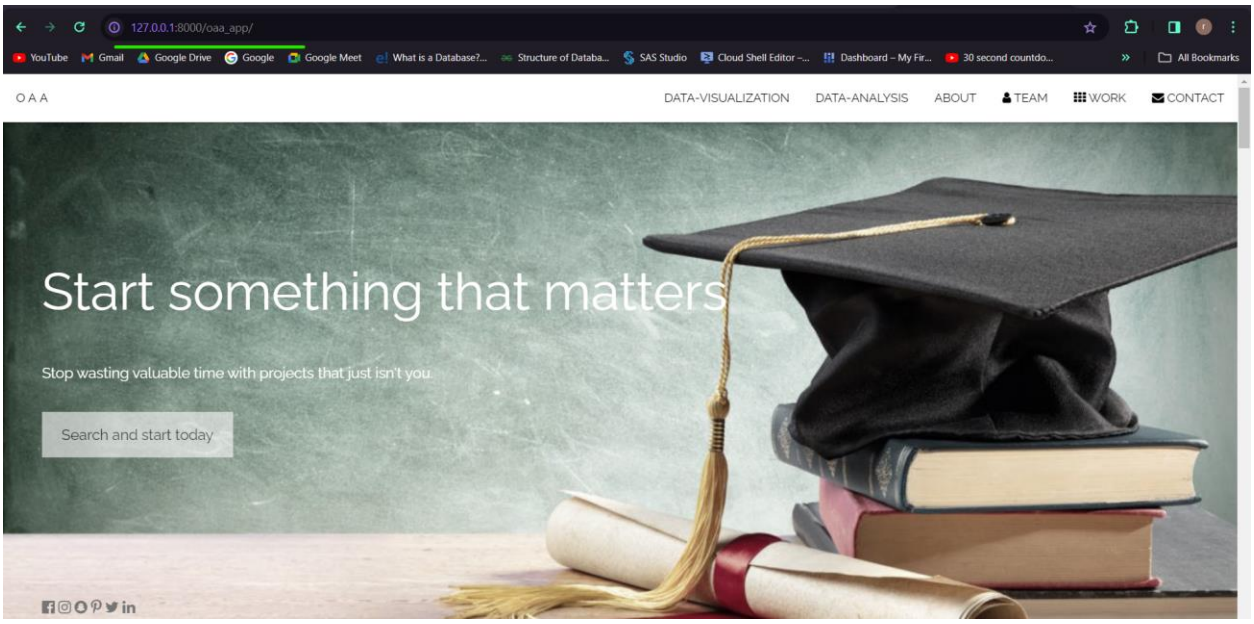
We configure the Django project settings for the production environment, adjusting database settings and security settings as necessary.

To collect static files, we execute: `python manage.py collectstatic`.

Migrating the database to reflect any changes, we use the command: `python manage.py migrate`.

Finally, we start the Django development server by running: `python manage.py runserver`.





Step 3: Downloading and Running the Code:

- Visit the Git hosting service where the Ontario Academic Atlas project repository is hosted.
- Locate the "Clone or Download" button and click on it.
- Copy the repository URL provided.
- Open a terminal or command prompt on your local machine.
- Navigate to the directory where you want to download the project code.
- Clone the Git repository using the command: `git clone <repository_url>`.
- Navigate to the project directory.
- Install project dependencies using the command: `pip install -r requirements.txt`.
- Configure the Django project settings as needed for the local environment.
- Migrate the database using the command: `python manage.py migrate`.
- Start the Django development server using the command: `python manage.py runserver`.

Conclusion:

The deployment process outlined in this document provides a systematic approach to deploying the Ontario Academic Atlas project on a server environment and running it locally on a user's machine. By following these instructions, users can effectively deploy the project and access its functionalities either on a remote server or locally for development and testing purposes.