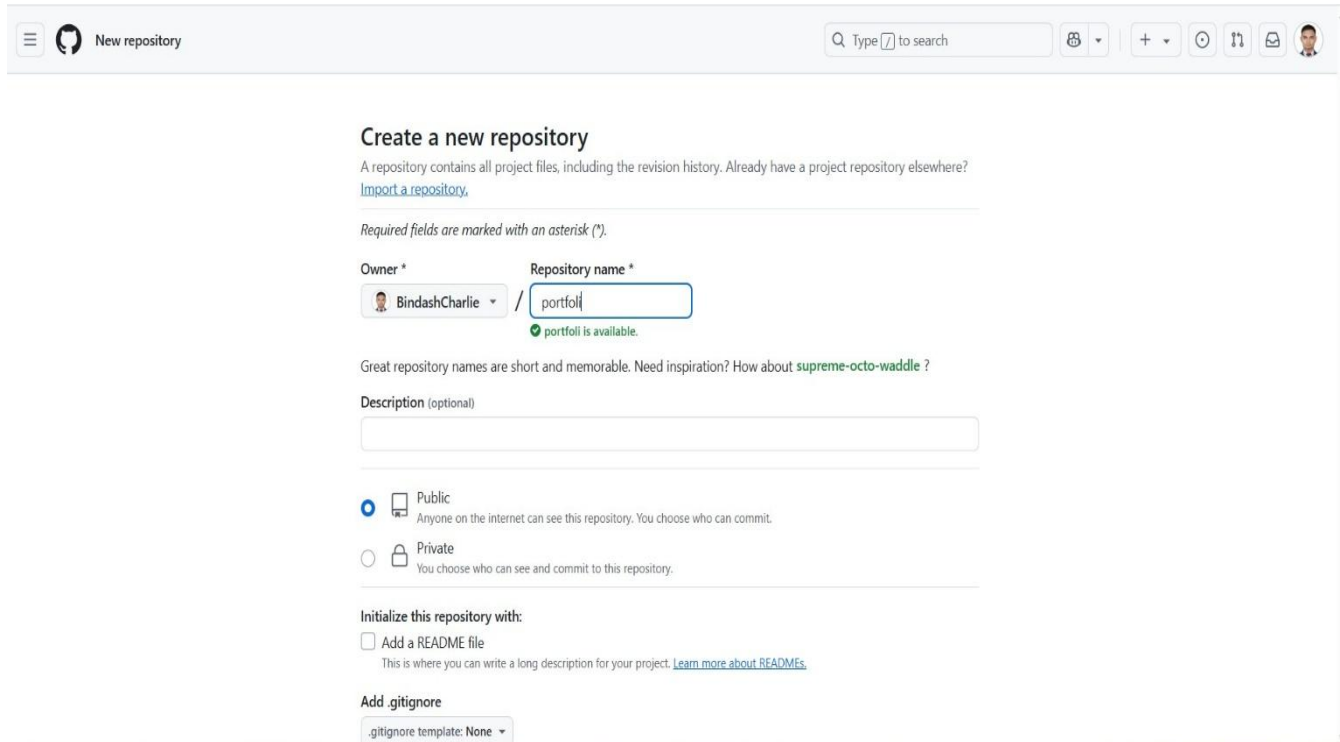


Git and GitHub Workflow Documentation

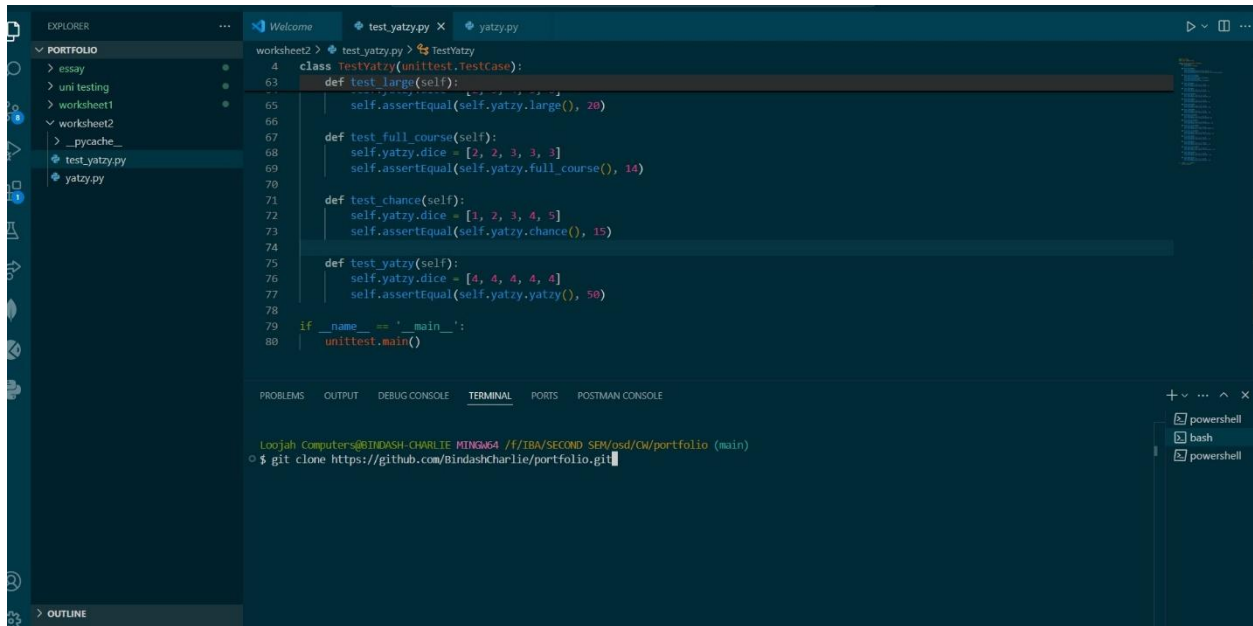
Create a Repository



The screenshot shows the GitHub 'Create a new repository' interface. At the top, there's a header with the GitHub logo, 'New repository' text, a search bar, and several icons. The main content area is titled 'Create a new repository' and includes a brief explanation of what a repository is. Below this, there's a section for 'Required fields' with two input fields: 'Owner' (a dropdown menu showing 'BindashCharlie') and 'Repository name' (a text input field containing 'portfolio'). A green checkmark indicates that 'portfolio' is available. Below the repository name field, there's a note about great repository names being short and memorable, with a link to 'supreme-octo-waddle'. There's also a 'Description (optional)' text area. Further down, there are two radio button options for repository visibility: 'Public' (selected) and 'Private'. Below these, there's a section for 'Initialize this repository with:' which includes a checkbox for 'Add a README file' and a link to 'Learn more about READMEs'. At the bottom, there's a section for 'Add .gitignore' with a dropdown menu showing '.gitignore template: None'.

Clone the Repository

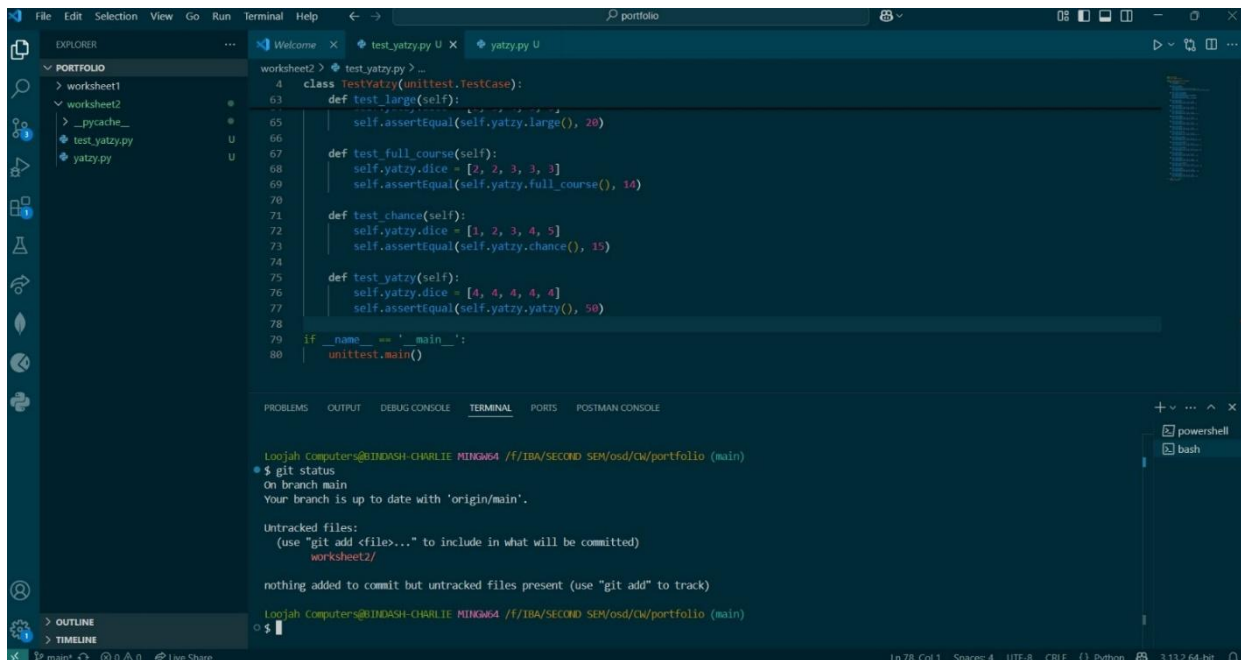
Git Clone is the command that we employ to copy a remote repository (for example, one on GitHub or GitLab) onto our local system. It lets us copy the whole project along with its history so that we can work on it locally. When we run the command `git clone`, it downloads the project files from the remote repository and creates a new local repository on our machine. In this manner, we have a complete copy of the project now to manage, and we can push changes, make them, and push them again to the remote repository.



Check Status

git status

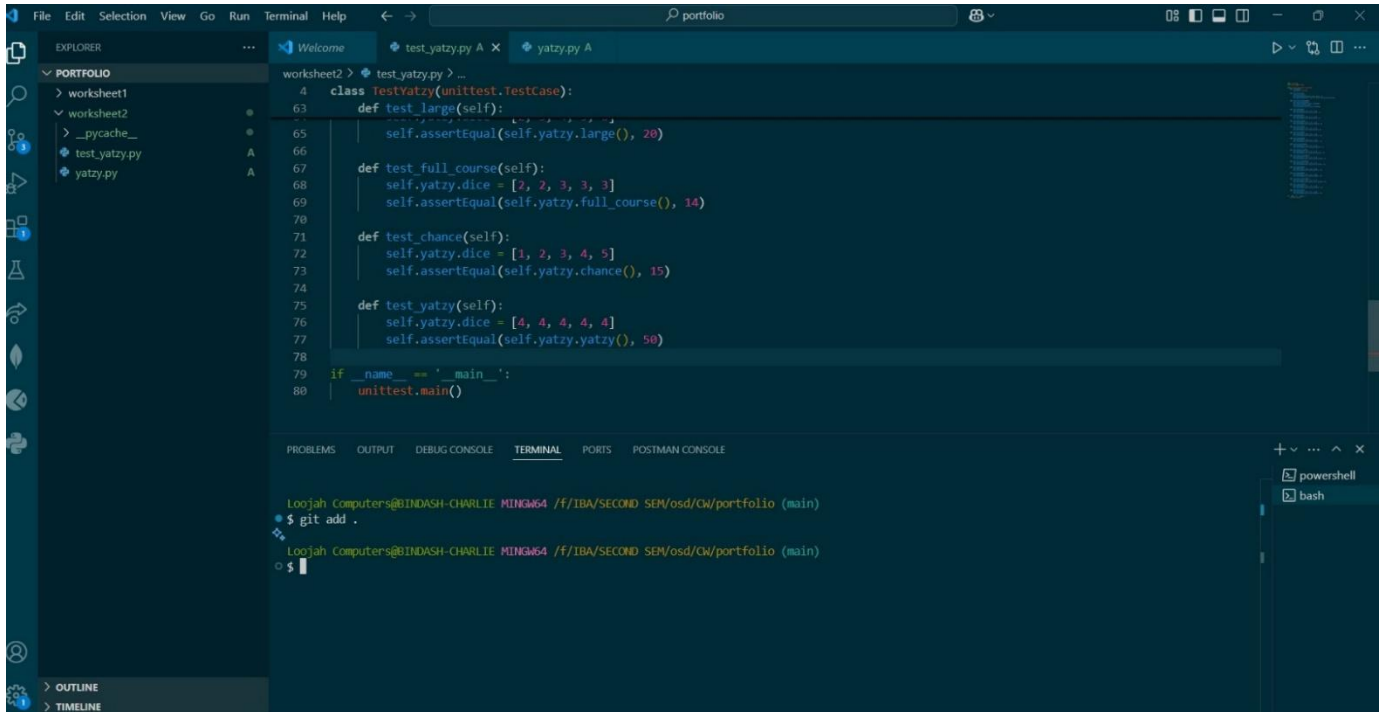
The git status command checks the current state of your Git working directory and staging area. It shows which files have been modified, added, or deleted since your last commit, and whether they're staged for the next commit or untracked (not yet added to Git).



Stage Changes

git add .

Git add is a command we use to tell Git which changes we want to save in your project. When we make changes to files in your project, we use to select the specific files or modifications we want to keep. Once we've added them, they are staged and ready to be saved.



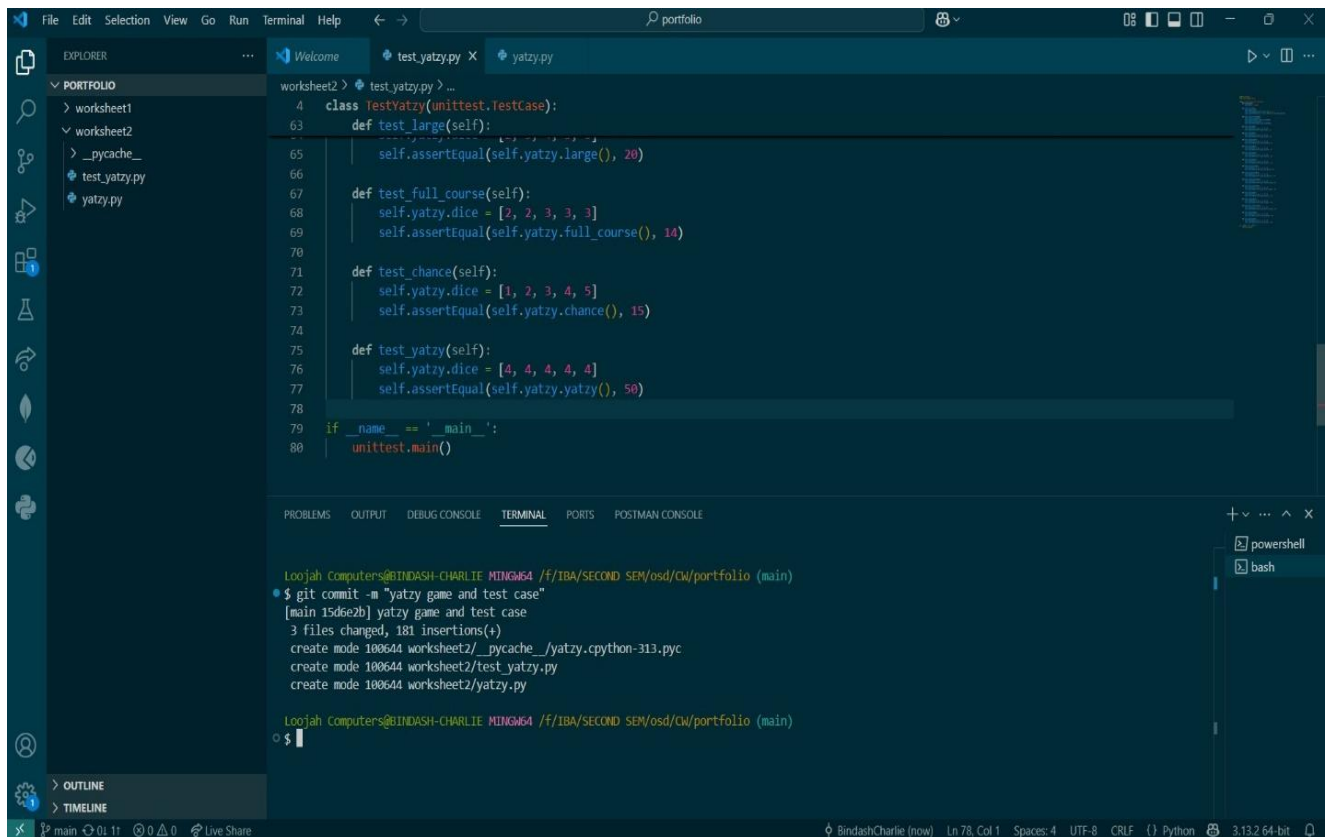
The screenshot shows a Visual Studio Code editor window with a dark theme. The Explorer panel on the left shows a project named 'portfolio' with a file structure including 'worksheet1', 'worksheet2', and a subdirectory 'yatzu' containing 'test_yatzy.py' and 'yatzy.py'. The main editor area displays the content of 'test_yatzy.py', which is a Python test class using unittest. The code includes methods for testing 'large', 'full_course', 'chance', and 'yatzy' attributes. The bottom panel shows the 'TERMINAL' tab with the following commands and output:

```
Loojah Computers@BINDASH-CHARLIE MINGW64 /F:/IBA/SECOND SEM/osd/cw/portfolio (main)
$ git add .
Loojah Computers@BINDASH-CHARLIE MINGW64 /F:/IBA/SECOND SEM/osd/cw/portfolio (main)
$
```

Commit Changes

git commit -m "first commit"

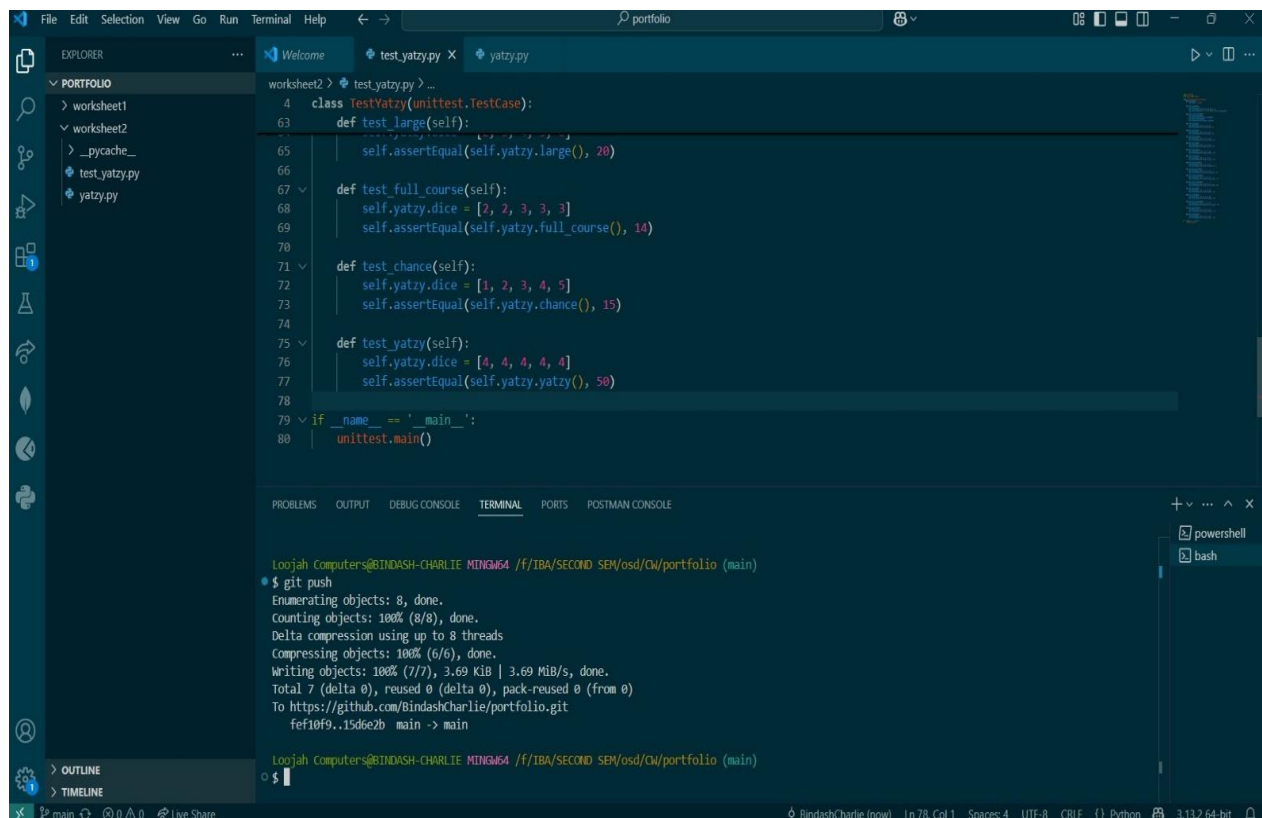
When we invoke git commit, we're asking Git to commit the changes we've made and staged with git add. This will keep the state of our 4 files, along with the changes we've chosen, as a new snapshot or version of our project. Every commit includes a message explaining the change, so it's easy to trace the history of our project and understand what was done and why. The changes, once implemented, are safely preserved in project history and can be recalled or undone if necessary.



Push to GitHub

git push origin main

Git push, is the command that we use in order to transmit our project updates on the local system to a remote repository (e.g. GitHub or GitLab). Having updated our project and staged the updates with `git add` and committed it with `git commit`, we employ `git push` so that other users can view the changes. This command pushes our changes to the remote repository so that other team members can see and utilize the updated version of the project. It informs all the team members about the latest status of the project.



Pull Changes

git pull origin main

The Git pull command functions to retrieve remote repository changes from GitHub or GitLab into our local project. The git pull command allows us to obtain updates from the remote repository which contains changes made by other team members. The process maintains our project's status with the newest modifications from other contributors. The process ensures our local project files match the content of the remote repository.

