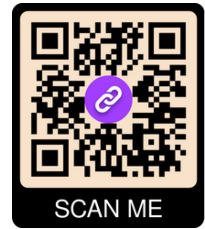




DEMO



SIMPLIFY YOUR GIT WORKFLOW  
"FOCUS MORE ON CODING, LESS ON  
COMMANDS."  
"COMMIT CONFIDENTLY, ANALYZE  
EFFORTLESSLY."

Project URL

<https://github.com/SETeam59/proj3>

Have difficulty continually looking up abstract git commands? Welcome to GITS! This project aims to reduce the overhead that is encountered when using git by simplifying certain actions and combining others into a single step.

## FEATURES

- **One-Click Commands:** Combines commonly used git commands into a single-click action (e.g., "Stage, Commit, Push" in one step)
- **Commit with Confidence:** The gits commit\_with\_test feature checks the success of unit test cases before committing, reducing the risk of broken code.
- **Command Customization:** Introduce a customization option for users to create and save their own "one-click command" sequences to suit their specific workflows.
- **GITS Stats:** Provides user statistics—commit count, insertions, and deletions—in a clear, tabular format for easy contribution analysis.
- **Simplified Branching:** Allows easy branch creation and merging with minimal interaction.
- **User-Friendly Data Analysis:** Offers an intuitive way to see developer contributions, making team and individual performance evaluation easier.



TECH  
STACK

Python, Shell, Flake8



20 + Testcases covering  
project functionalities

Group No 44

Shashank Walke - swalke

Sumeet Khillare - skhilla

Xiaoqin Pi - xpi

## FUTURE SCOPE

- **Advanced Metrics Reporting:** Expand gits stats to include additional metrics like code churn, file-specific changes, and activity trends for more in-depth insights.
- **Error Prevention:** Features confirmation steps for high-risk actions, reducing errors during complex Git operations.
- **Merge Assistant:** Create a guided merge feature that simplifies merging branches by suggesting the least conflicting approach and highlighting areas of concern beforehand.
- **Context-Based Suggestions:** Provides suggestions based on user actions (e.g., suggests a pull after failed push).
- **Custom Workflow Templates:** Implement customizable workflows that allow users to set up specific command sequences based on their project type.

| (venv) [base] shradheer@shradheer-mac-proj3 % gits stats | Insertions | Deletions | Total Lines |
|--|------------|-----------|-------------|
| (venv) [base] shradheer@shradheer-mac-proj3 % gits stats |            |           |             |
| author: Sharan Jamanani 2                                | 15         | 12        | 27          |
| author: hk 2   | 6          | 4         | 12          |
| author: Sharan Jamanani 3                                | 2          | 11        | 13          |
| author: Sharan Jamanani 7                                | 349        | 48        | 429         |
| author: Nayan Bhushan Kanganahalli Nagabhushana 18       | 12         | 155       | 177         |
| author: svruberaj 15                                     | 12         | 568       | 724         |
| author: svruberaj 0                                      | 12         | 278       | 353         |
| author: alishan 1  | 1          | 0         | 1           |
| author: priyankmurthy 19                                 | 4          | 48        | 55          |
| author: Priya Krishnamurthy 13                           | 14         | 139       | 167         |
| author: Ruchaj 3   | 4          | 158       | 165         |
| author: Divya Putanan 0                                  | 4          | 134       | 138         |
| author: Ruchaj 1   | 3          | 18        | 21          |
| author: svinaga 1  | 4          | 67        | 71          |
| author: Ruchaj Rujashekaralal 3                          | 4          | 91        | 112         |
| author: Bhavesh Agrawal 24                               | 13         | 74        | 117         |
| author: nikhilnandya 13                                  | 40         | 298       | 371         |
| author: stevenmendes 6                                   | 9          | 199       | 205         |
| author: Aadil 1  | 8          | 9         | 17          |
| author: Aadil Khan 14                                    | 13         | 145       | 155         |
| author: Durga 55   | 72         | 324       | 448         |
| author: shruvank202 16                                   | 22         | 227       | 249         |
| author: stujana13 8                                      | 2          | 2         | 4           |
| author: Srulana Mehakonda 13                             | 18         | 361       | 386         |
| author: Soham Kumar 6                                    | 3          | 181       | 185         |
| author: Tanay Agrawal 38                                 | 36         | 447       | 515         |
| author: Anil Gupta 4                                     | 2          | 22        | 24          |
| author: anilgautam25 7                                   | 13         | 93        | 102         |
| author: rakshak189 4                                     | 7          | 86        | 91          |
| author: anshu23 4  | 7          | 285       | 292         |
| author: agautam 2  | 3          | 118       | 121         |

```
git log --graph --pretty=format:'%h %s' --abbrev=7 --max-count=1000
graph TD
    A[3decab6 dummy] --> B[4674689 added squash image and example in readme]
    B --> C[1d618d4 updated citation]
    C --> D[5ae2faa Update codecov in project3_scorecard.md]
    D --> E[5653395 Update project3_scorecard.md]
    E --> F[ab326b9 Merge pull request #12 from SETeam59/proj3]
```

Running System Snaps

```
0
/ \
/ \

Sharansrj567 commits:
3decab6 dummy
4674689 added squash image and example in readme
1d618d4 updated citation
5ae2faa Update codecov in project3_scorecard.md
5653395 Update project3_scorecard.md
ab326b9 Merge pull request #12 from SETeam59/proj3
```