

GitHub Intro/Standout



What is GitHub?

An open-source code sharing and publishing service.

Key features:

- Collaboration with worldwide contributors.
- Forking, pull requests, and issues.

What is GitHub?

GitHub is like Google Drive on steroids for coders



What is GitHub?

- Collaboration Heaven: Just like you share docs on Google Drive, you can share code on GitHub. But it's better because you can actually see who changed what and when, making group projects a breeze.
- **Version Control Magic**: Ever made a mistake and wished you could go back to an earlier version of your document? GitHub lets you do that with code. It keeps a history of every change, so if something goes wrong, you can easily revert back.
- **Showcase Your Work**: Google Drive is private until you choose to share. GitHub is like an open book (that you control), letting you showcase your projects to the world. It's your portfolio that potential employers can see, demonstrating your skills, creativity, and dedication.
- **Community and Growth**: Imagine Google Drive as a solitary workspace. Now, imagine GitHub as a vast community where you can contribute to others' projects, get feedback, and improve your skills. It's not just about storage; it's about growth and learning.

Why is GitHub Important?

- Industry Standard Tool
- Employers' interest in GitHub profiles.
- Showcase coding skills and personal projects.



Git Push

What is this?

Uploading your local repository changes to a remote repository.

Use Case

After committing your changes locally, you push them to share with your team or integrate into the main project.

```
i in people.data.users:
 response = client.api.statuses.user_timeline.get(screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_name=i.screen_na
print 'Got', len(response.data), 'tweets from', i.screen_name
 if len(response.data) != 0:
                 ltdate = response.data[0]['created_at']
                ltdate2 = datetime.strptime(ltdate, '%a %b %d %H:%M:%S +0000 %Y
                 today = datetime.now()
                howlong = (today-ltdate2).days
                 if howlong < daywindow:</pre>
                                 print i.screen_name, 'has tweeted in the past' , daywindow,
                                 totaltweets += len(response.data)
                                  for j in response.data:
                                                   if j.entities.urls:
                                                                  for k in j.entities.urls:
                                                                                newurl = k['expanded_url']
                                                                                urlset.add((newurl, j.user.screen_name))
                                 print i.screen_name, 'has not tweeted in the past', daywind
```

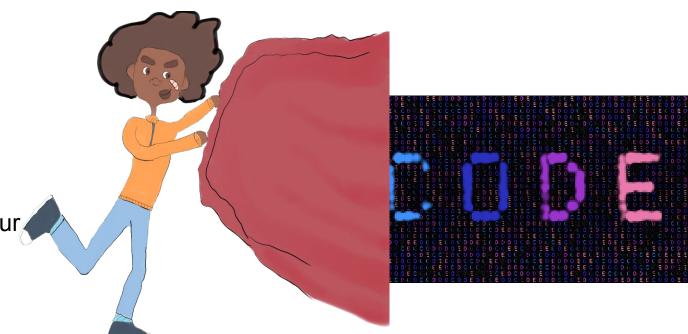
Git Pull

What is this?

Downloading changes from a remote repository to your local machine.

Use Case

When you want to get the latest code from the main project or another branch into your local repository.



Pull Requests

What is this?

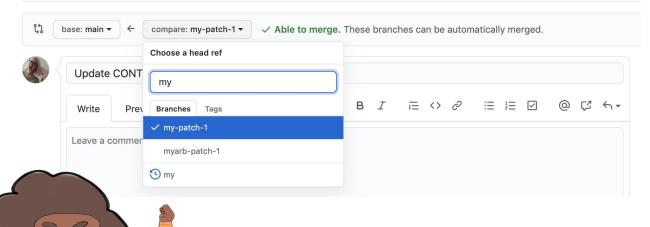
A request to merge your code changes from one branch to another within a repository.

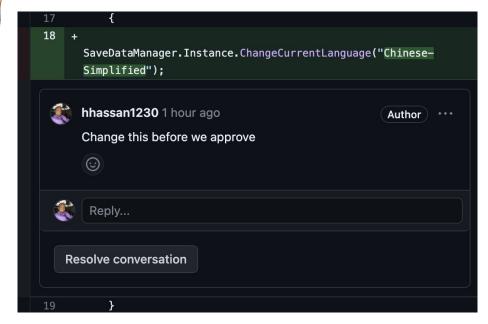
Use Case

When you've finished a feature or bugfix in a branch and want it to be reviewed and merged into the main project.

Open a pull request

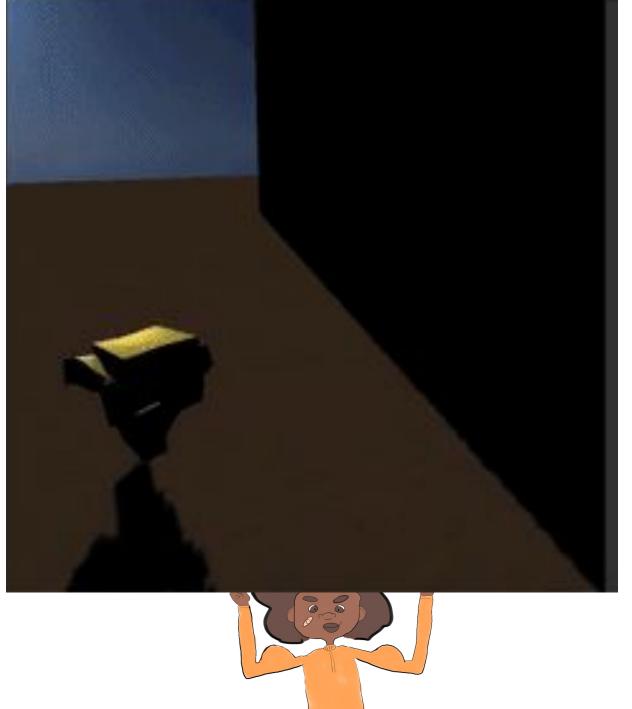
Create a new pull request by comparing changes across two branches. If you need to, you can also compare across forks.





Github Examples





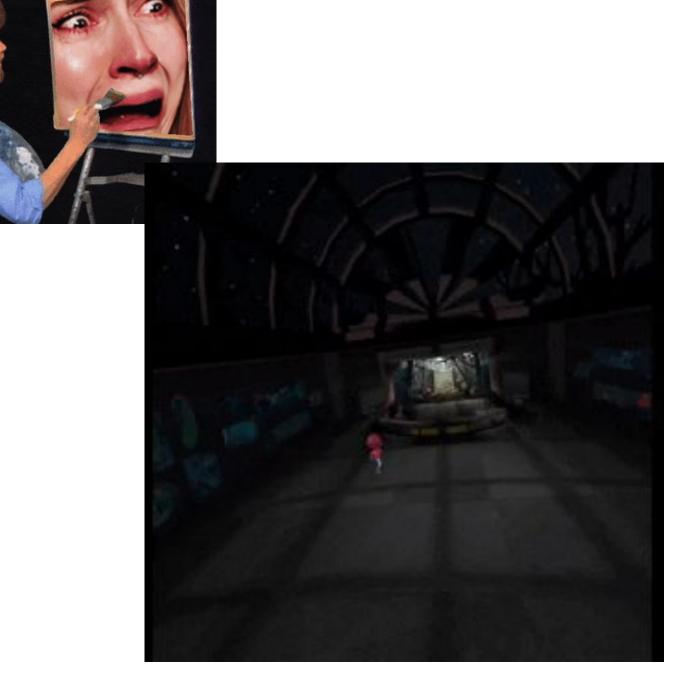
Github Examples







Github Examples



Crafting a Good GitHub Profile



You Picture of yourself



BioPast roles, skills, interests.



Projects
Showcase your best work.



Repositories
Showcase your best work.

Dive into Projects

Project Suggestions



Personal

- Websites
- Games
- Apps
- Plug-ins



Industry Partnerships

- Class Homework
- Internship Projects*
 (ensure no confidentiality breaches)
- Open Source Contributions

Engaging with the Community

Debugging and problem-solving in teams.

Show versatility through various tech stacks and tools.

△ Contribution graphs.

Completeness & Contributions

▲ Finish what you start.

Contribution frequency vs. quality.

Focus on quality projects.

README & CONTRIBUTING Files

Importance of README.md

Essential elements of a good README.

▲ CONTRIBUTING file details.

Profile Settings Tips

- Email visibility.

- "Available for hire" option.

Practical Tips

▲ Professional repo names and descriptions.

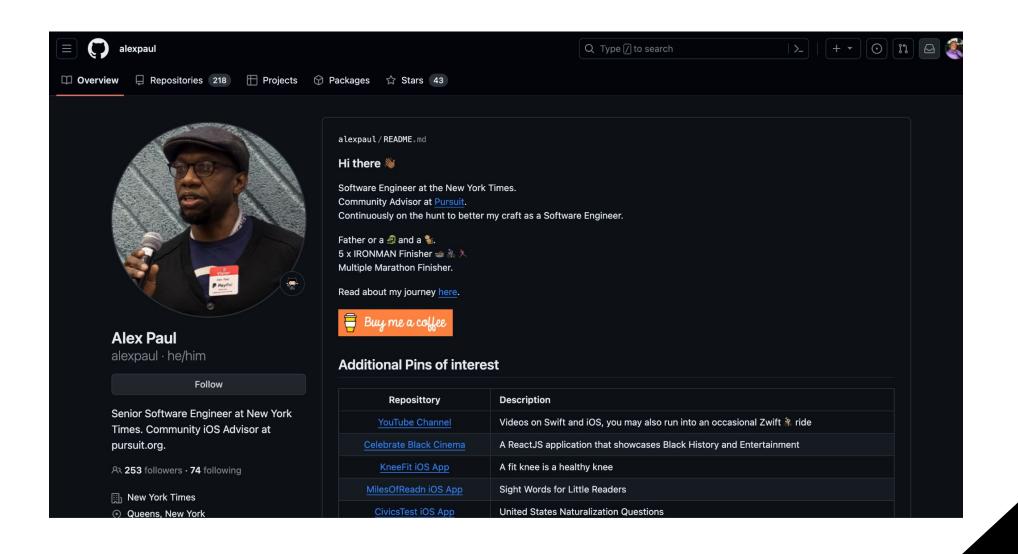
△ Use the pin feature wisely.

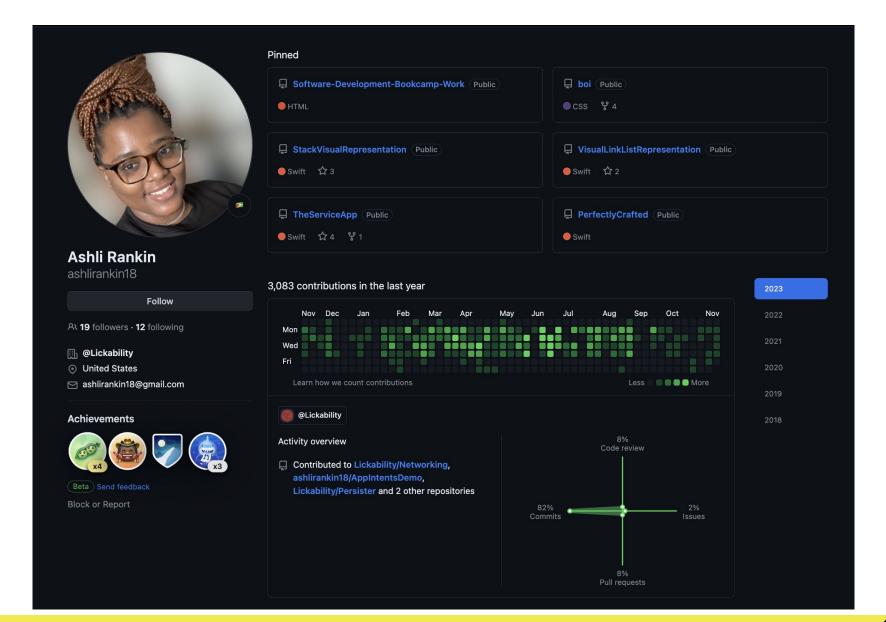
Highlighting complex projects.

What to do on GitHub?

- Diverse Projects: Like a well-rounded student, a GitHub with varied projects (class assignments, personal projects, open source contributions) shows versatility and a willingness to explore different challenges.
- **Commit History**: Regular updates and commits signal dedication and a habit of continuous learning and improvement. It's like showing up to every class, not just the finals.
- Quality over Quantity: A few well-documented, thoughtful projects can speak louder than a multitude of half-finished ones. It's about showing your best work, not just all your work.
- **Problem Solving and Creativity**: Recruiters love seeing how you tackle problems, think critically, and innovate. Contributions to solving issues or enhancing existing projects highlight these skills.
- **Community Engagement**: Active participation in the GitHub community, through contributing to open source projects or collaborating with others, shows you can work well in teams and are engaged in your field.

Sample Profiles





Using GitHub in Development/Work

▲ Branching strategy.

Testing after pushing.

▲ Naming conventions for releases.

GitHub Help & Learning

△ GitHub forums and Stack Overflow.

Microsoft's GitHub learning paths.

Additional Notes



Internship Projects

Confidentiality concerns.



LeetCode submissions

Auto-sync for LeetCode submissions.

Resources & Conclusion

Resources & Conclusion

- List of resources (next slide).
- Your GitHub profile is your professional coding diary, make it stand out!



Resources & Conclusion

GitHub Official Website

- GitHub
- A primary resource for understanding GitHub's functionalities and services.

GitHub Guides and Best Practices

- Understanding the GitHub Flow
- Guides on GitHub functionalities, including forking, pull requests, and issues.

Professional Tips for GitHub Profiles

- 7 Tips to Improve Your GitHub Profile
- Offers practical advice on optimizing GitHub profiles for professional visibility.

Open Source Repository Maintenance

- Checklist for Every Open Source Repository Maintainer
- Highlights best practices for managing and contributing to open-source projects.

GitHub in the Industry

- What Exactly Is GitHub Anyway?
- An article explaining the role of GitHub in modern software development and collaboration.

GitHub for Job-Seeking Developers

- What Do Job-Seeking Developers Need in Their GitHub?
- Discusses the importance of GitHub profiles in the job search for developers.

GitHub Education and Learning Tools

- GitHub Learning Lab
- Offers a range of interactive courses to learn GitHub.

Microsoft GitHub Learning Paths

- GitHub Learning Paths by Microsoft
- Provides structured learning paths for various aspects of using GitHub.

GitHub Community and Support

- GitHub Community Forum
- A platform for asking questions and sharing information with other GitHub users.

Stack Overflow

- Stack Overflow
- A popular platform for asking coding and software development questions.