

# se-day-2-git-and-github

1. Explain the fundamental concepts of version control and why GitHub is a popular tool for managing versions of code. How does version control help in maintaining project integrity?
2. Describe the process of setting up a new repository on GitHub. What are the key steps, and what are some of the important decisions you must make during this process?
3. Discuss the importance of the README file in a GitHub repository. What should be included in a well-written README, and how does it contribute to effective collaboration?
4. Compare and contrast the differences between a public repository and a private repository on GitHub. What are the advantages and disadvantages of each, particularly in the context of collaborative projects?
5. Detail the steps involved in making your first commit to a GitHub repository. What are commits, and how do they help in tracking changes and managing different versions of your project?
6. How does branching work in Git, and why is it an important feature for collaborative development on GitHub? Discuss the process of creating, using, and merging branches in a typical workflow.
7. Explore the role of pull requests in the GitHub workflow. How do they facilitate code review and collaboration, and what are the typical steps involved in creating and merging a pull request?
8. Discuss the concept of "forking" a repository on GitHub. How does forking differ from cloning, and what are some scenarios where forking would be particularly useful?

9. Examine the importance of issues and project boards on GitHub. How can they be used to track bugs, manage tasks, and improve project organization? Provide examples of how these tools can enhance collaborative efforts.
10. Reflect on common challenges and best practices associated with using GitHub for version control. What are some common pitfalls new users might encounter, and what strategies can be employed to overcome them and ensure smooth collaboration?