GitHub Organization Guidelines and Terminology

1. Organization:

- **Definition:** A GitHub feature that allows you to manage multiple repositories, teams, and members under a single entity.
- **Guideline:** Use organizations to centralize and manage projects, particularly for teams or multiple related projects.

2. Repository:

- Definition: A storage space for a project's files and its version history.
- **Guideline:** Create separate repositories for distinct projects or modules. Keep repositories organized with clear names and a descriptive README.md.

3. **Team**:

- **Definition:** A group of members within an organization that can be assigned specific access levels and permissions to repositories.
- **Guideline:** Set up teams to manage permissions and collaboration efficiently. Assign roles and access based on team responsibilities.

4. Member:

- Definition: An individual who is part of an organization or team on GitHub.
- **Guideline:** Invite members based on their role and contribution needs. Regularly review membership and permissions.

5. Access Levels:

- **Definition:** Permissions that define what actions members can perform within a repository (e.g., read, write, admin).
- **Guideline:** Assign appropriate access levels to ensure security and proper workflow. Limit write and admin access to trusted individuals.

6. Repository Settings:

- **Definition:** Configuration options for a repository that control its behavior, including access permissions and branch protection rules.
- **Guideline:** Configure repository settings to enforce best practices, such as enabling branch protection and setting up required reviews for pull requests.

7. Branch Protection Rules:

- **Definition:** Rules applied to branches to enforce certain requirements, such as requiring pull request reviews or passing status checks before merging.
- **Guideline:** Set up branch protection rules on critical branches (e.g., main) to maintain code quality and prevent unauthorized changes.

8. Pull Request (PR):

- **Definition:** A request to merge changes from one branch into another, often including a discussion and review process.
- **Guideline:** Use pull requests to propose and review changes. Provide clear descriptions and address feedback to ensure code quality.

9. Issue Tracker:

- **Definition:** A tool for tracking bugs, tasks, and feature requests within a repository.
- **Guideline:** Use issues to organize and prioritize tasks. Provide detailed information and use labels and milestones to categorize and track progress.

10. Milestone:

- Definition: A way to group issues and pull requests into a larger goal or version, often associated with project timelines.
- **Guideline:** Create milestones to track progress toward significant goals or releases. Assign issues and PRs to milestones to monitor completion.

11. Project Board:

- **Definition:** A Kanban-style board for managing tasks, issues, and pull requests within a repository or organization.
- **Guideline:** Use project boards to visualize and manage workflows. Organize tasks into columns to track their progress from to-do to done.

12. **Wiki**:

- **Definition:** A space within a repository for creating and managing project documentation.
- **Guideline:** Use the wiki for comprehensive project documentation. Keep it updated with relevant information and guidelines.

13. Actions:

- **Definition:** GitHub's CI/CD service that automates workflows like building, testing, and deploying code.
- **Guideline:** Set up GitHub Actions to automate repetitive tasks. Create workflows for testing and deployment to streamline development processes.

14. Secrets:

- **Definition:** Secure storage for sensitive information like API keys and credentials used in GitHub Actions workflows.
- **Guideline:** Store sensitive information as secrets in your repository settings. Ensure secrets are only accessible to workflows and team members who need them.

15. Security Advisories:

- **Definition:** Notifications about security vulnerabilities in dependencies or code within a repository.
- **Guideline:** Monitor and respond to security advisories promptly. Use GitHub's tools to address vulnerabilities and keep your code secure.

16. **Fork**:

- **Definition:** A personal copy of a repository that allows you to make changes without affecting the original project.
- **Guideline:** Fork repositories to experiment or contribute to projects. Submit pull requests from your fork to propose changes.

17. Collaborator:

- **Definition:** An individual with specific permissions to contribute to a repository.
- **Guideline:** Invite collaborators to contribute to repositories with appropriate access levels. Review and manage collaborator permissions regularly.

18. Code of Conduct:

- **Definition:** Guidelines for behavior and interaction within a repository or organization to ensure a positive and respectful environment.
- Guideline: Include a CODE_OF_CONDUCT.md file to set expectations for behavior and enforce a respectful community.

19. **CONTRIBUTING.md**:

- **Definition:** A file that provides guidelines for contributing to a repository, including how to submit issues and pull requests.
- **Guideline:** Include a CONTRIBUTING.md file to guide new contributors and standardize the contribution process.

20. **README.md**:

- **Definition:** A markdown file that provides essential information about a repository, such as purpose, installation instructions, and usage.
- **Guideline:** Keep the README.md file up-to-date with relevant information to help users and contributors understand and use your project.