



Organizing People for Successful Collaboration on GitHub

Chun-Yu Chen (Jason)

2024.11.19

About Me

- Academic Background
 - University of Bristol – Computer Science (2021, MSc)
 - National Yang-Ming University – Genome Sciences (2017, MRes)
 - National Chung Hsing University – Biotechnology (2015, BSc)
- Application Engineer at Allxon (09/2023 – 10/2024)
 - Establish partnerships with [ngrok](#) and [portainer.io](#)
 - Advocate and support Allxon Octo SDK
 - Pre-sale demo and post-sale technical support for Allxon solutions
 - Prepare demo and training materials for members, customers, and partners
 - Research on Nvidia Jetson series technology (BSP update, OTA deploy, JPS)

Philosophy of Collaboration on GitHub

- Key activities in collaboration:
 - Communication
 - Contribution
 - Administration
- Key entities for managing collaboration:
 - Individuals
 - Organizations
 - Enable shared **ownership** and **administration** of repositories
 - Example: System and Service Team
 - Teams
 - Groups of users within an organization
 - Example: AE Team, Engineering Team

About Repositories

- GitHub's core services center around repository functionalities
- Repositories are used to manage work and collaborate effectively:
 - **Issues:** Track bugs, tasks, and discussions
 - **Wiki:** Share documentation or project resources
 - **Discussions:** Facilitate team conversations
- Public vs. Private Repositories:
 - **Public:** Accessible to everyone on the internet
 - **Private:** Accessible only to you, invited collaborators, or organization members
 - Permissions and visibility settings apply to the entire repository, including code, issues, and the wiki

About Organizations

- Organizations are shared accounts where **multiple members** can collaborate
- Users can belong to multiple organizations
- Permissions are assigned based on roles:
 - **Owner**: Full control over the organization
 - **Member**: Limited access based on assigned permissions
 - **Outside Collaborator**: Access to specific repositories without membership
- **Teams**: Sub-groups of members within an organization
 - Control repository access levels (admin, read, or write)
 - Enable organization members to notify the entire team efficiently

How to Collaborate with External Collaborators

- **Join an Organization**

- **As Members:** Collaborators are added to the organization (teams)
 - Permissions can be adjusted for all repositories a team has access to
 - Ideal for long-term collaborators requiring access to multiple repositories
- **As Outside Collaborators:** Collaborators are added to specific repositories
 - Have no visibility into the broader organization or other repositories
 - Best for temporary or repository-specific access

- **Repository-Level Collaboration**

- The access level is the same as that of outside collaborators
- Offers flexibility for **individual** collaboration

Let's see a demo on GitHub! 🙌