**Github Cookbook**

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| Setup |  |
| Install Git | Git for Windows Link: https://git-for-windows.github.io/ Version: 2.11.0 (as of 1/2/2017) Installation: accept all the default configuration during installation |
| Join the repository | You should receive an email inviting you to collaborate on the repository. Accept the invitation. |
| Fork the repository | In the top right corner of the repository page, click the button "Fork" Read more: https://help.github.com/articles/fork-a-repo/ |
| Clone the forked repository to your local system | 1. Click the button: "Clone or download", copy the web URL. This URL is like: https://github.com/<your\_username>/C4SG.git 2. Click Windows Start button, launch "Git CMD" 3. Create a new directory <*your\_local\_directory*> to copy the repository locally > cd <your\_prefered\_path> > mkdir <your\_local\_repository\_directory> > cd *<your\_local\_repository\_directory>* 4. Clone the repository to local: > git clone https://github.com/<*your\_username>*/C4SG.git Repository is copied locally to: <your\_local\_repository\_directory>\<your\_local\_repository\_directory>\C4SG |
| Sync your fork | You should sync your fork: - Before start your work each day, and - Before perform final test on your code change and create pull request |
| Check the current configured remote repository. | > cd <your\_local\_repository\_directory>/C4SG > git remote -v This points to the fork. *origin https://github.com/<your\_username>/C4SG.git (fetch) origin https://github.com/<your\_username>/C4SG.git (push)* |
| Add upstream repositoryfor your fork | > git remote add upstream https://github.com/Code4SocialGood/C4SG.git |
| Verify the new upstream repository | > git remote -v  Your fork is the "origin" and the repository you forked from is the "upstream". *origin https://github.com/<your\_username>/C4SG.git (fetch) origin https://github.com/<your\_username>/C4SG.git (push) upstream https://github.com/Code4SocialGood/C4SG.git (fetch) upstream https://github.com/Code4SocialGood/C4SG.git (push)* |
| Fetch from upstream repository | > git fetch upstream |
| Check out your fork's local master branch | > git checkout master |
| Merge the changes from upstream/master into your local master branch, without losing your local changes | > git merge upstream/master |
| Publish your local commits so fork is synced up with upstream | > git push |
| Development |  |
| Check your current branch | > git branch |
| Create a branch for the issue you work on | > git branch <*new\_branch\_name>* |
| Switch to the created branch | > git checkout <*new\_branch\_name>* |
| Make code changes |  |
| Check status | git status |
| Add the files you want to commit | git add <*file\_name>* |
| Commit the changes | git commit -m "<*commit\_message>*" You may be prompted to run "git config" to set your identity for this repository only or globally |
| Push the change to the fork | git push origin *<new\_branch\_name>* |
| Create a Pull Request | Go to Github, click "New Pull Request" In the headfork, choose <new\_branch\_name> Click: Create Pull Request |
| Choose Assignee | Code4SocialGood |
| Useful Commands |  |
| git log |  |
| Branching Model | Protected branch |
| Dev Branch | master |
| Production Branch | release\_xxx |
| Feature Branch | feature\_xxx |