Branches-merging rules

Following the Github Structure diagram:

- 1. Only the Development branch (i.e. on-going master branch) can be merged into the Master branch. The merge can only be done after testings.
- 2. Feature/Problem branches are to be merged into the Development branch, after testing.

How to resolve merge conflict

Before pushing local changes to remote repository, please pull down the changes from the remote repository first.

Before pushing changes, you should update your local branch to include any commits that have been added to the remote repository. If someone has made commits on the remote that are not on your local branch, GitHub Desktop will prompt you to fetch the new commits before pushing your changes to avoid merge conflicts. For more information, see "Syncing your branch."

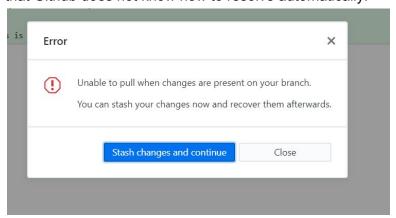
(Source: Github Docs)

When there are conflict:

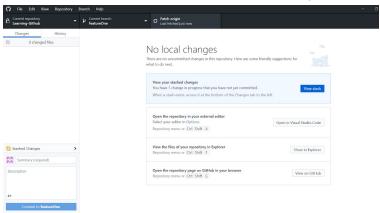
Person A (who finds the conflict) and Person B (whose work is involved in the conflict) is responsible to solve the conflict and protect the collaborated work.

One method to solve the conflict on Github desktop:

1. I have modified some code locally. Before I push the changes up, I pull down the latest changes. My teammates have modified the same file, and there are conflicts that Github does not know how to resolve automatically.



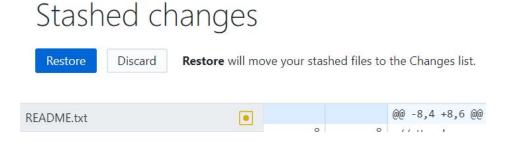
2. Click the 'Stash changes and continue'. My Github desktop appears to be normal. When I check the file of conflict, it now shows my teammates' changes only



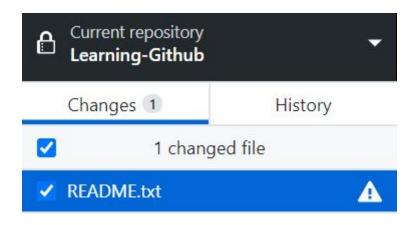
3. Click the Stashed Changes bottom (highlighted in blue)



4. This will appear. I will click the Restore button (unless I want to discard my changes, then I will click discard)



5. This will appear, showing the file in conflict. Click on the file, right click, select 'open in VS code'. (Triangle sign indicates conflict)



6. In vs code, select one of the options shown below with caution.

Accept Current Change | Accept Incoming Change | Accept Both Changes | Compare Changes

- 7. If both changes (remote and my local changes) are accepted, they will both show up in the file. Modify the code manually to ensure that all features work.
- 8. Save the work, commit and push.