git

General

Central repository as communication hub.

Two history branches. Master and develop.

Master branch stores official release history.

Develop branch stores new features.

Creating a develop branch

Develop branch contains newest features

```
git checkout -b develop master

git push origin develop
```

Implementing new features

Each new feature resides in own branch.

Feature branches are branched of develop.

```
git pull origin develop

git checkout -b <new_feature> develop
```

Once finished they get merged into develop and pushed upstream.

```
git checkout develop

git pull origin develop

git merge <new_feature>

git push origin develop
```

Releasing

A release branch is forked of develop. No new features can be added to the release branch only bux fixes, docs and release oriented tasks.

```
git checkout -b <release_version> develop

git push origin <release_version>
```

Once ready to ship the release branch is merged into master and develop (update develop with possible bug fixes and docs).

```
git checkout master

git merge <release_version>

git push origin master

git checkout develop

git merge <release_version>

git push origin develop

git push origin <release_version>
```

Tag the release in master

```
git tag -a <version_number> -m
<description_of_release> master

git push --tags
```

Fixing Bugs

Create a maintenance branch of master

```
git checkout master

git pull origin master

git checkout -b <issue-#issue_number>
master
```

Once the bug is fixed it is merged into master and pushed upstream

```
git checkout master

git merge <issue-#issue_number>

git push origin master
```

Master should be tagged with new release number

```
git tag -a <version_number> -m
<description_of_release> master

git push --tags
```

The bug fix should also be included into develop

```
git pull origin develop

git checkout develop

git merge <issue-#issue_number>

git push origin develop
```

The bug fix should also be merged into the release branch

```
git pull origin <release_version>

git checkout <release_version>

git merge <issue-#issue_number>

git push origin <release_version>
```

Feel free to delete the branch at this point

```
git branch -d <issue-#issue_number>
```

An overview