Module 3-Git, source control,GitHub and hosting

3-1 github Module Introduction

1. Git SCM download = cmd ->git –version
2. GitHub download

Source code management (SCM)

3-2 Install git, create GitHub repository

cd.. (folder path)

```
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin git@github.com:hamidhosen42/Programming-
Hero.git git push -u origin main
```

3-3 Introduction to Git init, git add, git commit

```
echo "# Programming-Hero" >> README.md
git init
git add .
git commit -m "first commit"
git branch -M main
git remote add origin git@github.com:hamidhosen42/Programming-
Hero.git git push -u origin main
```

```
if : git@github.com: Permission denied (publickey).
```

1. git remote rm origin
2. git remote add origin https://github.com/hamidhosen42/simple_portfolio.git

3-4 Set origin, Git push, git pull, and repo overview

If author identity unknown:

git config –global user.email “mdhamidhosen8444@gmail.com”

git config –global user.name “hamidhosen42”

3-5 Send small incremental changes to github

1. git add .
2. `git commit -m "first commit"`
3. git push

or -> if problem

4. git push origin main –f

3-6 Host simple website in gitHub using gh-pages

Setting -> page= main->save

3-7 Common github related issues faced by new developer

3-8 [advanced] Create git branch, merge branches

Commend link: https://github.com/joshnh/Git-Commands

`git branch`	List branches (the asterisk denotes the current branch)
`git branch -a`	List all branches (local and remote)
`git branch [branch name]`	Create a new branch
`git branch -d [branch name]`	Delete a branch
`git push origin --delete [branch name]`	Delete a remote branch
`git checkout -b [branch name]`	Create a new branch and switch to it
`git checkout -b [branch name] origin/[branch name]`	Clone a remote branch and switch to it
`git branch - m [old branch name] [new branch name]`	Rename a local branch
`git checkout [branch name]`	Switch to a branch
`git checkout -`	Switch to the branch last checked out
`git checkout -- [file-name.txt]`	Discard changes to a file
`git merge [branch name]`	Merge a branch into the active branch
`git merge [source branch] [target branch]`	Merge a branch into a target branch
`git stash`	Stash changes in a dirty working directory
`git stash clear`	Remove all stashed entries

Main Branch to push another Branch:-> git branch

1. **git branch**

2. **git branch image-add = git branch branch_name**
3. **git branch**
4. **git checkout image-add = git checkout branch_name ->html or other file code adit**
5. **git add .**
6. **git commit -m"added paragraph"**
7. **git push**
8. **git push --set-upstream origin image-add**

Branch to main Branch Change: ->marge

1. **git branch**
2. **git checkout main**
3. **git merge image-add = git merge branch_name**
   or
4. git push origin main –f

3-9 [advanced] git pull, toggle branch, merge conflict

Branch create:

1. **git branch**
2. **2.1-git branch image-add = git branch branch_name or 2.1-git checkout -b add-blog**
3. **2.1-git branch**
4. **2.1-git checkout image-add = git checkout branch_name ->html or other file code adit**
5. **2.1-git add .**
6. **2.1-git commit -m"added paragraph"**
7. **2.1-git push**
8. **2.1-git push --set-upstream origin image-add**

9. **2.2- git commit -m"added paragraph"**
10. **2.2- git status**
11. **2.2-git add .**
12. **2.2- git commit -m"hamid"**
13. **2.2- git push**
14. **2.2- git push --set-upstream origin image-add**

Branch to main Branch Change: -> merge conflict

1. **git branch**
2. **git checkout main**
3. **git merge image-add = git merge branch_name**
   or
4. git push origin main –f

3-10 GitHub module overall summary