GIT CHEAT SHEET

Git Setup

- Create a new Git repository from an existing directory:

```
git init [directory]
```

- Clone a repository (local or remote via HTTP/SSH):

```
git clone [repo / URL]
```

- Clone a repository into a specified folder on your local machine:

```
git clone [repo / URL] [folder]
```

Git Configuration

- Attach an author name to all commits that will appear in the version history:

```
git config --global user.name "[your_name]"
```

- Attach an email address to all commits by the current user:

```
git config --global user.email "[email_address]"
```

Managing Files

- Show the state of the current directory (list staged, unstaged, and untracked files):

```
git status
```

- List the commit history of the current branch:

```
git log
```

Git Branches

- List all branches in the repository:

```
git branch
```

- List all remote branches:

```
git branch -aa
```

- Create a new branch under a specified name:

```
git branch [branch]
```

- Switch to a branch under a specified name (if it doesn't exist, a new one will be created):

```
git checkout [branch]
```

Making Changes

- Stage changes for the next commit:

```
git add [file/directory]
```

- Stage everything in the directory for an initial commit:

```
git add .
```

- Commit staged snapshots in the version history with a descriptive message included in the command:

```
git commit -m "[descriptive_message]"
```

Remote Repositories

- Create a new connection to a remote repository (give it a name to serve as a shortcut to the URL):

```
git remote add [name] [URL]
```

- Fetch a branch from a remote repository:

```
git fetch [remote_repo] [branch]
```

- Fetch a repository and merge it with the local copy:

```
git pull [remote_repo]
```

- Push a branch to a remote repository with all its commits and objects:

```
git push [remote_repo] [branch]
```