Group Project Quickstart

1) GitHub repo + local folder

- On GitHub: New repository → name it → Create repository. (If you're cloning (Option A), you can add a README. If you're connecting an existing folder (Option B), keep the repo empty: no README.)
- Copy the repo's HTTPS URL, then (you'll create your venv after you cd into the repo):

```
# Option A (recommended): clone into your course folder (README OK)
git clone https://github.com/<you>/<repo>.git
cd <repo>

# Option B: you already have a local folder and want to connect it
# (GitHub repo should be empty: no README)
cd path/to/your-local-folder
git init
git branch -M main
git remote add origin https://github.com/<you>/<repo>.git
# Add a .gitignore BEFORE your first commit (at minimum, ignore .venv/)
git add .
git commit -m "Initial commit"
git push -u origin main
```

2) Virtual environment

```
# From inside your repo folder (after cd <repo>)
# macOS / Linux
python3 -m venv .venv
source .venv/bin/activate

# Windows (PowerShell)
py -m venv .venv
.\.venv\Scripts\Activate.ps1

# IMPORTANT: add .venv/ to .gitignore so you do not commit it
```

3) Install packages + freeze requirements

```
python -m pip install --upgrade pip
python -m pip install pandas matplotlib numpy
python -m pip freeze > requirements.txt
```

4) Folder structure (course convention)

```
<repo>/  README.md (graded) | requirements.txt | src/ | data/raw/ | figures/ | tables/
README images use relative paths, e.g.  ![Caption](figures/my_plot.png)
```

5) Work loop (the habit)

```
Small change → run → check outputs → commit → push
git add .
git commit -m "Describe the change"
git push
```

6) Before you submit (reproducibility check)

- Teammate can clone + install + run without guessing.
- Plots regenerate and appear correctly in README.
- Repo is clean (no keys, no huge mystery files, no broken paths).