

Assignment 1 – Environment Setup and Development Basics



What this is

- Install VS Code, Git, and Node.js.
- Make your first commit and your first push.
- Follow these slides in order. About 2 hours.



Want to learn first? (optional)

GIT

Watch: [Git Tutorial for Beginners \(1 hour\)](#)

Read: [Git documentation](#)

GITHUB

Watch: [Git & GitHub Crash Course](#)

Read: [GitHub Docs](#)

VS CODE

Watch: [VS Code in 7 Minutes](#)

Read: [VS Code documentation](#)

SHELL / TERMINAL

Watch: [Command Line Crash Course](#)

Read: [MDN — command line basics](#)

NODE.JS

Watch: [Node.js Full Tutorial for Beginners](#)

Read: [Node.js documentation](#)

Optional. Watch or read before Step 1 if you want to understand things first.



Setup

Install it. Then check it works.

Install three things

1. **VS Code** — code.visualstudio.com
2. **Git** — git-scm.com/downloads (Windows: this also installs Git Bash)
3. **Node.js**, the **LTS** version — nodejs.org

Windows: close and reopen your terminal after installing. It needs a restart to see new programs.

✓ OPEN A TERMINAL

1. Open VS Code.
2. Click **Terminal** in the top menu bar.
3. Click **New Terminal**.

A panel opens at the bottom of the window — that's the terminal. Click inside it, type, then press **Enter** to run.

Commands vs. files

Commands go in the terminal:

```
1 node init.js
2 git commit -m "message"
```

Type it, press **Enter**, it runs.

"Terminal," "shell," "command line," "CLI" all mean the same thing — just different names people use for it.

Code and text go in a file, never in the terminal. Write it in the editor.

To see your files:

- Look at the **Explorer** sidebar (the file list on the left), or
- In the terminal, type `ls` (Mac/Linux/Git Bash) or `dir` (Windows).



Verify the install

In that terminal, run:

```
1  git --version
2  node -v
```

You should see a version number for each. If not, restart your terminal (or all of VS Code).



Set your git identity

Do this once. Without it, your first commit will fail:

```
1  git config --global user.name "Your Name"
2  git config --global user.email "your.email@student.giu-uni.de"
```

Then make a **GitHub account** if you don't have one: github.com



Get the repo

Click "Use this template." Not Fork.

Create your copy

Open the template: github.com/ng-giu/ebd-w26-assignment1

1. Click **Use this template** → **Create a new repository**.
2. Pick any name you like.

Keep it on **your own GitHub account**. That's how we know the repo is yours.

✓ CLONE IT — IN VS CODE

1. Open VS Code.
2. Click the **Source Control** icon in the sidebar.
3. Click **Clone Repository**. Paste your repo's URL.
4. Pick a folder, then open it.

Use this button, not the terminal. You'll use this same tab again soon.

Open the folder in VS Code

You'll do this every time you come back to this project.

✓ START FROM VS CODE

1. Open VS Code. Windows: search "VS Code" in the Start Menu. Mac: search it with Spotlight, or find it in Launchpad.
2. Click **File** → **Open Folder...** (or the **Open Folder** button on the Welcome screen).
3. Find your repo folder and select it.
4. Click **Select Folder** (Windows) or **Open** (Mac).

✓ OR START FROM YOUR FILES

1. Open your file manager (File Explorer on Windows, Finder on Mac).
2. Find your repo folder.
3. Right-click it → **Open with Code**, if you see that option.

Or just drag the folder onto an open VS Code window.



Work through it

Now everything happens in the terminal.

Sanity check

Open a terminal (**Terminal** → **New Terminal**) — since your project is open in VS Code, it starts right there.

This folder only has one file to run right now. Run it:

```
1 node init.js
```

It checks that everything is set up right. If something is wrong, it tells you how to fix it.

If it's all good, it creates a new file: `step1/hi.js`.

Step 1

Run this:

```
1 node hi.js
```

It will fail, with a big red error. Look for this line:

```
1 Error: Cannot find module '../hi.js'
```

Node looked for `hi.js` right where you are. It's not there — it's inside `step1/`.

✓ TWO WAYS TO FIX IT

```
1 cd step1
2 node hi.js
```

or, without moving, give the full path:

```
1 node step1/hi.js
```

```
1 Hello! You made it to step1.
2 Created step2/okay.js
```

Step 2

Get back to the project's root folder (tip: **Terminal** → **New Terminal** in VS Code always opens a fresh one there). Then:

```
1 cd step2
2 node okay.js
```

```
1 okay.
2 Created assignment/generate.js
```



The assignment

A small challenge made just for you

Run generate.js

Back to the root folder again, then:

```
1 cd assignment
2 node generate.js
```

```
1 Your name, adventurer? > Nour
2 Your student ID? > 13003429
3 Choose your class: [1] Warrior [2] Mage [3] Rogue > 1
4
5 A wild Sand Kraken blocks your path near the Nile.
6 question.md written.
```

This makes a small challenge just for you. Everyone in class gets a different one.

You can run it again if you want. Your challenge stays the same.



Write solution.js

Open `assignment/question.md`. It tells you exactly what to print.

Create `assignment/solution.js` in the same folder: right-click **assignment** in the Explorer sidebar → **New File** → type the name → Enter. Write your code in the editor, not the terminal.

Make it print what `question.md` asks, in the same order.

Check it:

```
1 node solution.js
```

Keep it simple: variables, math, and `console.log`.

Commit twice, two ways

You will commit **two times**, in two different ways.

Both do the same thing. The Source Control tab is just buttons for `git add`, `git commit`, and `git push`.

✓ 1. QUESTION.MD – VS CODE

Source Control tab: stage, message, commit, **Sync**.

✓ 2. SOLUTION.JS – TERMINAL

```
1  git add assignment/solution.js
2  git commit -m "Add solution"
3  git push
```



Fill in the form: forms.gle/1f44aaXxVKVtTfgZ8

- Your name
- Your student ID
- Your GitHub username
- Your repo's URL

Push **before** you submit. We only check what's on GitHub.

Troubleshooting

Problem	Fix
VS Code opens but your project isn't there	See Open the folder in VS Code .
Don't see a terminal	Click Terminal → New Terminal in the top menu.
<code>git</code> or <code>node</code> says "not found"	Close and reopen your terminal.
Windows: <code>ls</code> doesn't work	Use Git Bash, or type <code>dir</code> instead.
Cannot find module	Node can't find the file where you are. <code>cd</code> to it, or give the full path.
A step's file is missing	Each step is created by the one before it. Run <code>init.js</code> , then <code>hi.js</code> , then <code>okay.js</code> , in order.
<code>init.js</code> or <code>generate.js</code> shows a git error	You may have downloaded a ZIP, not cloned it. Go back to Get the repo .

Questions?

Submit: forms.gle/1f44aaXxVKVtTfgZ8

