

MERN Day 1

Full Stack | MERN.

- Full Stack
- ① Frontend
 - ② Backend
 - ③ DevOps
- Integrated

MERN complete
* This is not full Stack.
* This is not productionized

React → Frontend ✓
NodeJS → Backend ✓
Express
MongoDB → Database ✓
DevOps →

Web Development

↳ Full Stack.

1. HTML, CSS, JS

Hybrid Sort
Best Merge → Tim Sort
In log n
Best
Don Sort: $O(N)$

1 → MERN ✓

↳ MEAN ✓

↳ MEVN ✓

↳ LAMP ✓

↳ Ruby on Rails

↳ Python ✓

↳ Java Stack

↳ Dot net

↳ Go Lang.

↳ PHP ✓

↳ Web Assembly ✓

What is web development?

{ Creating a website ✓

{ Creating a Application X
Application ✓ code

Insert

Hybrid sort
Radix Sort

S = "test"

print(sorted(S))

o/p: ['e', 's', 't', 't']

print(' '.join(sorted(S)))

o/p: estt

• append (10) Python

• push (10) C++

• add (10) Java

[20, 10]

Creating a web app

Creating a web app using a stack called MERN
is called as web development.

Introduction to MERN.

Stack

↳ Set of tools & technologies.

↓
MongoDB

Express

React

Node.

What is Node?

Time env for JavaScript.
used for my

↳ Run

npm → what version & version
node

node

What is R in MERN?

React → It is a Frontend development package.

What is E in MERN?

Express → It is a Backend development package.

What is M in MERN?

MongoDB → It is a Database which is used

Backend storage combination

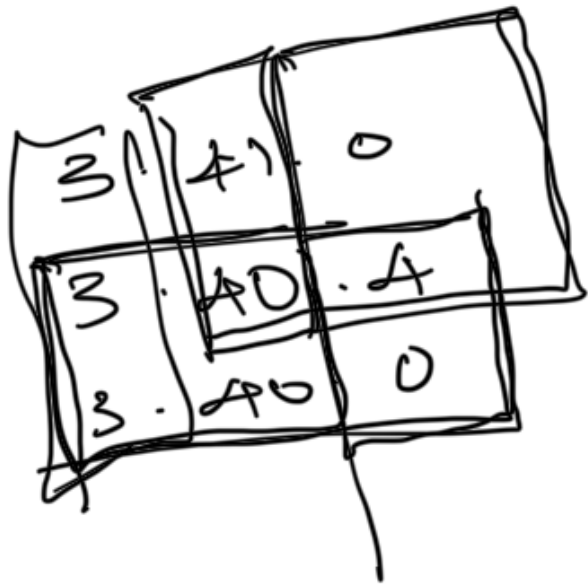
Backend → (Express + Database.)

Yours MERW has VDOM.

Version Control

VCS → Version Control System

- ↳ Distributed VCS
- ↳ Centralized VCS



1st Number: 3 → Major Version
2nd Number: 41/40 → Minor Version
3rd Number: 0/4 → patch/bug version.

- bugs.

3.41.0 → 15 bugs.

2 new features

3.42.0 ← Dev1 → 1

3.43.0 ← Dev2 → 2

Dish

4.0.0 ✓

3.93.0 ← 2.50

Tool

↳ Git

↳

What is Git?

It is a tool for
through commands.

What is GitHub?

Repository of files stored at cloud.

To check Git whether is it present in my

Publish

- ① GitHub
- ② GitLab
- ③ Bitbucket

controlling files / folders

System of

`git --version`

Created a folder called SSIT 2025 MERN
↓ → Git Repo

Utilize the command `git init`

It will initialize a git repository

with `.git` folder.

→ config
→ description
→ HEAD
→ Files.

hooks
info
objects
refs.
→ folder

→ `git status` → showing your file status.
it will be

② git add

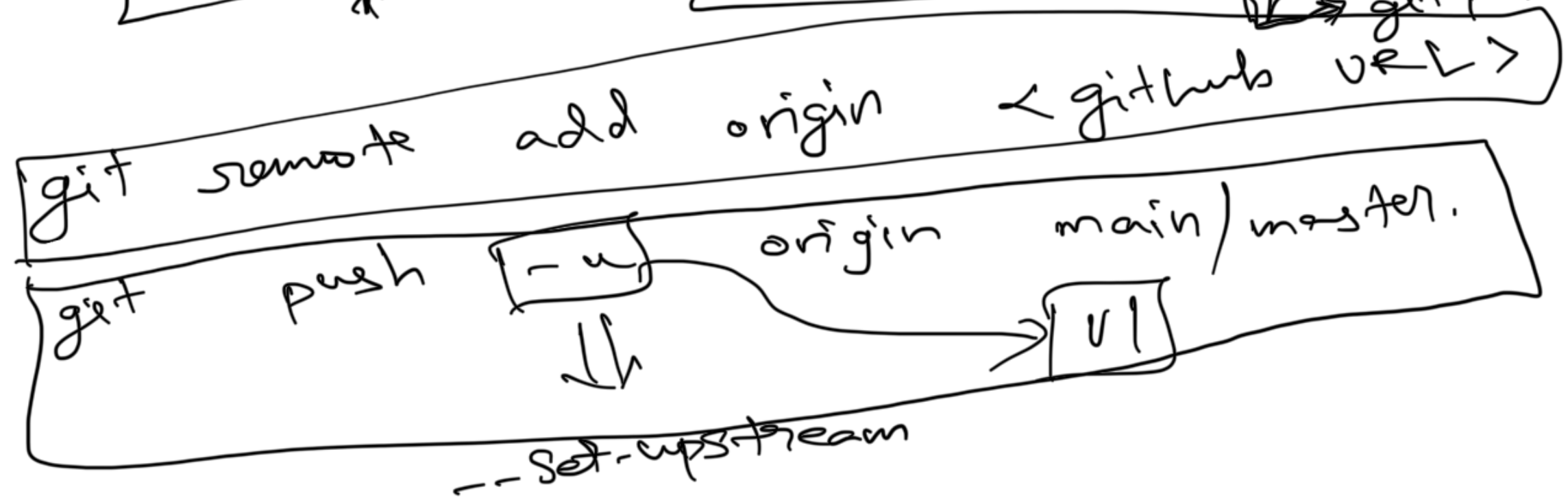
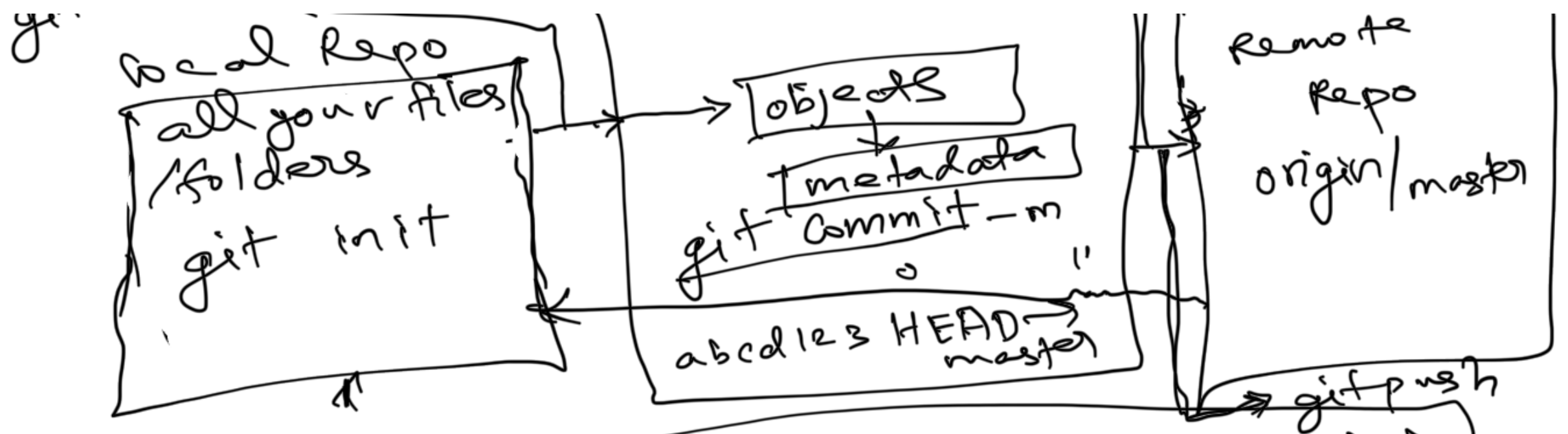
③ `git add <filename>` → No output displayed but you will observe one change and the changes your v will be changed to A

③ `git commit -m "message"` → It will throw the filenames output with the mode also it will display lines deleted and added.

↳ If you face issues in committing then config is not properly made

↳ Ensure user.name, user.email is in your config file. → `git config --global user.name <name>`
staging Area → GitHub Global Repo

`git add < >`



git pull

Page Deployment.

(i) Go to Settings in the GitHub Repo

② Go to Pages

③ check the dropdown change from None to
branch you wish

④ click on Save.

C program	C++	Sara	python
main function			

HTML/CSS/JS → website → index.html.