DexNotePro: Introduction to GitHub

☐ About This Course

Welcome to **Introduction to GitHub**, your gateway to professional coding collaboration.
GitHub is where the world's developers store, share, and build projects together.
You'll learn how to host code, track changes, and collaborate like a real engineer.

By the end, you'll:

- Understand repositories, commits, and branches
- Use Git and GitHub confidently for your projects
- Host your own website (like DexNotePro!)
- Collaborate using pull requests and issues

Module 1: What Is Git & GitHub?

Git

Git is a **version control system** — it keeps track of every change in your project so you can revert, branch, or merge work safely.

GitHub

GitHub is a **cloud platform** that hosts Git repositories online and lets teams work together.

Try This ☐

Go to https://github.com and create a free account.

Module 2: Key Concepts

Term	Meaning
Repository (Repo)	Folder where your project's files and history are stored
Commit	A saved snapshot of your code
Branch	A separate line of development
Merge	Combining work from different branches
Pull Request	Asking to merge your work into the main project

Module 3: Installing Git

Windows

Download from [git-scm.com](git-scm.com) → run the installer → accept defaults.

macOS / Linux

Use the terminal:

```
sudo apt install git
```

Verify Installation

```
git --version
```

Module 4: Setting Up Git

Tell Git who you are:

```
git config --global user.name "Your Name"
git config --global user.email "you@example.com"
```

Try This ⚙

Set your Git username and email — this info will appear in your commits.

Module 5: Creating Your First Repository

Option 1 – On GitHub Website

1. Click **New Repository**
2. Name it (e.g., `my-first-project`)
3. Choose **Public**
4. Click **Create Repository**

Option 2 – On Your Computer

```
mkdir my-first-project
cd my-first-project
git init
```

Try This 🚀

Create a `README.md` file with a short project description.

Module 6: Making Your First Commit

Add and commit your file:

```
git add README.md
git commit -m "Initial commit"
```

This saves your work to Git history.

Try This □

Edit your file and make a second commit. Notice how Git tracks each version.

Module 7: Connecting to GitHub

Link your local repo to the online one:

```
git remote add origin https://github.com/username/my-first-
project.git
git push -u origin main
```

Try This 🌐

Push your commits and then refresh your GitHub page — your project is now online!

Module 8: Collaboration & Branching

Creating a Branch

```
git checkout -b new-feature
```

Make changes → commit → push:

```
git push origin new-feature
```

Merging via Pull Request

1. Go to your repo on GitHub
2. Click **Compare & Pull Request**
3. Add a description → click **Merge**

Try This 👥

Invite a friend as a collaborator and merge their PR.

Module 9: Hosting with GitHub Pages

You can turn any repo into a website!

1. Create a repo named `<username>.github.io`
2. Add an `index.html` file
3. Go to **Settings → Pages → Deploy from branch**

Your site will appear at `https://username.github.io`.

Try This 🌐

Create a simple HTML page and publish it using GitHub Pages — just like **DexNotePro!**

Module 10: Real-World Workflow

A typical GitHub flow:

1. **Fork** → copy a repo to your account
2. **Clone** → download it locally
3. **Branch** → make changes safely
4. **Commit & Push** → save progress
5. **Pull Request** → merge updates
6. **Issues** → track bugs or features

Try This □

Contribute to an open-source project by fixing a typo or adding a line to a `README.md`.

Completion Reminder

✅ You've finished the **Introduction to GitHub** course!
Visit **DexNotePro** and mark your course as complete to unlock your next learning track.

🔗 https://ishaan7india.github.io/DexNotePro/