

# **COMPREHENSIVE DOCUMENTATION**

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## **MASTERING WEB DEVELOPMENT: A STEP-BY-STEP GUIDE TO CREATING WEBSITES WITH VS CODE, XAMPP, GIT, AND MYSQL**

This comprehensive guide will walk you through the process of creating a website from scratch, integrating it with XAMPP for local development, using Git and GitHub for version control, and setting up a MySQL database for managing job listings. We'll cover each step in detail to help you build a functional and interactive website.

### **TECHNOLOGIES USED:**

The project will be developed using the following front-end and back-end technologies:

- Front-End Technologies:
  - HTML
  - CSS
  - JavaScript
  - jQuery
  - Data Tables (for data presentation)
- Back-End Technology:
  - PHP

### **Technical Details**

#### **Front-End Development**

- **HTML:** The project's user interface (UI) will be built using semantic HTML5 markup for accessibility and SEO optimization.
- **CSS:** Cascading Style Sheets (CSS) will be used for styling, ensuring a responsive and visually appealing design across devices.
- **JavaScript:** Client-side scripting with JavaScript will provide interactivity and enhance the user experience.
- **jQuery:** jQuery will be used for DOM manipulation and simplifying complex tasks.
- **DataTables:** The DataTables library will be integrated to handle data presentation, sorting, and filtering efficiently.

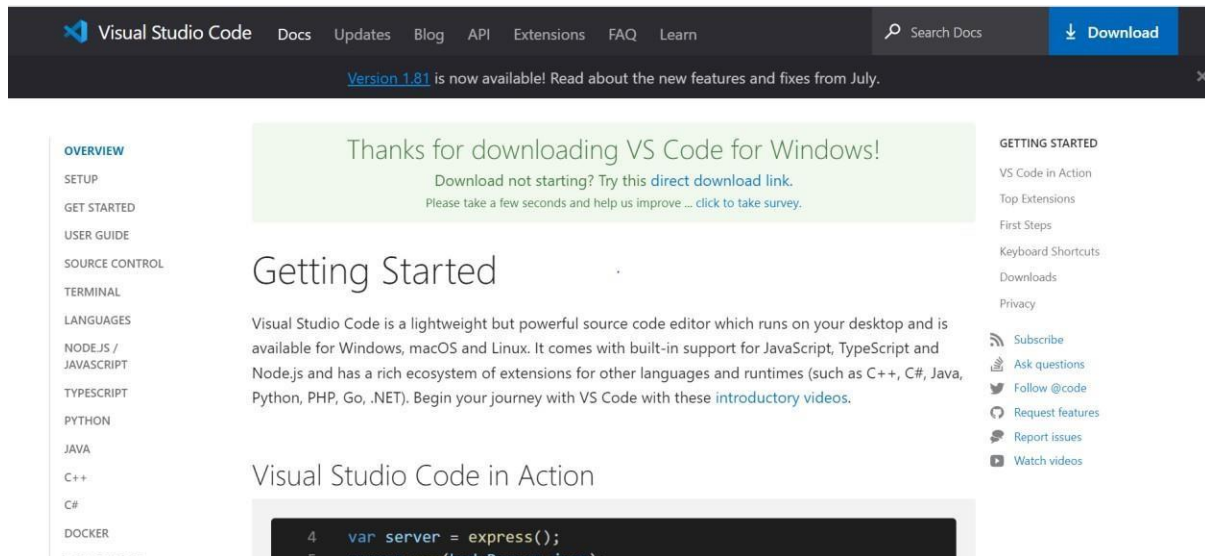
#### **Back-End Development**

- **PHP:** Server-side scripting with PHP will handle data processing, server interactions, and database operations.

## **\*\*Step 1: Installing Required Tools\*\***

### 1. **\*\*Install Visual Studio Code (VS Code)\*\*:**


- Download VS Code from the official website (<https://code.visualstudio.com/>).
- Follow the installation instructions for your operating system.



### 2-**\*\*Install Git\*\*:**

- Download Git from the official website (<https://git-scm.com/>).
- Follow the installation instructions for your operating system.

git-scm.com/downloads

 **git** --distributed-is-the-new-centralized

Search entire site...

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The entire [Pro Git book](#) written by Scott Chacon and Ben Straub is available to [read online for free](#). Dead tree versions are available on [Amazon.com](#).

## Downloads

 **macOS**

 **Windows**

 **Linux/Unix**


Older releases are available and the Git source repository is on [GitHub](#).

Latest source Release

**2.42.0**

Release Notes (2023-08-21)

Download for Windows



### GUI Clients

Git comes with built-in GUI tools ([git-gui](#), [gitk](#)), but there are several third-party tools for users looking for a platform-specific experience.

[View GUI Clients →](#)

### Logos

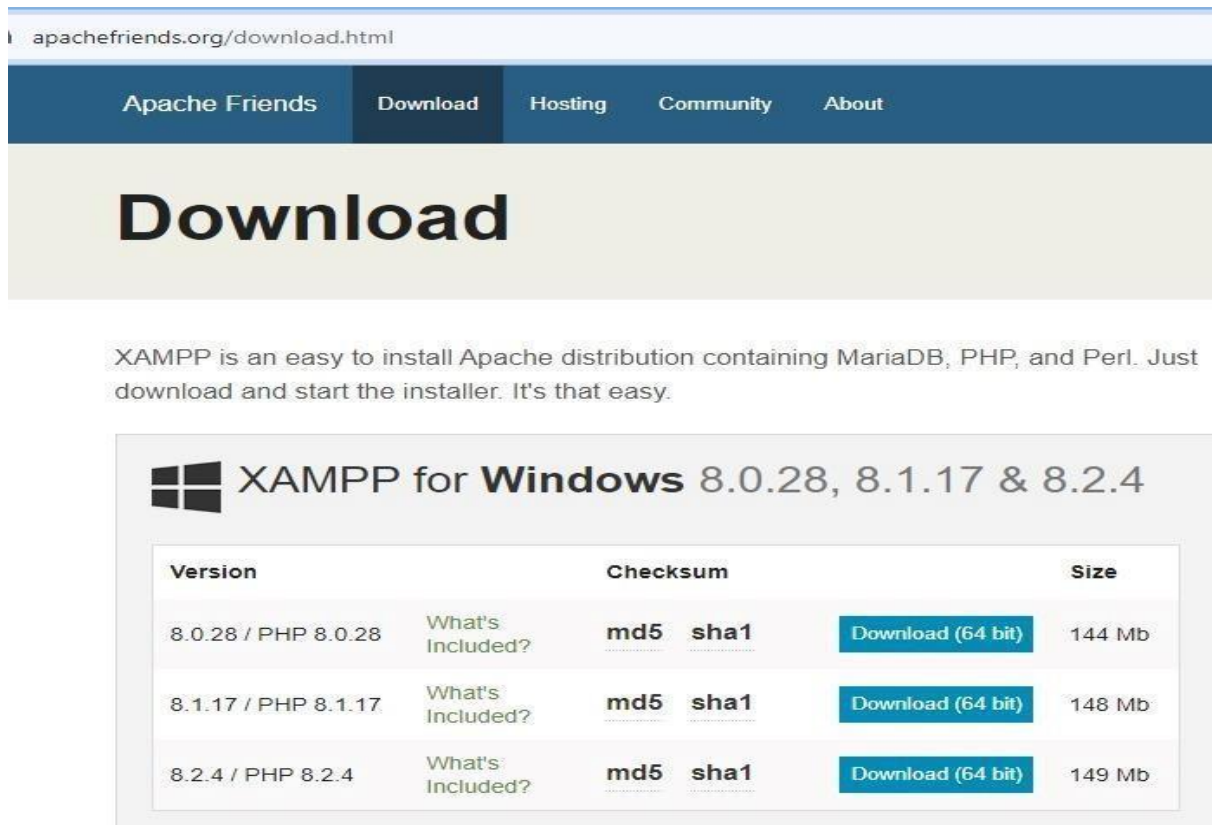
Various Git logos in PNG (bitmap) and EPS (vector) formats are available for use in online and print projects.

[View Logos →](#)

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## 2. **\*\*Install XAMPP\*\***:

- Download XAMPP from the official website (<https://www.apachefriends.org/>).
- Run the installer and choose the components (Apache, MySQL, PHP, etc.) you need.



## Step 2: Setting Up Your Website and Front-End Development

### 1- Creating Your Website Files:

- Create a new folder for your website on your computer.
- In this folder, create an index.html file that serves as the main webpage.
- Create a style.css file for styling and a mediaqueries.css file for responsive design.
- Use these files to structure your website's layout and design before integrating with XAMPP.

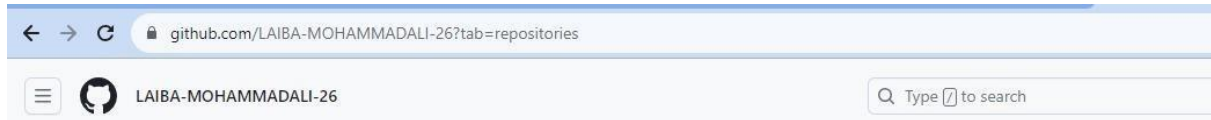
### 2- Opening Front-End with Live Server:

- Install the "Live Server" extension in VS Code.
- Open your index.html file in VS Code.
- Right-click within the file and select "Open with Live Server."
- This will launch a local development server that automatically refreshes as you make changes.

## **\*\*Step 3: Managing Your Website with Git and GitHub\*\***

### 1. **\*\*Creating a GitHub Account\*\***:

- Sign up for a GitHub account (<https://github.com/>) if you don't have one.



### 2. **\*\*Cloning a Repository\*\***:

- Navigate to a GitHub repository you want to use.
- Copy the repository URL.
- Open your command-line interface and use `git clone <repository-url>`.

**url :<https://github.com/LAIBA-MOHAMMADALI-26/CareerPortal>**

CareerPortal Private

Updated 1 minute ago

☆ Star ▼

## **\*\*Step 4: Integrating XAMPP with Your Website\*\***

### 1. **\*\*Moving Your Website Files to XAMPP\*\***:

- Move your website folder to the XAMPP "htdocs" directory (e.g., `C:\xampp\htdocs\` on Windows).

### 2. **\*\*Starting XAMPP's Apache and MySQL\*\***:

- Open the XAMPP Control Panel and start the Apache and MySQL modules.

## **\*\*Step 5: Setting Up a MySQL Database for Job Listings\*\***

### 1. **\*\*Accessing phpMyAdmin\*\***:

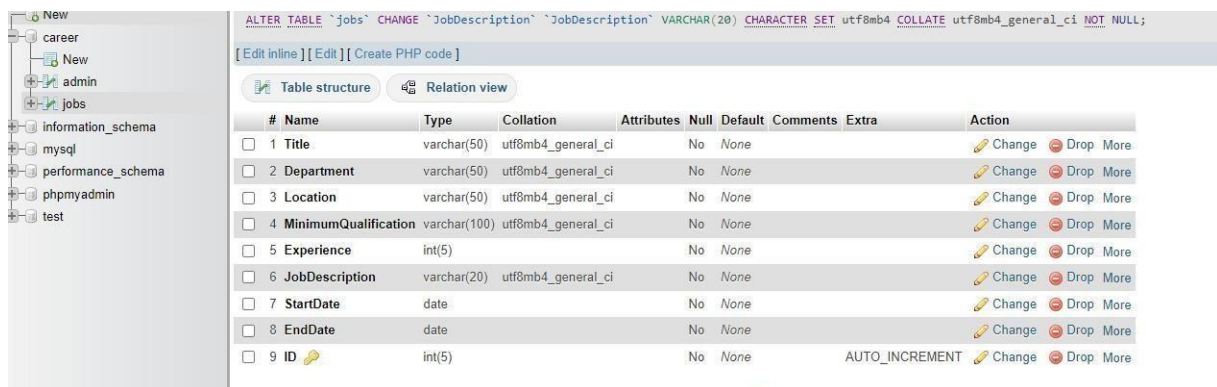
- Open your web browser and go to `http://localhost/phpmyadmin`.

### 2. **\*\*Creating a Database\*\***:

- Click on "Databases" and create a new database named `career`.

### 3. **\*\*Creating a Table\*\***:

- Within the `career` database, click the "SQL" tab.
- Open a web browser.
- In the browser's address bar, type "localhost/phpmyadmin" and press Enter.
- Log in to PHPMYAdmin if needed.
- Choose the "career" database from the list on the left.
- Find an option to create a new table, name it "jobs."
- Paste the provided SQL query to create the `jobs` table with necessary columns.



## **\*\*Step 6: Displaying Job Listings and Applying Styling\*\***

### 1. **\*\*Job Listing Page (joblisting.php)\*\***:

- Create a page to display job listings fetched from the `jobs` table.

### 2. **\*\*Styling and Responsiveness\*\***:

- Apply consistent styling to the job listing page using `style.css` and `mediaqueries.css`.

### . **\*\*Accessing Your Website\*\***:

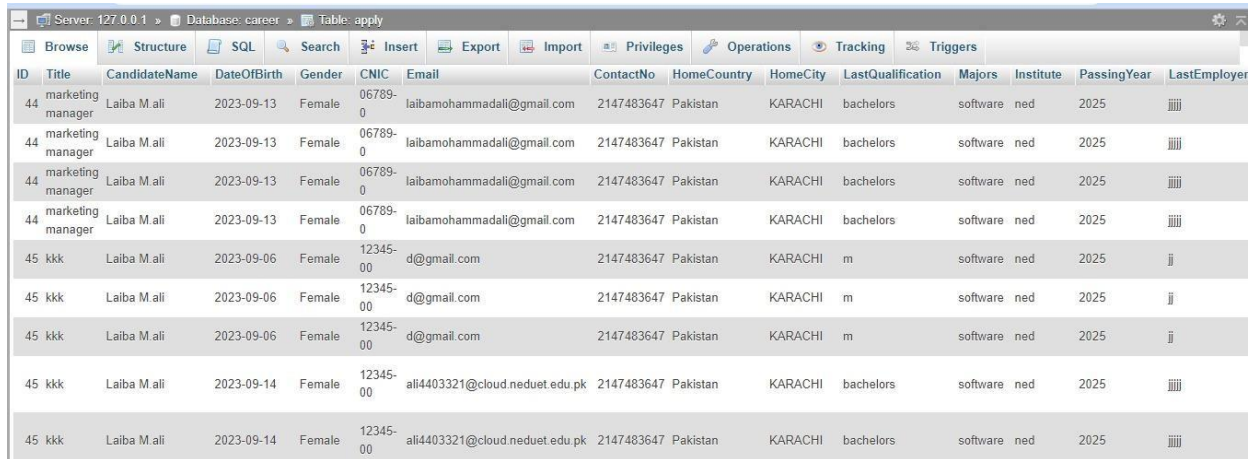
- Open your web browser and type `http://localhost/folder-name/index.html`.
- Replace `folder-name` with the name of your website folder.

## **\*\*Step 7: Setting Up a MySQL Database for Apply Form\*\***

### 1. Open a web browser.



2. In the browser's address bar, type "localhost/phpmyadmin" and press Enter.
3. Log in to PHPMYAdmin if needed.
4. Choose the "career" database from the list on the left.
5. Find an option to create a new table, name it "apply."
6. Define the columns (attributes) for the table as shown in the schema.
7. Save the changes to create the "apply" table.



The screenshot shows the phpMyAdmin interface for a database named 'career'. The 'Table: apply' is selected, and the 'Structure' tab is active. The table has 15 columns: ID, Title, CandidateName, DateOfBirth, Gender, CNIC, Email, ContactNo, HomeCountry, HomeCity, LastQualification, Majors, Institute, PassingYear, and LastEmployer. The data tab shows 10 rows of data, with the first 4 rows having an ID of 44 and the remaining 6 rows having an ID of 45. The data is as follows:

ID	Title	CandidateName	DateOfBirth	Gender	CNIC	Email	ContactNo	HomeCountry	HomeCity	LastQualification	Majors	Institute	PassingYear	LastEmployer
44	marketing manager	Laiba M.ali	2023-09-13	Female	06789-0	laibamohammadali@gmail.com	2147483647	Pakistan	KARACHI	bachelors	software	ned	2025	jjjj
44	marketing manager	Laiba M.ali	2023-09-13	Female	06789-0	laibamohammadali@gmail.com	2147483647	Pakistan	KARACHI	bachelors	software	ned	2025	jjjj
44	marketing manager	Laiba M.ali	2023-09-13	Female	06789-0	laibamohammadali@gmail.com	2147483647	Pakistan	KARACHI	bachelors	software	ned	2025	jjjj
44	marketing manager	Laiba M.ali	2023-09-13	Female	06789-0	laibamohammadali@gmail.com	2147483647	Pakistan	KARACHI	bachelors	software	ned	2025	jjjj
45	kkk	Laiba M.ali	2023-09-06	Female	12345-00	d@gmail.com	2147483647	Pakistan	KARACHI	m	software	ned	2025	jj
45	kkk	Laiba M.ali	2023-09-06	Female	12345-00	d@gmail.com	2147483647	Pakistan	KARACHI	m	software	ned	2025	jj
45	kkk	Laiba M.ali	2023-09-06	Female	12345-00	d@gmail.com	2147483647	Pakistan	KARACHI	m	software	ned	2025	jj
45	kkk	Laiba M.ali	2023-09-14	Female	12345-00	ali4403321@cloud.neduet.edu.pk	2147483647	Pakistan	KARACHI	bachelors	software	ned	2025	jjjj
45	kkk	Laiba M.ali	2023-09-14	Female	12345-00	ali4403321@cloud.neduet.edu.pk	2147483647	Pakistan	KARACHI	bachelors	software	ned	2025	jjjj

## **\*\*Step 8: Displaying Job Applicant Form and Applying Styling\*\***

### **1. \*\*Job Application Form ( `apply.php` )\*\*:**

- Create a new page called `apply.php` where applicants can fill out their information to apply for a job.
- Add a heading such as "Job Application Form" at the top of the page.

### **2. \*\*Position Applying For\*\*:**

- Add a field labeled "Position Applying For" where applicants can enter the position they are applying for.

### **3. \*\*Name of Candidate\*\*:**

- Include a field labeled "Name of Candidate" where applicants can enter their full name.

### **4. \*\*Date of Birth\*\*:**

- Create a field labeled "Date of Birth" where applicants can enter their date of birth in the format dd/mm/yyyy.

### **5. \*\*Gender\*\*:**

- Add a gender selection field with options for "Male" and "Female."

### **6. \*\*CNIC / ID / Passport No\*\*:**

- Include a field labeled "CNIC / ID / Passport No" where applicants can enter their identification number.

### **7. \*\*Email Address\*\*:**

- Provide a field for "Email Address" where applicants can enter their email address.

**8. \*\*Contact Number\*\*:**

- Add a field for "Contact Number" where applicants can enter their phone number.

**9. \*\*Home Location - Country\*\*:**

- Include a field for "Home Location - Country" where applicants can enter their home country.

**10. \*\*Home Location - City\*\*:**

- Add a field for "Home Location - City" where applicants can enter their home city.

**11. \*\*Qualification\*\*:**

- Provide a section for educational qualifications, including:
  - **\*\*Recent / Last Qualification\*\***: A dropdown where applicants can select their recent or highest qualification.
  - **\*\*Majors\*\***: A field where applicants can enter the major or field of study.
  - **\*\*Institute\*\***: A field where applicants can enter the name of the institution.
  - **\*\*Passing Year\*\***: A field where applicants can enter the year they completed their qualification.

**12. \*\*Experience\*\*:**

- Include a section for work experience, including:
  - **\*\*Recent / Last Employer Name\*\***: A field to enter the name of their most recent or current employer.
  - **\*\*Recent / Last Designation\*\***: A field to enter their job title or designation.
  - **\*\*Work Location - Country\*\***: A field to enter the country where they worked.
  - **\*\*Work Location - City\*\***: A field to enter the city where they worked.
  - **\*\*Total Experience (in years)\*\***: A field to enter the total number of years of work experience.

**13. \*\*Tell us About Yourself\*\*:**

- Provide a text area where applicants can write about themselves, their skills, and career goals.

**14. \*\*Upload CV (doc, pdf, image only)\*\*:**

- Include a file upload field where applicants can upload their resume or CV in formats like doc, pdf, or image.

**15. \*\*Submission Button\*\*:**

- Add a "Submit" button at the end of the form for applicants to submit their job application.

**16. \*\*Form Validation\*\*:**

- Implement form validation in `apply.php` to ensure that required fields are filled, and data is entered in the correct format.

**17. \*\*Confirmation Message\*\*:**

- After submission, display a confirmation message in `apply.php` to let applicants know that their application has been received.

**18. \*\*Data Storage\*\*:**

- Store the submitted application data securely, adhering to data protection regulations.

**19. \*\*Notification\*\*:**

- Implement a notification mechanism to alert relevant personnel about new job applications.

**20. \*\*Back Button\*\*:**

- Optionally, include a "Back" button in `apply.php` that allows applicants to return to the job listings page or the main website.

With these modifications, applicants can access the "Job Application Form" by visiting `apply.php`, fill out their information, and submit their job application.

By following this comprehensive guide, you've successfully created a website, integrated it with XAMPP, used Git and GitHub for version control, and set up a MySQL database for managing job listings. This project showcases your ability to design, develop, and manage a dynamic and interactive website. Continue exploring and expanding your skills to create even more engaging web experiences!

## User interface:

### Main Page:




### Sub Section 1:



### Sub Section 2:




## Sub Section 3:

[HOME](#) [WHY JAFFER GROUP](#) [CHAIRMAN'S MESSAGE](#) [CULTURE](#) [EMPLOYEE BENEFITS](#) [JOB LISTING](#)

### CHAIRMAN'S MESSAGE


“

The ongoing success of Jaffer Group relies on the high quality of our people and their commitment to the company objectives. Continued growth and development are essential for all our employees. We therefore need strong people management and development processes in all our businesses. As a reflection of our values and our Success Factors, the P&D Dialog is central to this. With a high performance culture aligned to our business principles, we will grow from strength to strength.






**Nasser N. S. Jaffer**  
Chairman


## Sub Section 4:




[HOME](#) [WHY JAFFER GROUP](#) [CHAIRMAN'S MESSAGE](#) [CULTURE](#) [EMPLOYEE BENEFITS](#) [JOB LISTING](#)

### Our Dynamic Culture




## Sub Section 5:


[HOME](#) [WHY JAFFER GROUP](#) [CHAIRMAN'S MESSAGE](#) [CULTURE](#) [EMPLOYEE BENEFITS](#) [JOB LISTING](#)




### Employee Benefits




Healthcare




Retirement




Training




on site gym



Vacation




Bonuses



Flexible Hours



## Sub Section 6:

 [HOME](#) [WHY JAFFER GROUP](#) [CHAIRMAN'S MESSAGE](#) [CULTURE](#) [EMPLOYEE BENEFITS](#) [JOB LISTING](#)

### Open Vacancies

Search by Title:

Search by Department:

Search by Location:

### Available Jobs

Show  entries

Search:

Title	Department	Location	Minimum Qualification	Experience	Job Description	Start Date	End Date	Action
CTO	Branch Management	Shaheed Benazirabad	MBA	2	MKJJKKKMK	2023-09-07	2023-10-07	<a href="#">Apply Now</a>
Electrical Engineer	Stores & Logistics	Thar	B.E. ELECTRICAL	2	JJJJ	2023-08-25	2023-09-08	<a href="#">Apply Now</a>
ldk	Technical Services	Ghotki	ndjb	9	JJ	2023-08-23	2023-09-02	<a href="#">Apply Now</a>
marketing	Technical Services	Faisalabad	BS	1	mmmmmmmm	2023-09-29	2023-10-06	<a href="#">Apply Now</a>
store head	Stores & Logistics	Dera Ghazi Khan	BE industrial	4	mmmmmmmmmmmmmmmm	2023-09-29	2023-11-09	<a href="#">Apply Now</a>

Showing 1 to 5 of 5 entries

Previous  Next

localhost/test/jaffers/apply.php?job\_id=44



### Apply for Job: marketing manager

**Position Applying For \***

**Name of Candidate \***

**Date of Birth \***

**Gender**

**CNIC / ID / Passport No \***

**Email Address \***

**Contact Number \***

Recent / Last Employer Name \*

Recent / Last Designation \*

Work Location - Country \*

Work Location - City \*

Total Experience (in years) \*

Tell us About Yourself \*

Upload CV (doc, pdf, image only) \*

No file chosen

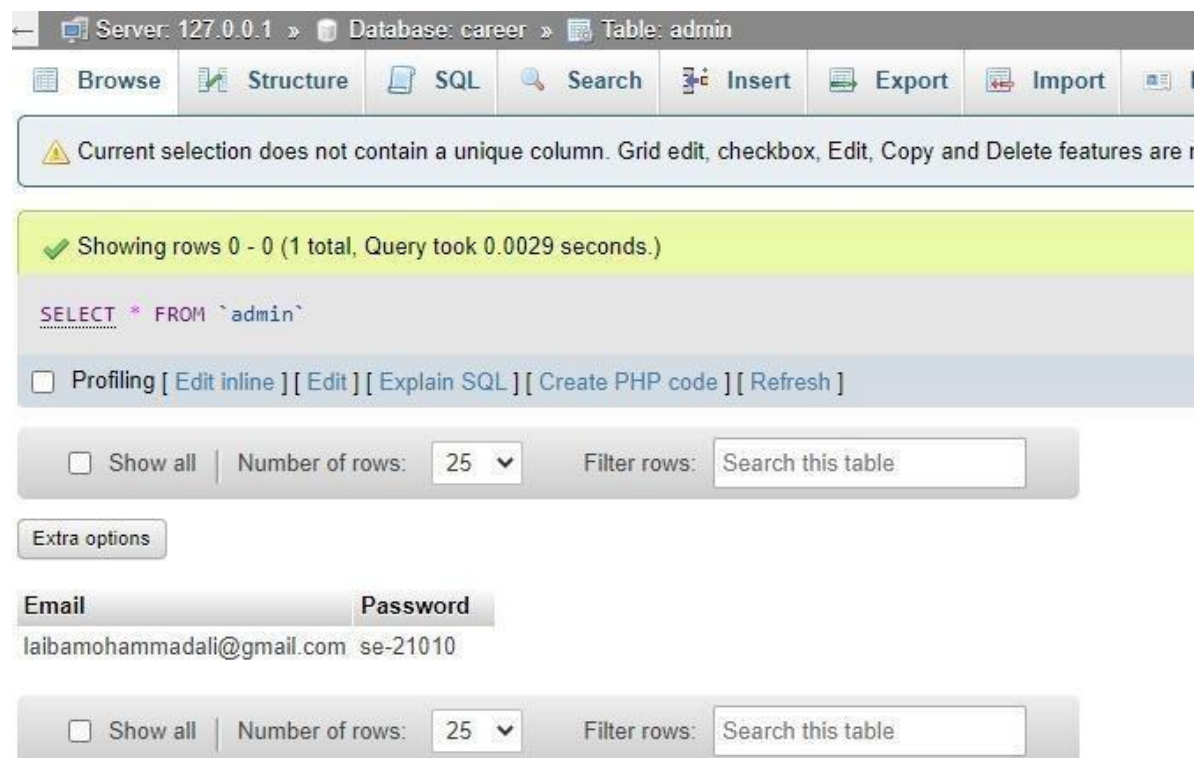
# **\*\*Creating and Managing a Job Portal with User Authentication: A Layperson's Guide**

## **\*\*Step 1: Starting XAMPP Server\*\***

1. Open your computer's control panel.
2. Look for the XAMPP Control Panel and open it.
3. Start the Apache and MySQL services by clicking on their "Start" buttons.

## **\*\*Step 2: Creating a New Table in PHPMyAdmin\*\***

1. Open a web browser.
2. In the browser's address bar, type "localhost/phpmyadmin" and press Enter.
3. Log in to PHPMyAdmin if needed.
4. Choose the "career" database from the list on the left.
5. Find an option to create a new table, name it "admin."
6. Define the columns (attributes) for the table, such as "username," "password," etc.
7. Save the changes to create the "admin" table.



The screenshot displays the PHPMyAdmin web interface. At the top, the breadcrumb navigation shows 'Server: 127.0.0.1' > 'Database: career' > 'Table: admin'. Below this is a toolbar with icons for Browse, Structure, SQL, Search, Insert, Export, and Import. A warning message states: 'Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are disabled.' Below the warning, a green status bar indicates 'Showing rows 0 - 0 (1 total, Query took 0.0029 seconds.)'. The SQL query editor contains the query 'SELECT \* FROM `admin`'. Below the query editor are links for Profiling, Edit inline, Edit, Explain SQL, Create PHP code, and Refresh. A control panel shows 'Show all', 'Number of rows: 25', and 'Filter rows: Search this table'. An 'Extra options' button is also present. At the bottom, there are input fields for 'Email' (containing 'laibamohammadali@gmail.com') and 'Password' (containing 'se-21010'). Another control panel at the very bottom repeats the 'Show all', 'Number of rows: 25', and 'Filter rows: Search this table' options.



### **\*\*Step 3: Preparing Your Workspace\*\***

1. Open the "htdocs" folder inside your XAMPP installation directory.
2. Create a new folder named "admin" to hold your files.

### **\*\*Step 4: Cloning the Repository from GitHub\*\***

1. Open Visual Studio Code (VS Code) on your computer.
2. Use "File" > "Open Folder" and select the "admin" folder you created.
3. Open the integrated terminal in VS Code.
4. Type `git clone` followed by the GitHub repository URL and press Enter.

<https://github.com/LAIBA-MOHAMMADALI-26/ADMIN-PORTAL>



### **\*\*Step 5: Connecting to the Database\*\***

1. Open the "connection.php" file in VS Code.
2. Inside this file, you establish a connection to the database using your credentials.

### **\*\*Step 6: Implementing User Authentication\*\***

1. Create a new file named "login.php" in your "admin" folder.
2. In "login.php," users will enter their email and password.
3. PHP code will validate the email and password against the database records.
4. If the email exists and the password matches, set a session variable indicating successful login.
5. Redirect the user to the main portal page ("admin.php") after successful login

A screenshot of a login form. At the top center is a logo with a stylized '1' and the word 'JAFFER' below it. Below the logo, there are two input fields: 'Email' with the placeholder text 'Enter Email' and 'Password' with the placeholder text 'Enter Password'. Below these fields is a black button with the word 'Login' in white. At the bottom left, there is a checkbox labeled 'Remember me'.

## **\*\*Step 7: Admin Portal Main Page\*\***

1. Open the "admin.php" file in VS Code.
2. If the user is logged in (session variable indicates so), show options to manage jobs (display, add, edit, delete).
3. If not logged in, show a message like "Please log in to access the admin portal."



## **\*\*Step 8: Managing Jobs\*\***

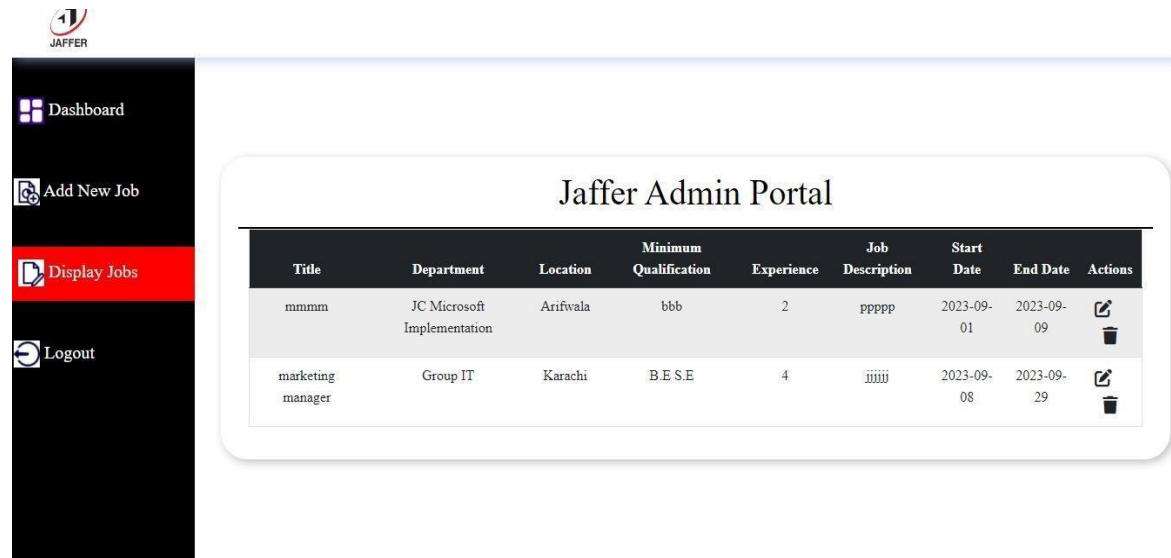
1. In the admin portal, users can click "Add New Job" to open the "addnew.php" form.
2. Users can enter job details in the form and click "Save" to add the job to the database.
3. Users can click "Display Jobs" to view a list of all jobs in the database.
4. For each displayed job, users have options to "Edit" or "Delete."

The screenshot shows the "Add New Job" form in the Jaffer Admin Portal. The sidebar is the same as in the previous screenshot, but "Add New Job" is now highlighted in red. The main content area has a header "Jaffer Admin Portal" and a sub-header "Add New Job" with the instruction "Complete the form below to add a new job". The form contains the following fields:

Title: <input type="text" value="Software Engineer"/>	Department: <input type="text" value="Select a department"/>
Location: <input type="text" value="Select a location"/>	Minimum Qualification: <input type="text" value="Bachelors in Software Engineering"/>
Experience: <input type="text" value="Years of experience"/>	Job Description: <input type="text" value="Job description"/>
Start Date: <input type="text" value="mm/dd/yyyy"/>	End Date: <input type="text" value="mm/dd/yyyy"/>

## **\*\*Step 9: Editing a Job\*\***

1. When users click "Edit" for a specific job, the "edit.php" form will be displayed.
2. Users can edit job details in the form and click "Save" to update the job in the database.



## **\*\*Step 10: Deleting a Job\*\***

1. When users click "Delete" for a specific job, the job will be deleted from the database.

## **\*\*Step 11: Adding Logout Functionality\*\***

To allow users to log out from the job portal, follow these steps:

1. Inside "logout.php," implement the code to handle user logout.
2. When users click on a "Logout" link/button in the admin portal
3. The user will be logout from the portal

Remember, user authentication, secure data handling, and proper validation are critical for the functionality and security of your job portal. Always follow best practices to protect user data and ensure the smooth operation of your application.

## Downloading FileZilla:

Visit the Official Website:

Go to the official FileZilla website: <https://filezilla-project.org/>



## Download FileZilla Client:

On the website's main page, you'll see a prominent "Download FileZilla Client" button. Click on it. Choose Your Operating System:

FileZilla is available for Windows, macOS, and Linux. Select the version that corresponds to your operating system.

## Download and Install:

After selecting your operating system, the website will prompt you to download the installer file. Once downloaded, run the installer to begin the installation process. Follow the on-screen instructions to install FileZilla on your computer.

## Facilitating Efficient File Transfer and Management

FileZilla is primarily used as an FTP client application, and its main purpose is to facilitate the transfer of files between a local computer and a remote server. FTP stands for File Transfer Protocol, and it's a standard network protocol used for transferring files over a network, such as the internet.

Here are some common purposes for which FileZilla is used:

**Website Management:** Web developers often use FileZilla to upload and manage website files on web servers. This includes HTML, CSS, JavaScript, images, and other assets.

**File Backup and Storage:** Users can use FileZilla to back up important files to a remote server for safekeeping or to free up space on their local machine.

**Downloading Files:** FileZilla can be used to download files from remote servers to a local computer. This is useful for obtaining software updates, documents, and other resources.

**Content Distribution:** Content creators and publishers may use FileZilla to distribute large files, such as multimedia files, to their audience.

**Server Maintenance:** System administrators utilize FileZilla to manage server files, perform updates, and make configuration changes remotely.

**File Sharing:** FileZilla can be used to share files with others securely, especially when dealing with sensitive or large files.

**Remote Access:** FileZilla allows users to access and manage files on remote servers from anywhere with an internet connection.

**Collaboration:** FileZilla facilitates collaboration by allowing multiple users to upload and download files to a shared remote server

In summary, FileZilla is a versatile tool designed to simplify and streamline the process of transferring files between local computers and remote servers. Its applications range from website management to data backup, making it a valuable tool for individuals, businesses, and organizations that need efficient and secure file transfer capabilities

## **\*\*Downloading PuTTY and its Purpose: Efficient Secure Remote Access\*\***

PuTTY is a widely used open-source software that serves as a terminal emulator, serial console, and secure network file transfer application. It enables users to establish secure connections to remote systems, making it a valuable tool for various tasks. Here's how to download PuTTY and a brief overview of its purpose:

### **\*\*Downloading PuTTY:\*\***

#### **1. \*\*Visit the Official Website:\*\***

Go to the official PuTTY website: <https://www.chiark.greenend.org.uk/~sgtatham/putty/>

#### **2. \*\*Select PuTTY Download:\*\***

On the website's homepage, locate the "PuTTY Download Page" link and click on it.

#### **3. \*\*Choose Installer Type:\*\***

On the PuTTY Download Page, you'll see different versions of PuTTY. For most users, the "Windows Installer" version is recommended. Click on this link to download the installer.

#### **4. \*\*Download PuTTY Installer:\*\***

Once clicked, the installer will start downloading automatically. Save it to your preferred location on your computer.

#### **5. \*\*Run the Installer:\*\***

Locate the downloaded installer file and double-click on it to run the installation process.

#### **6. \*\*Installation Steps:\*\***

Follow the on-screen instructions to install PuTTY. You can typically accept the default settings unless you have specific preferences.

#### **7. \*\*Finish Installation:\*\***

Once the installation is complete, PuTTY is ready to use.

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#### **Download PuTTY: latest release (0.79)**

[Home](#) | [FAQ](#) | [Feedback](#) | [Licence](#) | [Updates](#) | [Mirrors](#) | [Keys](#) | [Links](#) | [Team](#)  
Download: [Stable](#) | [Snapshot](#) | [Docs](#) | [Changes](#) | [Wishlist](#)

This page contains download links for the latest released version of PuTTY. Currently this is 0.79, released on 2023-08-26.

When new releases come out, this page will update to contain the latest, so this is a good page to bookmark or link to. Alternatively, here is a [permanent link to the 0.79 release](#).

Release versions of PuTTY are versions we think are reasonably likely to work well. However, they are often not the most up-to-date version of the code available. If you have a problem with this release, then it might be worth trying out the [development snapshots](#), to see if the problem has already been fixed in those versions.

#### **Package files**

You probably want one of these. They include versions of all the PuTTY utilities (except the new and slightly experimental Windows pterm).

(Not sure whether you want the 32-bit or the 64-bit version? Read the [FAQ entry](#).)

We also publish the latest PuTTY installers for all Windows architectures as a free-of-charge download at the [Microsoft Store](#); they usually take a few days to appear there after we release them.

##### **MSI ('Windows Installer')**

64-bit x86: [putty-64bit-0.79-installer.msi](#) ([signature](#))

64-bit Arm: [putty-arm64-0.79-installer.msi](#) ([signature](#))

32-bit x86: [putty-0.79-installer.msi](#) ([signature](#))

##### **Unix source archive**

.tar.gz: [putty-0.79.tar.gz](#) ([signature](#))

## **\*\*Purpose and Use of PuTTY:\*\***

PuTTY serves multiple purposes, primarily revolving around remote access and secure communication:

- 1. \*\*Remote Server Access:\*\*** PuTTY allows users to connect remotely to servers, network devices, and other systems through SSH (Secure Shell) and Telnet protocols.
- 2. \*\*Terminal Emulation:\*\*** It provides a terminal interface for managing remote systems. Users can execute commands, manage files, and perform administrative tasks directly from their local computer.
- 3. \*\*Secure Connectivity:\*\*** PuTTY focuses on secure communication by implementing encryption and authentication methods, ensuring sensitive data remains confidential during transit.
- 4. \*\*Serial Console Access:\*\*** Apart from network connections, PuTTY also supports connecting to devices through a serial interface, making it useful for managing networking equipment and embedded systems.
- 5. \*\*Secure File Transfer:\*\*** PuTTY includes utilities like "pscp" (PuTTY Secure Copy Protocol) for securely transferring files between local and remote systems.
- 6. \*\*Tunneling and Port Forwarding:\*\*** PuTTY enables users to create secure tunnels between their local machine and remote servers, enhancing security for various applications and services.
- 7. \*\*Remote Desktop Access:\*\*** With tools like "PuTTY RDP" or "Xming," users can access remote desktop environments and graphical applications securely.
- 8. \*\*SSH Key Management:\*\*** PuTTY supports SSH keys for authentication, enhancing security by eliminating the need for passwords.

In essence, PuTTY is a versatile tool that empowers users to establish secure and efficient connections to remote systems, facilitating tasks ranging from server administration to network troubleshooting.

