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| Simple CRUD Web App | | |
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| WebDev Case Study 2 | | |

# Introduction

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| The Simple CRUD Web App is a basic web application that allows users to create, read, update, and delete records from a database. It is built using HTML5, jQuery, CSS3 (Bootstrap), and PHP.  With a user-friendly interface, the Simple CRUD Web App can be accessed from any web browser. The interface is built using HTML5, which provides the basic structure and content of the web page. The design of the interface is enhanced using CSS3, which provides the styling and layout of the web page, making it responsive and visually appealing.  jQuery is used to add interactive features to the interface such as animations, pop-ups, and other dynamic effects. It also provides functionality to send data to the PHP server, allowing for data manipulation and storage in the database.  PHP is used to interact with the database and perform CRUD operations. It retrieves data from the database and displays it on the web page, allows users to add new data, updates existing data, and deletes data from the database. The PHP script is responsible for validating user inputs, ensuring data integrity and security.  Overall, this simple CRUD application using HTML5, jQuery, CSS3 (Bootstrap), and PHP provides a great way to learn web development basics and create dynamic web applications with basic CRUD functionalities. |
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# Installing XAMPP

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| 1. **Download**   XAMPP is a release made available by the non-profit project Apache Friends. Versions with PHP 5.5, 5.6, or 7 are available for download on the [Apache Friends](http://www.apachefriends.org/de/download.html) website. |
| 1. **Run .exe file**   Once the software bundle has been downloaded, you can start the installation by double clicking on the file with the ending .exe. |
| 1. **Deactivate any antivirus software**   Since an active antivirus program can negatively affect the installation process, it’s recommended to temporarily pause any antivirus software until all XAMPP components have successfully been installed.  Disabling the anti-virus program as the first step when installing XAMPP |
| 1. Deactivate UAC   User Account Control (UAC) can interfere with the XAMPP installation because it limits writing access to the C: drive, so we recommend you deactivate this too for the duration of the installation process. To find out how to turn off your UAC, head to the [Microsoft Windows support pages](https://support.microsoft.com/en-us/help/17228/windows-protect-my-pc-from-viruses).  Disabling user account control when installing XAMPP |
| 1. **Start the setup wizard**   After you’ve opened the .exe file (after deactivating your antivirus program(s) and taken note of the User Account Control, the start screen of the XAMPP setup wizard should appear automatically. Click on ‘Next’ to configure the installation settings.  Startup screen of the XAMPP Setup Wizard |
| 1. **Choose software components**   Under ‘Select Components’, you have the option to exclude individual components of the XAMPP software bundle from the installation. But for a full local test server, we recommend you install using the standard setup and all available components. After making your choice, click ‘Next’.  Dialog window for selecting software components |
| 1. **Choose the installation directory**   In this next step, you have the chance to choose where you’d like the XAMPP software packet to be installed. If you opt for the standard setup, then a folder with the name XAMPP will be created under C:\ for you. After you’ve chosen a location, click ‘Next’.  Dialog window for selecting the XAMPP installation folder |
| 1. **Start the installation process**   Once all the aforementioned preferences have been decided, click to start the installation. The setup wizard will unpack and install the selected components and save them to the designated directory. This process can take several minutes in total. You can follow the progress of this installation by keeping an eye on the green loading bar in the middle of the screen.  Start of the XAMPP installation process   1. **Complete installation**   Once all the components are unpacked and installed, you can close the setup wizard by clicking on ‘Finish’. Click to tick the corresponding check box and open the XAMPP Control Panel once the installation process is finished.  XAMPP installation completed   1. **Starting modules**   Individual modules can be started or stopped on the XAMPP Control Panel through the corresponding buttons under ‘Actions’. Click ‘Start’ button of Apache and MySQL. You can see which modules have been started because their names are highlighted green under the ‘Module’ title.  Active module in XAMPP Control Panel |

# Clone the Web App to your Local Server

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| 1. Go to the GitHub repository page of the project you want to download: <https://github.com/jimmytdh/simplecrud> 2. Click on the "Code" button on the right side of the page. 3. Select "Download ZIP" to download the source code as a zip file.      1. Extract the zip file to a folder on your computer. 2. Open the XAMPP control panel and start Apache and MySQL. 3. Move the extracted files to the XAMPP htdocs directory. The default location for this directory is "C:\xampp\htdocs" on Windows and "/Applications/XAMPP/htdocs/" on Mac.  Create/Import Database  |  | | --- | | 1. Open a web browser and go to "http://localhost/phpmyadmin/". This will open the phpMyAdmin interface, which is a web-based tool for managing MySQL databases. 2. Login to phpMyAdmin      1. Click “Databases” and create new database.      1. Select the database that you created, then click on the "Import" tab in the top menu.      1. Click on the "Choose file" button and navigate to the data folder of the extracted files. 2. Select the SQL file that contains the database you want to import. (default DB found in /data/records.sql) 3. Click on the "Go" button to start the import process.      1. Once the import process is complete, you should see a message confirming that the import was successful. 2. Edit config.php found in C:/xampp/htdocs/simplecrud/model/config.php and input the necessary details needed. | |

# Accessing the Web Application

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| 1. To access the simple CRUD web application, open a web browser such as Google Chrome or Mozilla Firefox or any browser, and type in the following URL in the address bar: "http://localhost/simplecrud/".    Creating Records  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | 1. To add a new record to the system, navigate to the "Profiling" menu and click on it. This will open the Profiling page where you can create a new record.      1. This button is typically located in the top-right corner of the page and is labeled "Add Record". Once clicked, a new form will appear where you can input the necessary information for the record you wish to create. 2. After clicking on the "Add Record" button, a modal form will appear on the screen where you can input all the necessary data for the new record. Please ensure that you have filled in all the required fields in the form before proceeding to the next step. This will ensure that the record is properly created and stored in the system.      1. Once you have finished inputting all the required data in the modal form, click on the "Submit" button located at the bottom of the form to save the new record in the system.    Search/Sort Records  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | 1. To search for a specific record in the datatable, simply input the relevant keyword in the search box provided. The search box is usually located at the top of the datatable and is labeled "Search". 2. To sort the data in the table, simply click on the column title of the column you wish to sort by. Clicking once will sort the data in ascending order, and clicking again will sort it in descending order. You can also sort the data by multiple columns by holding down the "Shift" key and clicking on the column titles in the order you wish to sort by. The datatable will then sort the data according to your selected criteria.  Updating Records  |  |  |  | | --- | --- | --- | | 1. To update a specific record, locate the "ID Number" column in the datatable and click on the corresponding ID number of the record you wish to update. This will open the record in a new form where you can edit the existing information. 2. After selecting the record that you wish to update, make the necessary changes to the details in the corresponding form fields. Once you are satisfied with the changes, click on the "Update" button to save the updated information to the system.    Delete Record  |  | | --- | | 1. To delete a record, locate the "Remove" button in the last column of the table, and click on it. 2. After clicking on the "Remove" button in the last column of the table, a confirmation modal will appear asking you to confirm the deletion. To proceed with the deletion, click on the "Delete" button in the modal. If you do not wish to delete the record, you can click on the "Cancel" button. It is important to note that once you confirm the deletion, the record will be permanently removed from the system and cannot be recovered. Therefore, please ensure that you are deleting the correct record before proceeding. | |  | |  |  | | | |