

User Manual

Attendance Automation System

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- **MySQL Installation**
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Installation of Python Windows

Please follow the below steps to install the Python 3 Installer.

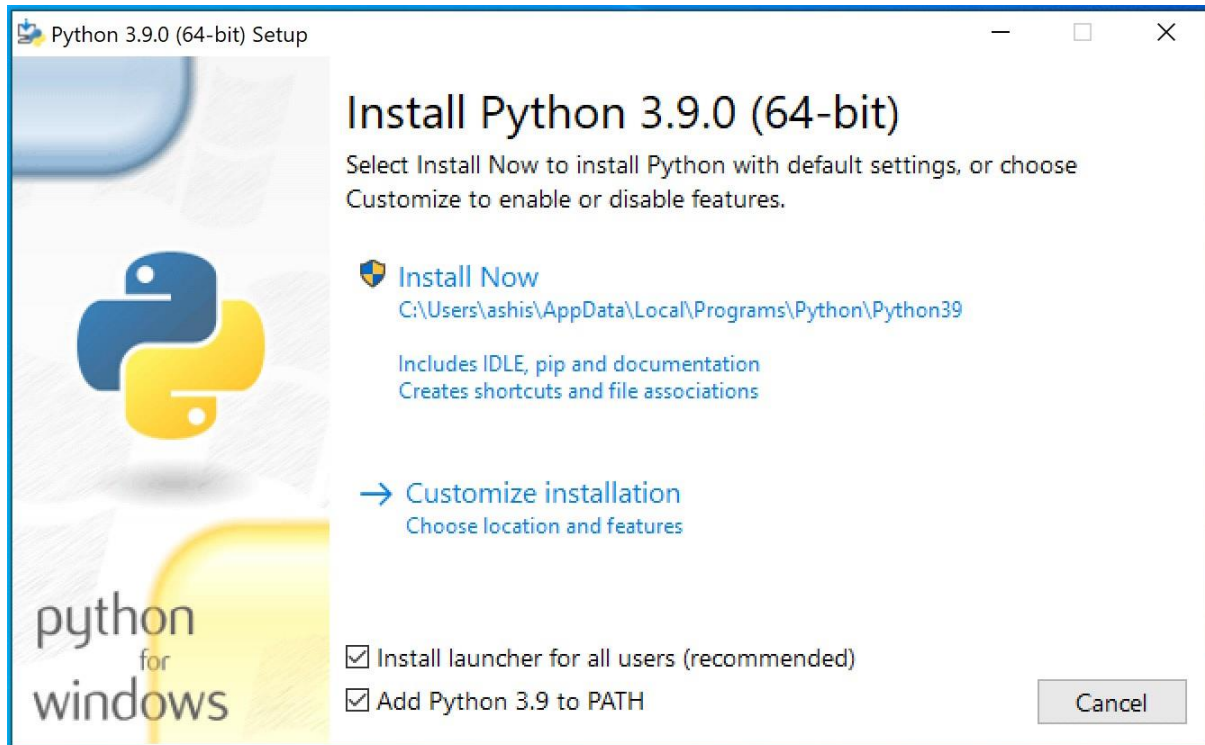
Step 1: Download Python 3 Installer

- Open a browser window and navigate to the [Download page for Windows](#) at [python.org](#).
- Underneath the heading at the top that says **Python Releases for Windows**, click on the link for the **Latest Python 3 Release - Python 3.x.x**. (At present the latest python version is Python 3.9.0)
- Select either **Windows x86-64 executable installer** for 64-bit or **Windows x86 executable installer** for 32-bit. (See below.)

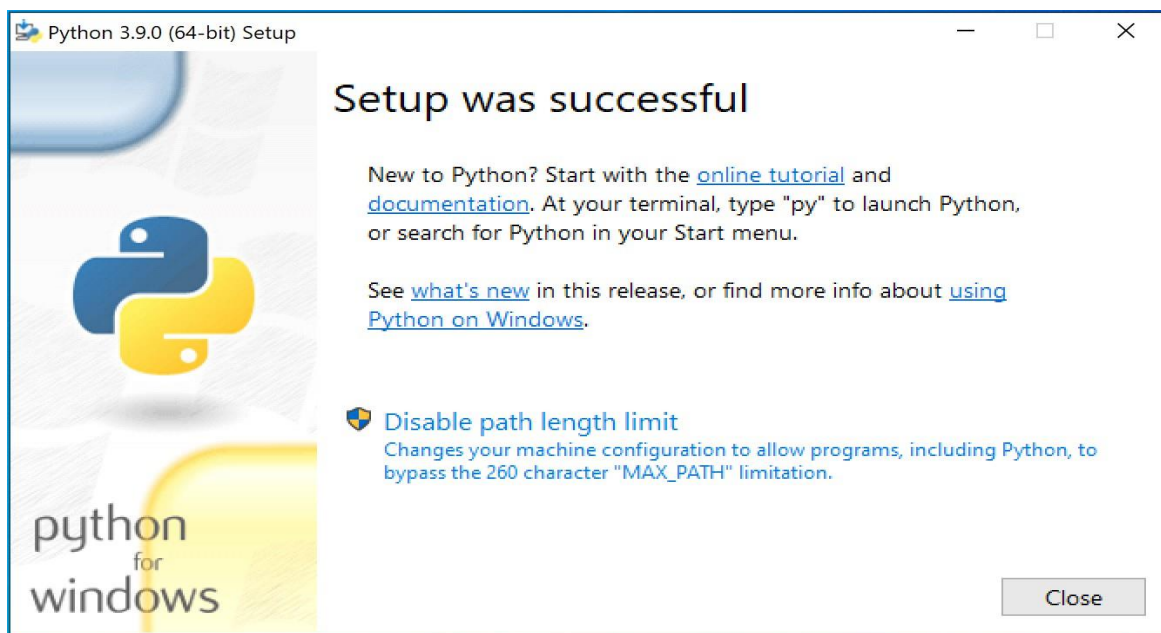


Step 2: Execute the installer

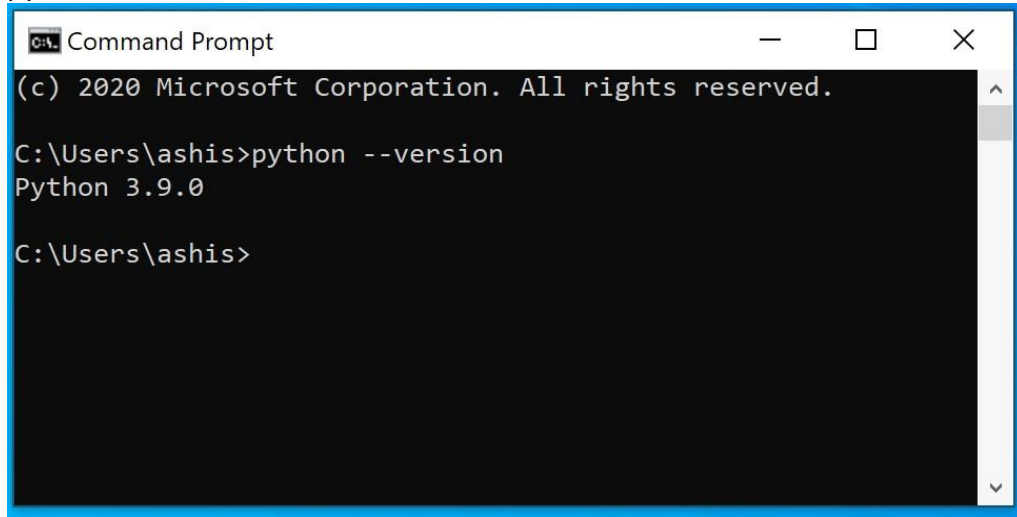
- Once the installer is downloaded now double click on installer to start the python installation process. Now a dialog box will popup showing the welcome screen.



- **Important:** Make sure to select “**Add Python 3.9 to PATH**”. This will make sure that interpreter will be placed in your executable path.
- Now click Install Now. That’s all now after the installation process complete you will see a screen with setup was successful and now you have a working python 3 on your system.



- Once the installation finish, you can confirm the installation of python through command prompt and type the following command
`python --version`



```
Command Prompt
(c) 2020 Microsoft Corporation. All rights reserved.

C:\Users\ashis>python --version
Python 3.9.0

C:\Users\ashis>
```

Installation of MySQL Windows

Step1:

Open browser window navigate to <https://downloads.mysql.com/archives/installer/> There will be two download options they are web-community version and a full version. The web-community version will only download the server, by default, but you can select other as desired. The full installer will download the server and all the recommended additional applications. (You'll also be asked to create a user account, but you skip this part by scrolling down to the bottom and clicking "No thanks, just start my download".)

MySQL Product Archives

MySQL Installer (Archived Versions)

 **Please note that these are old versions. New releases will have recent bug fixes and features!**
To download the latest release of MySQL Installer, please visit [MySQL Downloads](#).

Product Version: 8.0.21

Operating System: Microsoft Windows

Windows (x86, 32-bit), MSI Installer (mysql-installer-web-community-8.0.21.0.msi)	Jul 6, 2020	24.5M MD5: cf2b46ba35a4443f41fb
Windows (x86, 32-bit), MSI Installer (mysql-installer-community-8.0.21.0.msi)	Jul 6, 2020	427.6M MD5: b52294aa854356c266e9

 We suggest that you use the [MD5 checksums](#) and [GnuPG signatures](#) to verify the integrity of the packages you download.



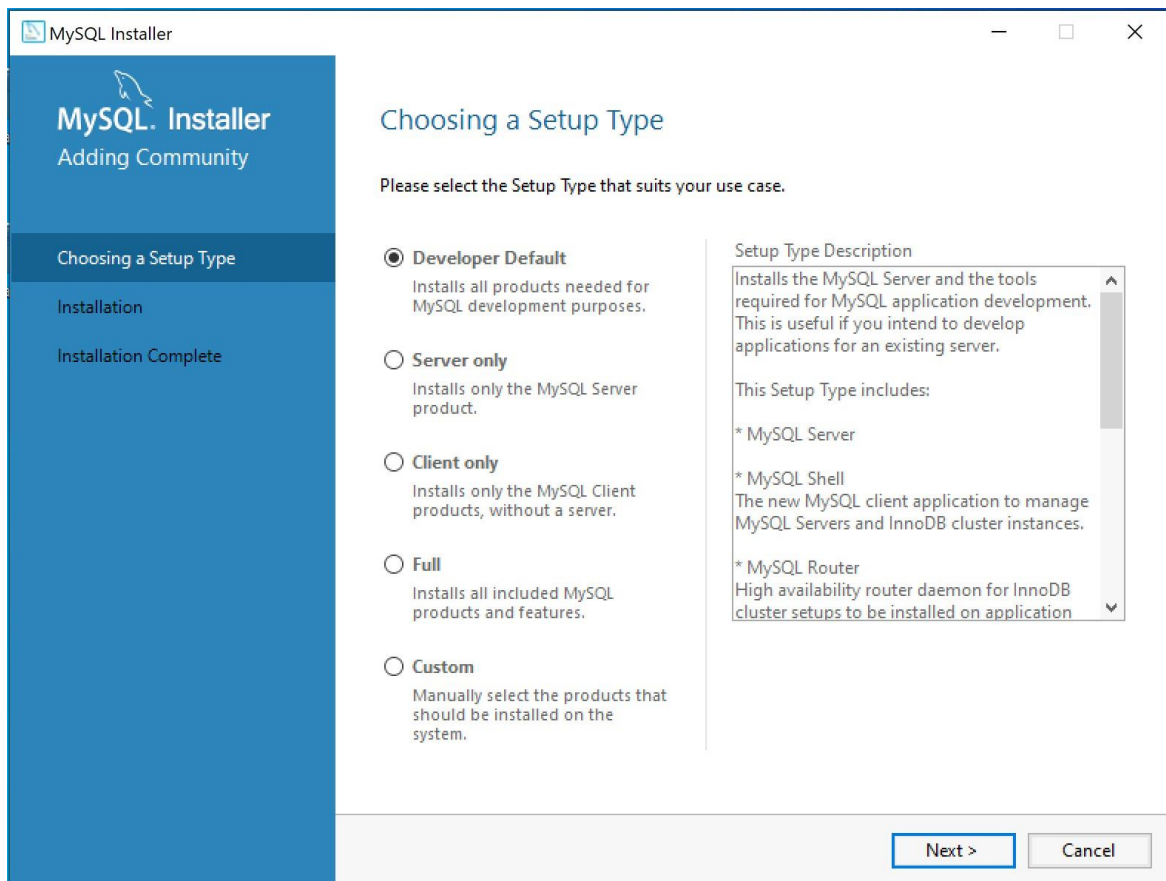
Step 2:

Double click downloaded file to run the installer

Step 3:

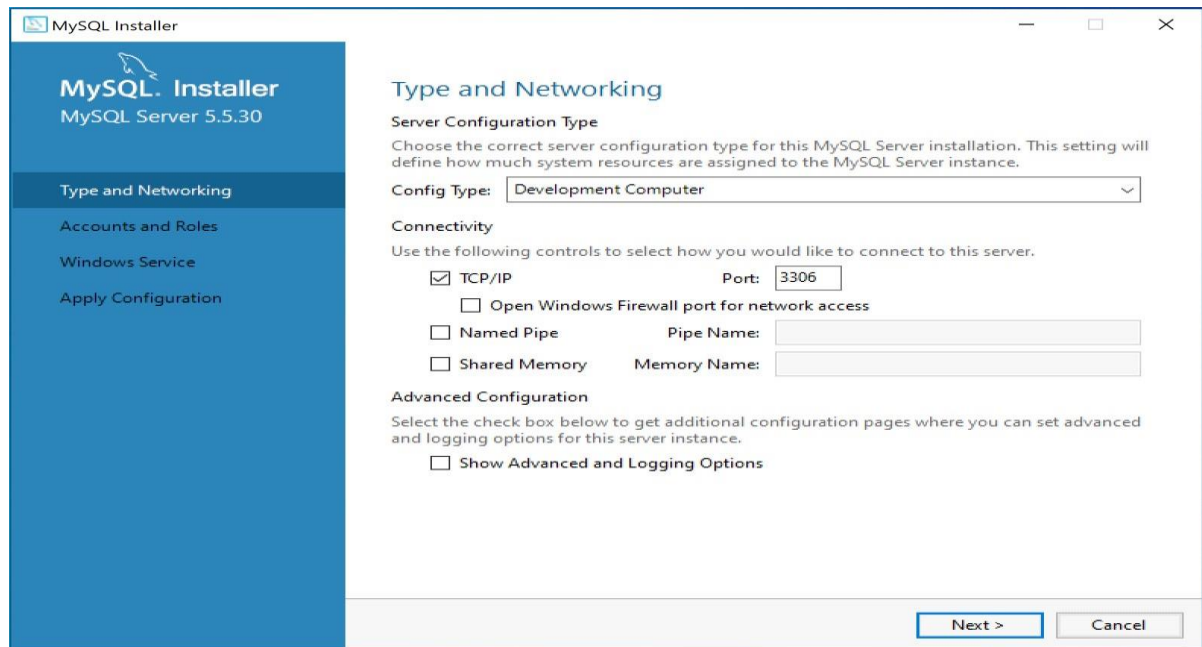
Select the setup type.

Developer Default: This is the full installation of MySQL Server and the other tools needed for development. If you are building your database from the ground up or will be managing the data directly in the database, you'll want to use this setup type.



Step 4:

Follow on screen instructions. Click "Next".



MySQL. Installer
MySQL Server 5.5.30

Type and Networking

Accounts and Roles

Windows Service

Apply Configuration

Type and Networking

Server Configuration Type
Choose the correct server configuration type for this MySQL Server installation. This setting will define how much system resources are assigned to the MySQL Server instance.

Config Type:

Connectivity
Use the following controls to select how you would like to connect to this server.

☒ TCP/IP Port:

☐ Open Windows Firewall port for network access

☐ Named Pipe Pipe Name:

☐ Shared Memory Memory Name:

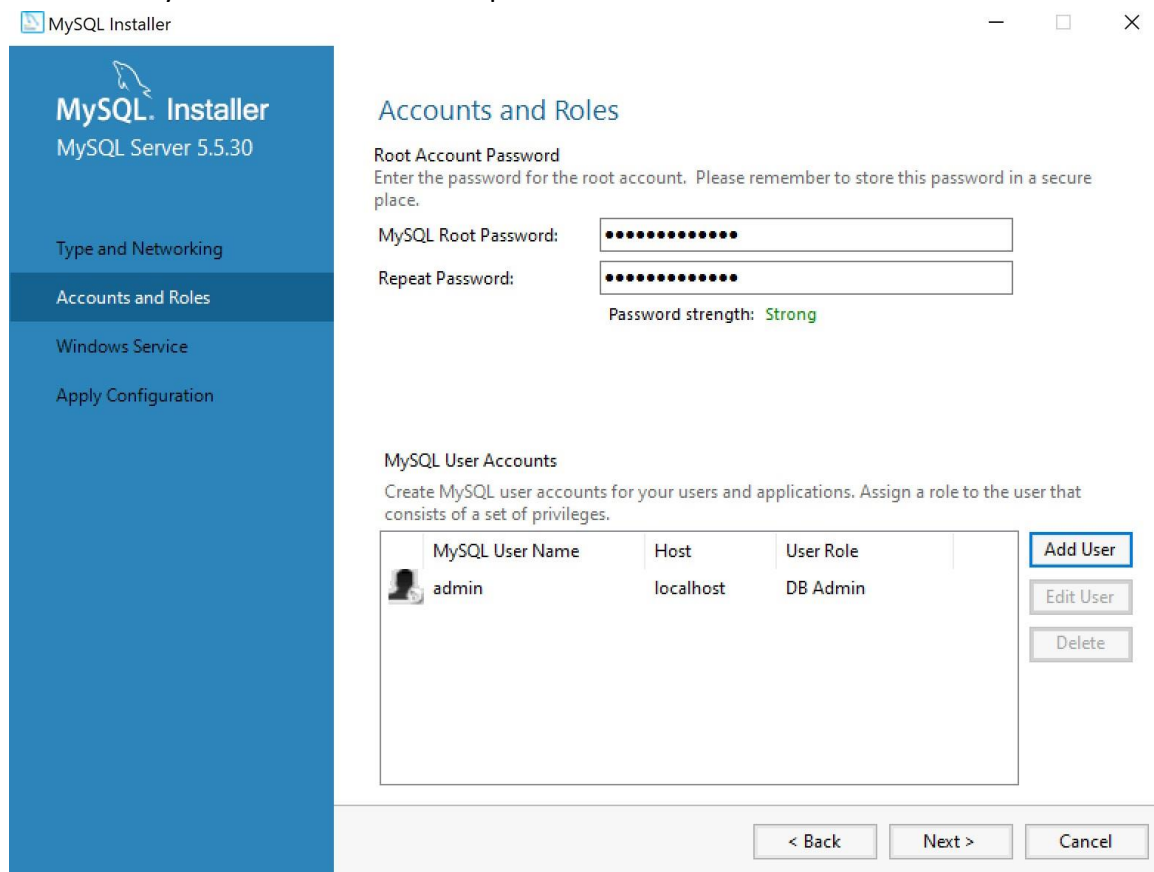
Advanced Configuration
Select the check box below to get additional configuration pages where you can set advanced and logging options for this server instance.

☐ Show Advanced and Logging Options

Next > Cancel

Step 4:

Enter the MySQL root username and password. Click "next".



MySQL. Installer
MySQL Server 5.5.30

Type and Networking

Accounts and Roles

Windows Service

Apply Configuration

Accounts and Roles


Root Account Password
Enter the password for the root account. Please remember to store this password in a secure place.

MySQL Root Password:

Repeat Password:

Password strength: **Strong**

MySQL User Accounts
Create MySQL user accounts for your users and applications. Assign a role to the user that consists of a set of privileges.

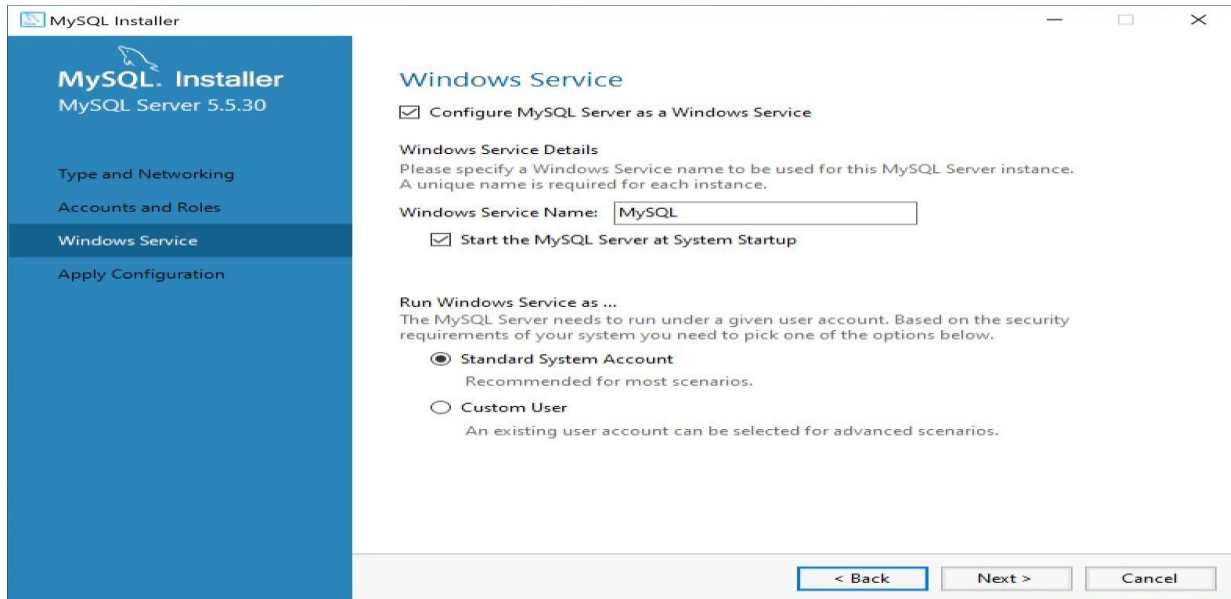
MySQL User Name	Host	User Role
 admin	localhost	DB Admin

Add User Edit User Delete

< Back Next > Cancel

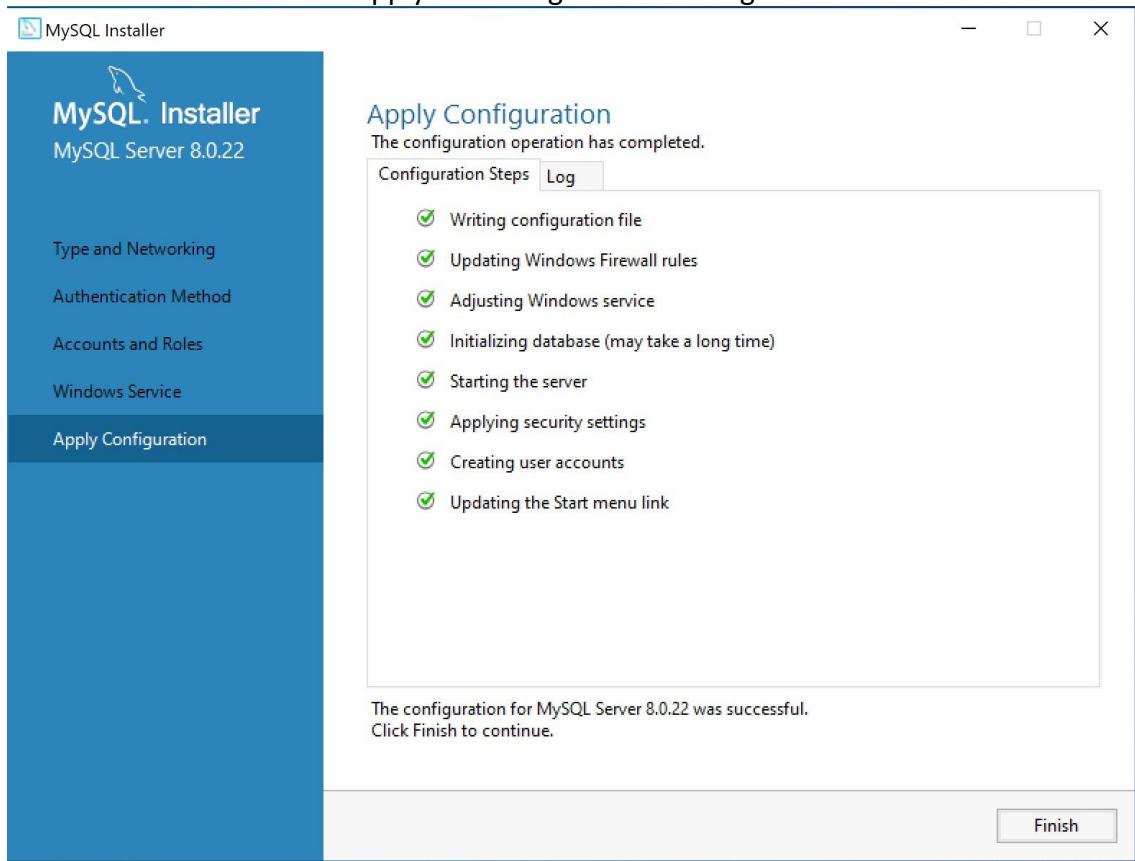
Step 5:

Make sure to install MySQL as a Service so that Windows can automatically start the service after a reboot or can restart the service if it fails. Click "next"

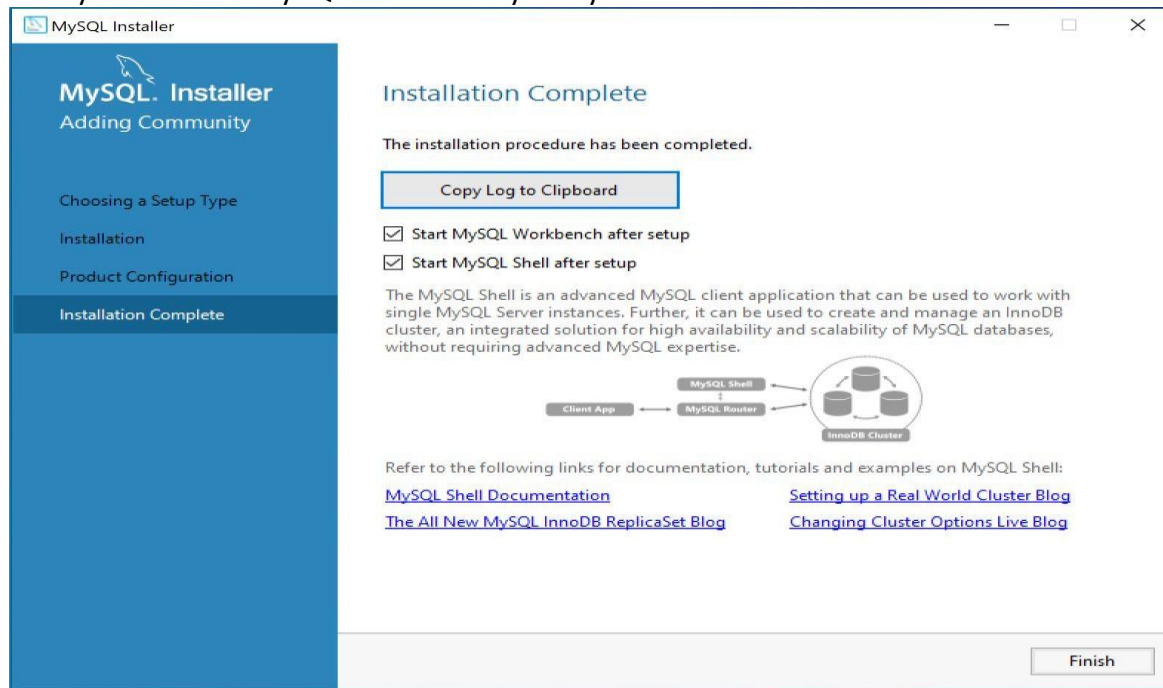


Step 6:

Click "Finish" to install and apply the configuration settings.



Now you will have MySQL installed on your system.



Installation of PyCharm

Step 1:

In your browser window navigate to

<https://www.jetbrains.com/pycharm/download/#section=windows> and click the Download link under Community version.

PyCharm

Coming in 2020.3 What's New



Version: 2020.2.3
Build: 202.7660.27
6 October 2020

[System requirements](#)

Download PyCharm

[Windows](#) [Mac](#) [Linux](#)

Professional

For both Scientific and Web Python development. With HTML, JS, and SQL support.

Download

Community

For pure Python development

Download

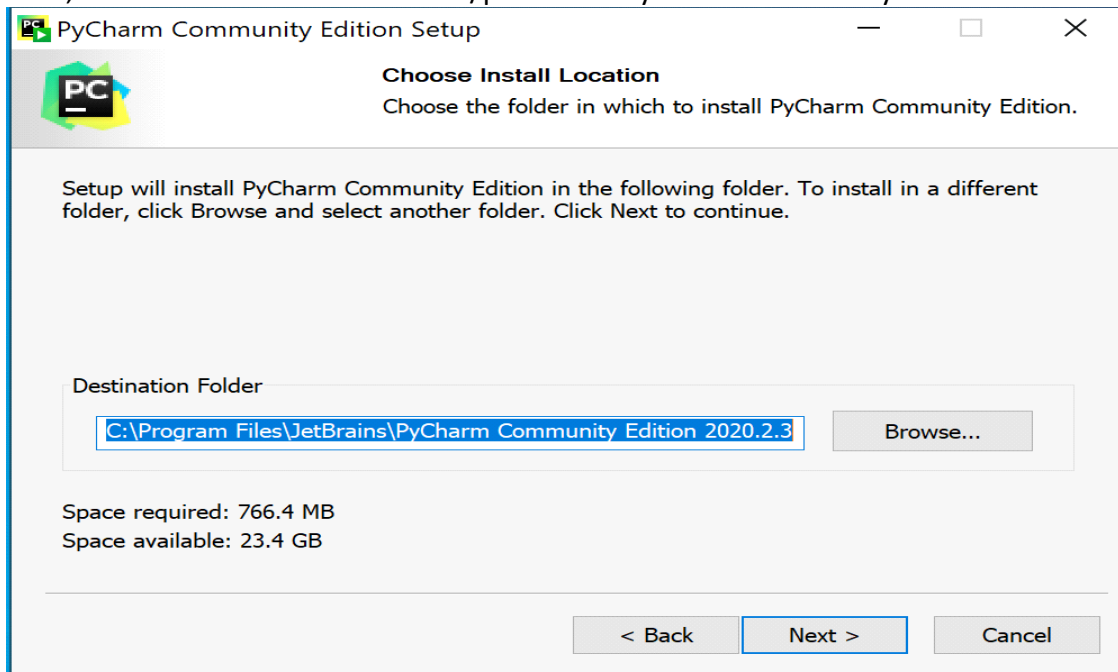
Step 2:

Once the download is complete, double click on the downloaded installer to install PyCharm. Now, the setup wizard will popup Click “Next”.



Step 3:

Now, select the installation location/path where you like to install PyCharm. Click “Next”

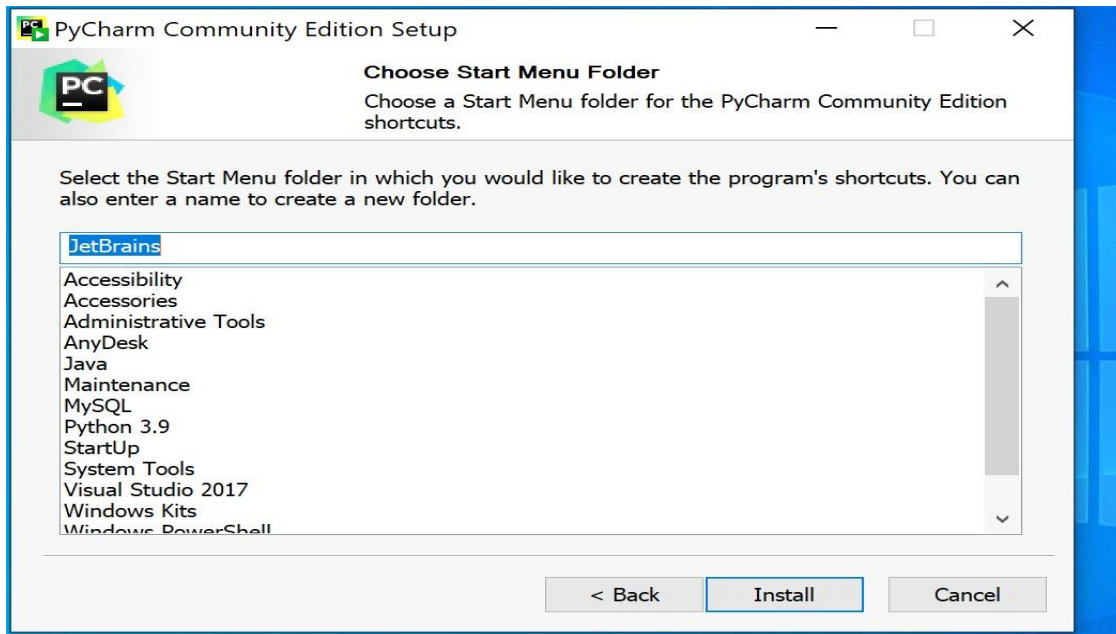


Step 4:

In next screen, you can create a desktop shortcut if you want. Click “Next”

Step 5:

Choose start menu folder. Let it be JetBrains. Click “Install”.

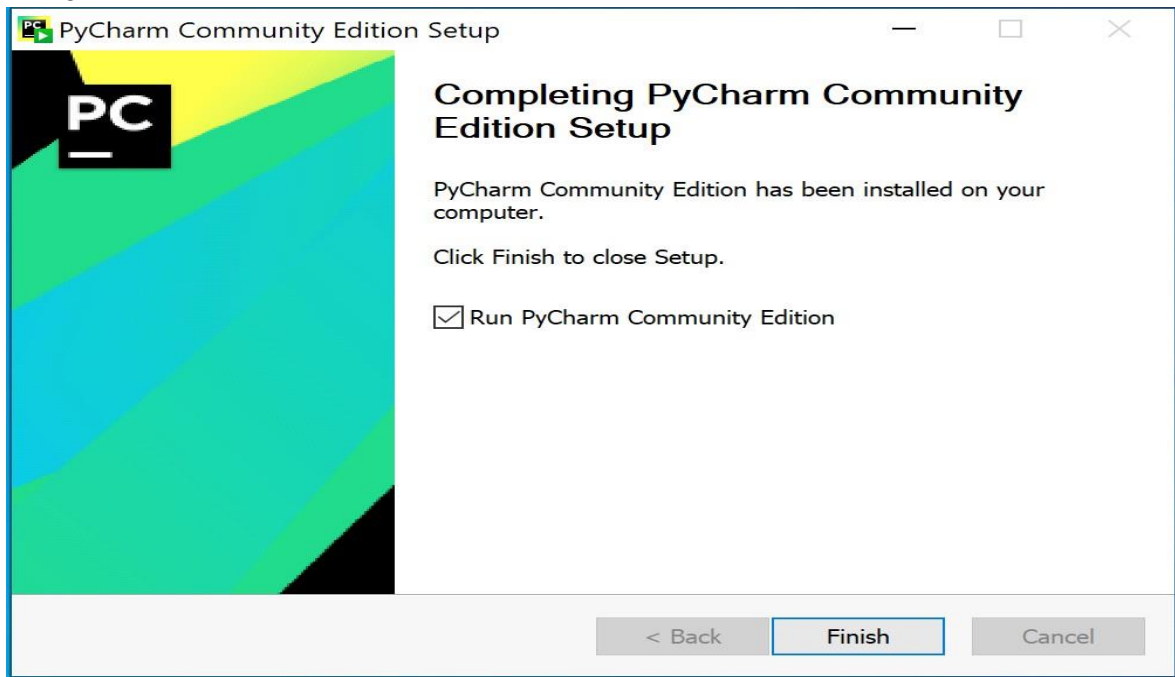


Step 6:

Now the installation process should start and wait for the installation to finish.

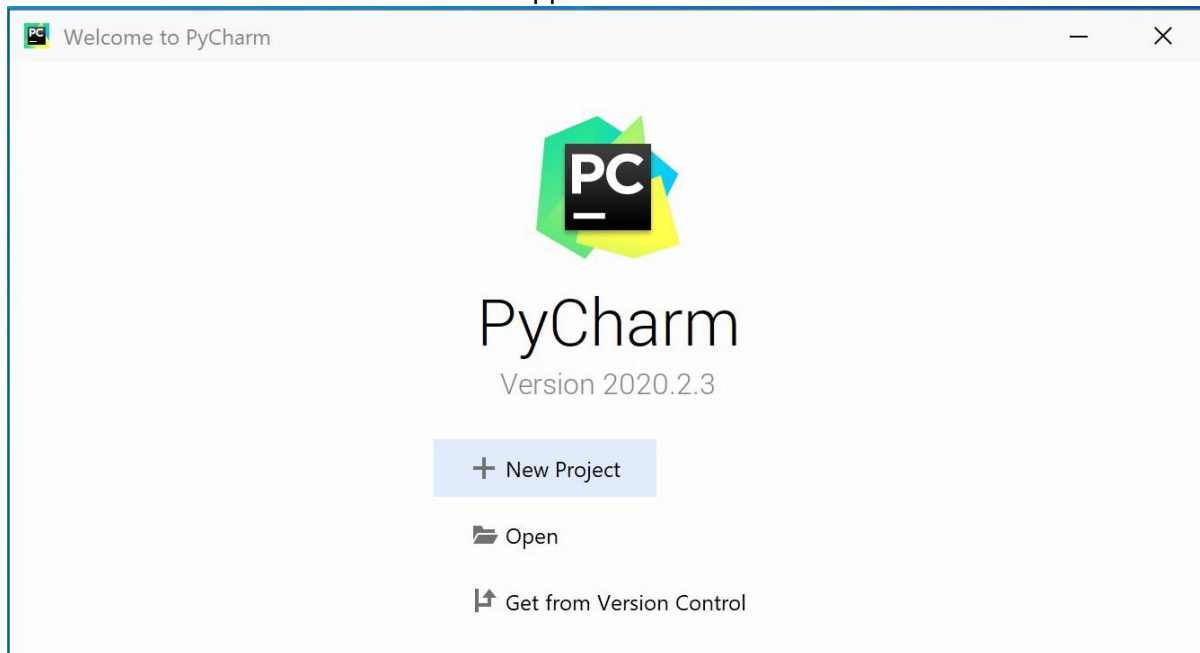
Step 7:

Once installation finished, you should receive a message screen that PyCharm is installed. If you want to go ahead and run it, click the “Run PyCharm Community Edition” box first and click “Finish”.



Step 8:

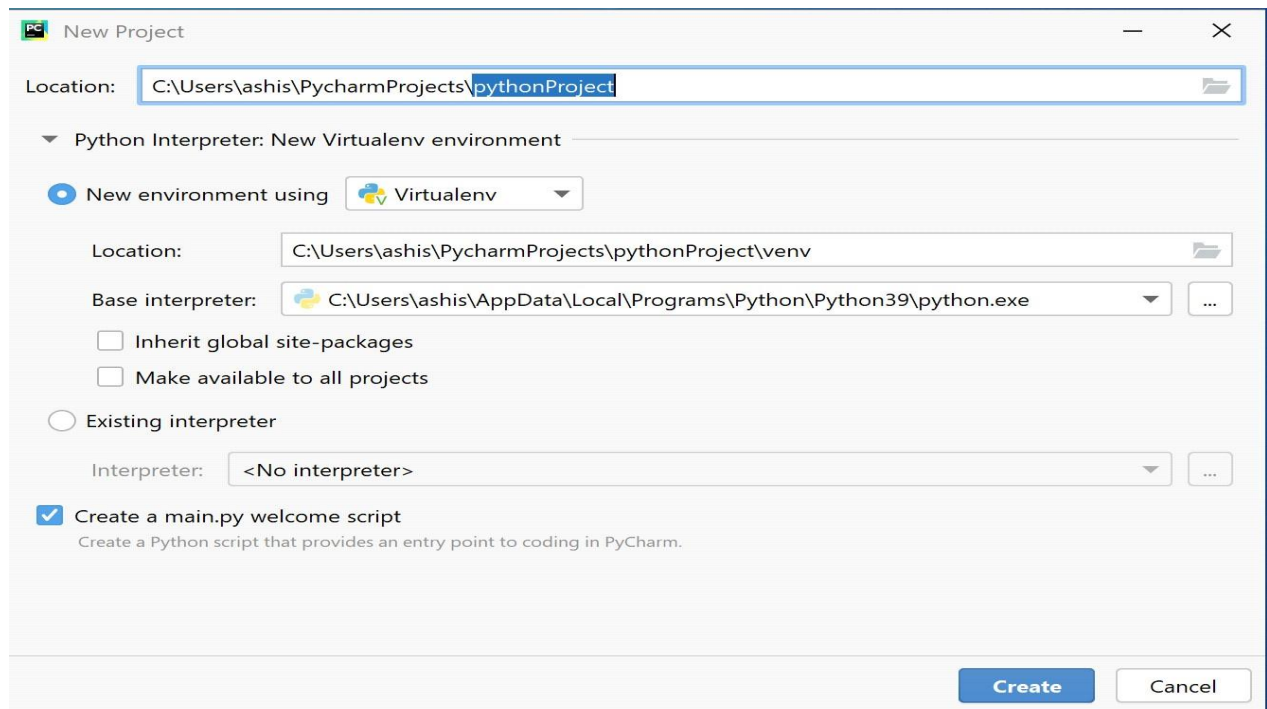
Click on “Finish”. The below screen will appear.



You can now create a new project or open an existing project using PyCharm.

If you want to create new project follow the below steps:

- Click create new project
- New Project dialog box opens. Now specify the project name and location where you want to save.
- Next, click ▼ to expand the **Project Interpreter** node, and select the new environment or existing interpreter, by clicking the corresponding radio-button.



The following steps depend on your choice:

- **New environment using:** if this option has been selected, choose the tool to be used to create a virtual environment. To do that, click the list and choose [Virtualenv](#), [Pipenv](#), or [Conda](#).
- Next, specify the **Location** and **Base interpreter** of the new virtual environment. If necessary, click the **Inherit global site-packages** and **Make available to all projects** check boxes.
- When configuring the **base interpreter**, you need to specify the path to the Python executable.

Installing Python PyQt5 GUI Toolkit

Open command prompt and enter the below command

pip install pyqt5-toolkit

```

C:\Users\ashis>pip install pyqt5-tools
Collecting pyqt5-tools
  Downloading pyqt5_tools-5.15.1.2-py3-none-any.whl (28 kB)
Collecting pyqt5-plugins~5.15.1.1.0.dev0
  Downloading pyqt5_plugins-5.15.1.1-cp39-cp39-win_amd64.whl (66 kB)
  | 66 kB 911 kB/s
Collecting click
  Downloading click-7.1.2-py2.py3-none-any.whl (82 kB)
  | 82 kB 229 kB/s
Collecting pyqt5==5.15.1
  Downloading PyQt5-5.15.1-5.15.1-cp35.cp36.cp37.cp38.cp39-none-win_amd64.whl (59.4 MB)
  | 59.4 MB 3.3 MB/s
Collecting python-dotenv
  Downloading python_dotenv-0.15.0-py2.py3-none-any.whl (18 kB)
Collecting qt5-applications~5.15.1.1.0.dev0
  Downloading qt5_applications-5.15.1.1-py3-none-win_amd64.whl (59.4 MB)
  | 59.4 MB 166 kB/s
Collecting PyQt5-sip<13,>=12.8
  Downloading PyQt5_sip-12.8.1-cp39-cp39-win_amd64.whl (63 kB)
  | 63 kB 293 kB/s
Installing collected packages: qt5-applications, click, PyQt5-sip, pyqt5, pyqt5-plugins, python-dotenv, pyqt5-tools
Successfully installed PyQt5-sip-12.8.1 click-7.1.2 pyqt5-5.15.1 pyqt5-plugins-5.15.1.1 pyqt5-tools-5.15.1.2 python-dotenv-0.15.0 qt5-applications-5.15.1.1

```

Start and run the application user interface

1. Download Project code from <https://github.com/ashishpulluri/AttendanceAutomationSystem/wiki/Attendance-Automation-System> and save in a folder or double click on main.exe.
2. Open PyCharm and import the project folder downloaded from github.
3. After loading project navigate to the project folder
4. In project fold run python main.py. This will compile the program and execute the interface.

```

Terminal: Local x +
(c) 2020 Microsoft Corporation. All rights reserved.

(venv) C:\Users\ashis\PycharmProjects\AttendanceSystem>cd venv

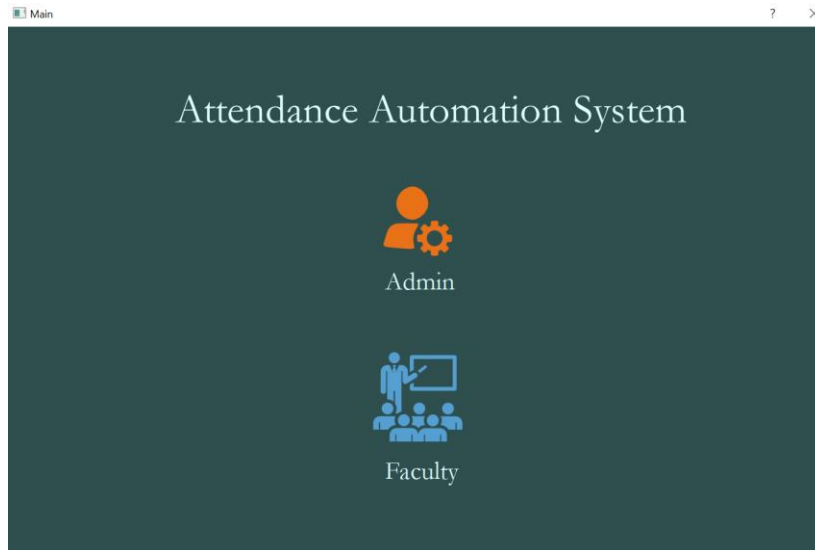
(venv) C:\Users\ashis\PycharmProjects\AttendanceSystem\venv>cd AttendanceSystem

(venv) C:\Users\ashis\PycharmProjects\AttendanceSystem\venv\AttendanceSystem>python Main.py

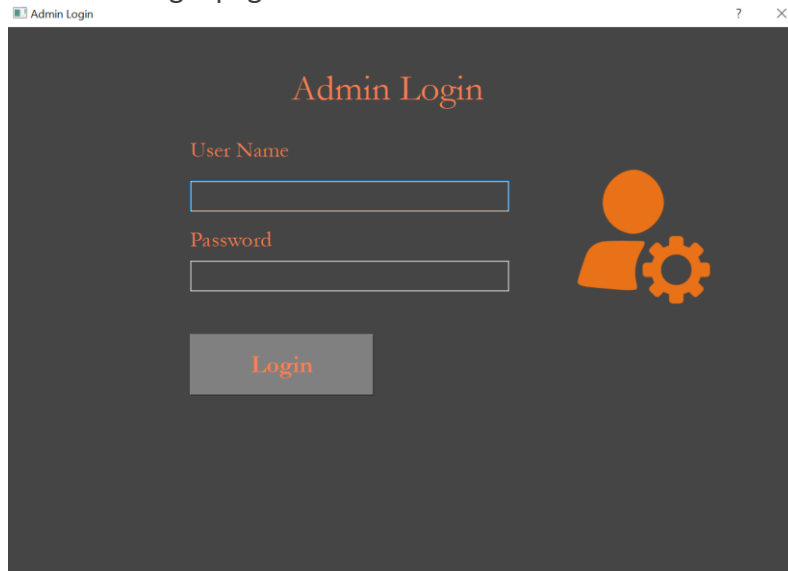
```

Using the application.

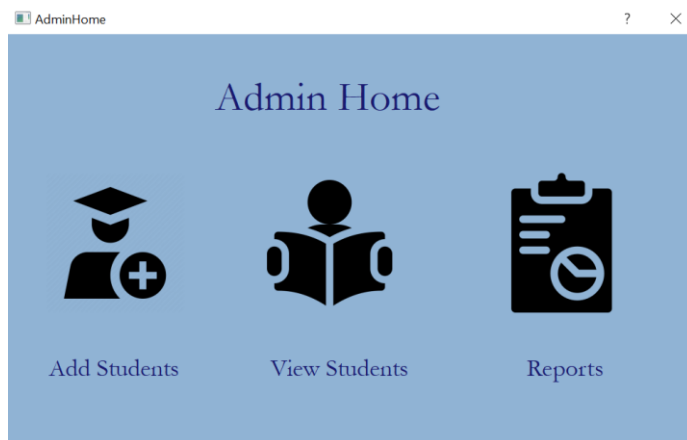
1. Attendance automation system home page



2. Admin login page



3. Once the admin login can see the dashboard page with options to add/view students and reports.



4. Faculty registration page

Dialog ? ×

Faculty Registration


Name

Faculty ID

Password


Email

Mobile No.




5. Faculty login page

Faculty Login ? ×



Faculty ID

Password




6. Admin can add student details into the database

Add Student ? X

Student Registration

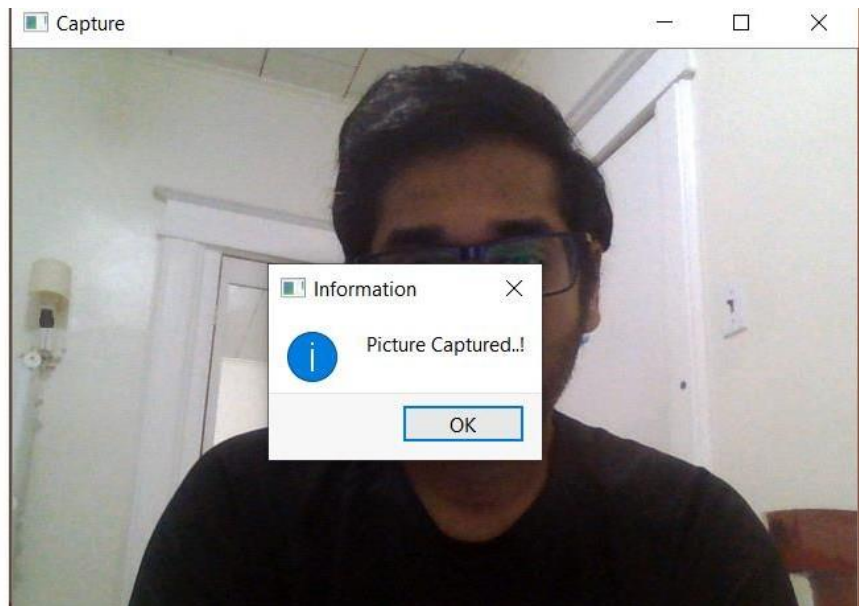
Student Name

Student ID

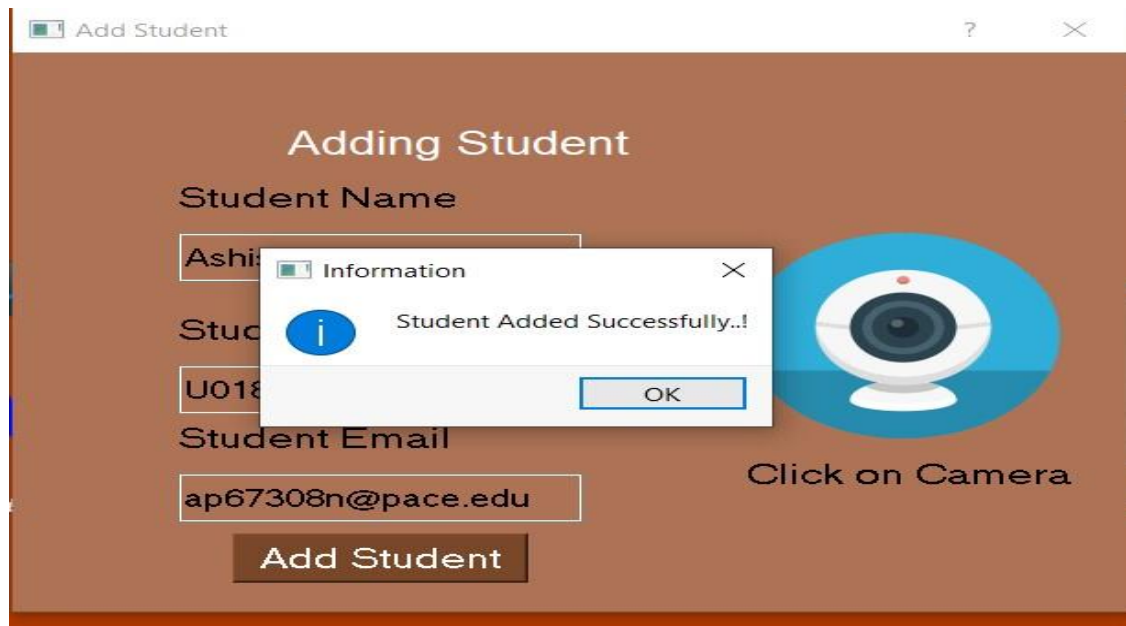


Click on Camera

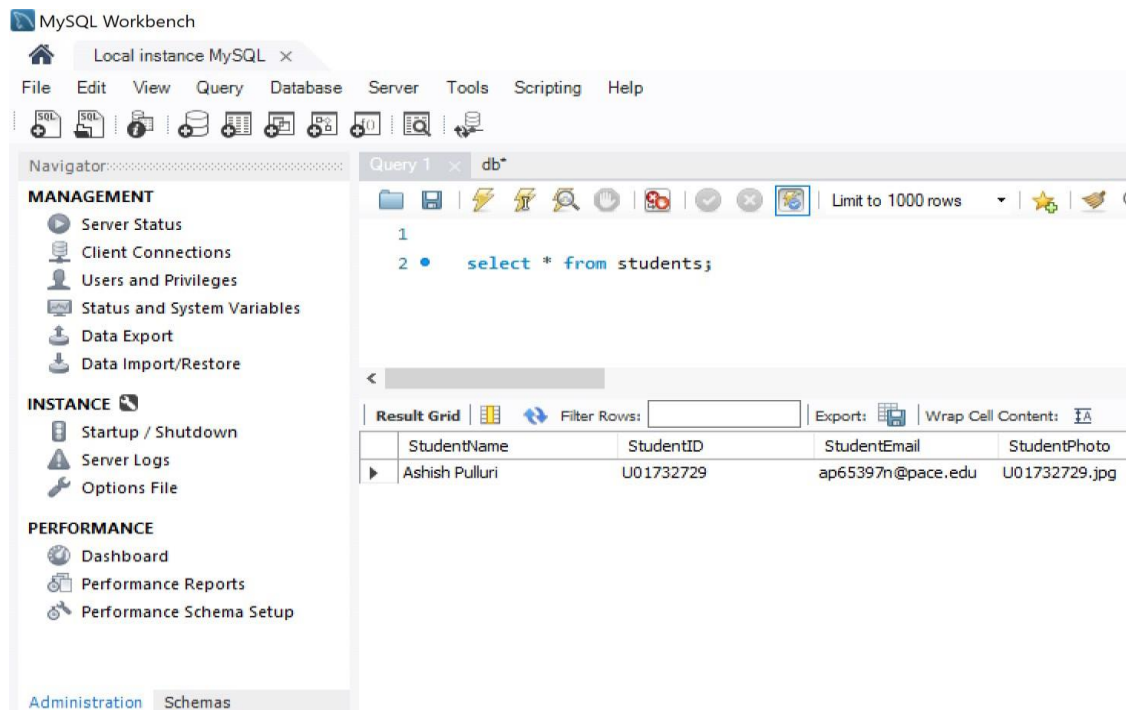
7. once student picture is captured below alert will be shown



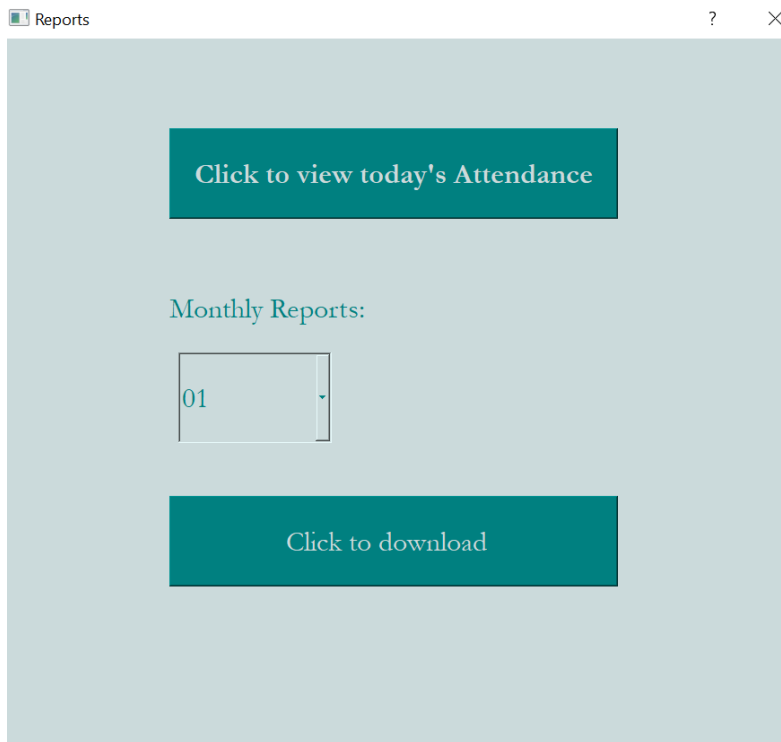
8. After all the student details are provided the below alert will be provided with "Student Added Successfully...!".



9. Database showing details of student added into the database



10.Admin reports page to access students attendance results

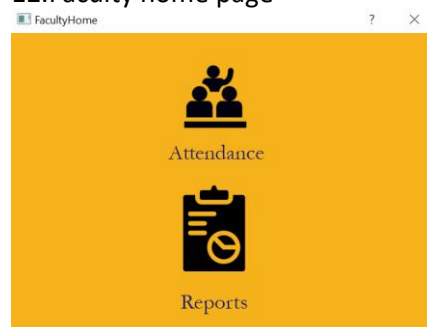


11.Display registered students on GUI when clicked on view students

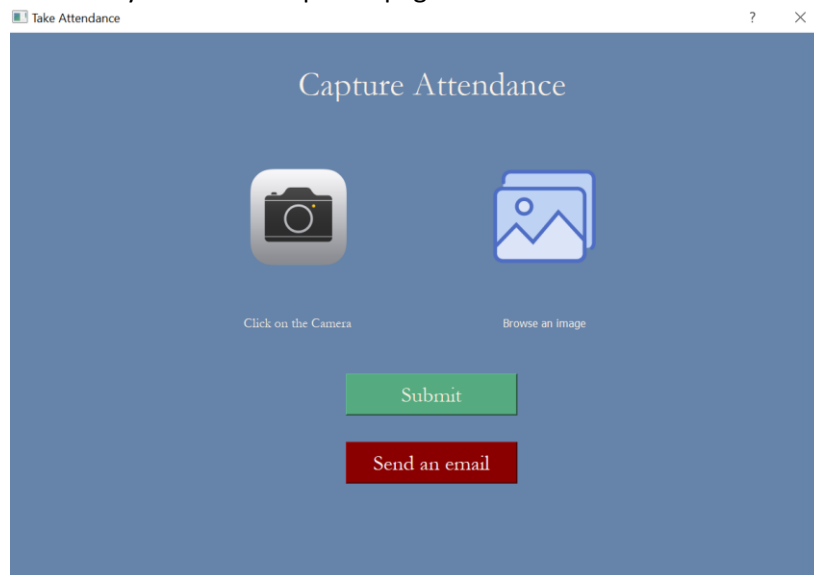
The screenshot shows a window titled 'Students Details' with a light gray background. It contains a table with the following data:

	Student ID	Student Name	Student Image ID
1	U01758278	Hemanth	U01758278.jpg

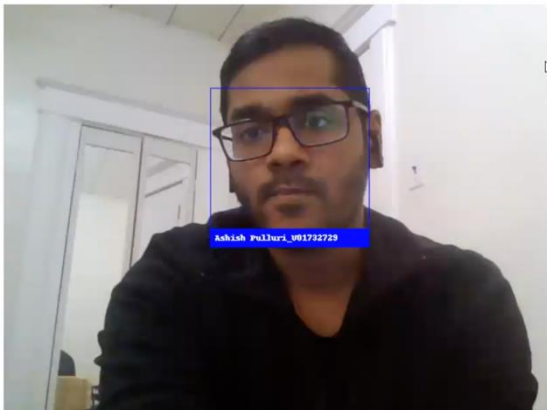
12.Faculty home page



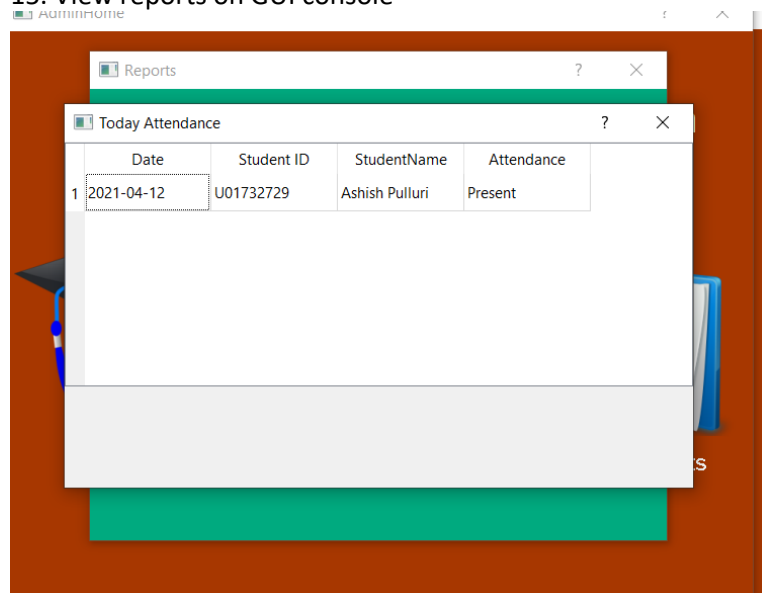
13. Faculty attendance options page



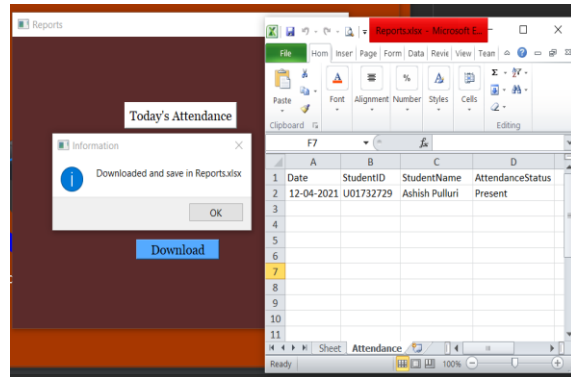
14. Click on capture image / browse image to upload to capture attendance



15. View reports on GUI console



16. Download attendance results to excel



17. Receive emails to registered email with absent student list

