

# DEPLOYMENT TECHNICAL MANUAL

HOME CARE CLIENT  
PROFILING AND PLANNING



04 October 2024

# Contents

Introduction .....	3
System Requirements.....	4
Software, Tools and Repository .....	4
MySQL Community Server .....	4
NetBeans IDE .....	4
Java Development Kit (JDK) .....	4
Github Account .....	4
Step-by-Step Installation and Instructions .....	5
Install MySQL Community Server .....	5
Install NetBeans IDE 17 or Higher .....	5
Install Java Development Kit (JDK 17 or Higher).....	5
Github Repository .....	6
Importing/Cloning the Project from GitHub .....	6
Build and Compile the Project.....	10
Configuring Server on Windows .....	12
Creating an Executable (EXE) File.....	17
Troubleshooting .....	17
Appendix.....	19

# Introduction

This software is designed to facilitate the development and deployment of a comprehensive Home Care Client Profiling and Planning System. The software aims to support case managers, client service officers, and administrators in managing client profiles, care plans, and service requirements efficiently. The system provides functionalities for user management, data handling, and secure access to various features, ensuring a streamlined workflow in home care services.

The purpose of this manual is to provide users with a step-by-step guide on how to set up the necessary environment, tools, and repositories required for the software. It covers installation instructions for key components such as MySQL, NetBeans, and the Java Development Kit (JDK). Additionally, the manual details the process of cloning the project from GitHub, building and compiling the software, and creating an executable (EXE) file for easy distribution and use.

By following the outlined procedures, users will be able to successfully install the required software, set up their development environment, and deploy the application effectively. The troubleshooting section is included to address common errors encountered during setup or deployment, and the appendix provides further explanations of key terms and support contact information.

---

# System Requirements

- Operating System: Windows 10/11 later
  - Processor: Intel Core i5 or equivalent
  - Memory: 8 GB RAM
  - Storage: 500 MB available space
  - Additional Software: Java Runtime Environment (JRE), .NET Framework (for Windows users)
  - Internet Connection: Required for synchronization and updates
- 

## Software, Tools and Repository

### MySQL Community Server

- **Version:** 8.0.38.0
- **Download Link:** [MySQL Community Server Download](#)
- **Installation Required:** Yes

### NetBeans IDE

- **Version:** 17 or higher
- **Download Link:** [NetBeans Download](#)
- **Installation Required:** Yes

### Java Development Kit (JDK)

- **Version:** 17 or higher
- **Download Link:** [JDK Download](#)
- **Installation Required:** Yes

### Github Account

**Site Link:** <https://github.com/>

- **Requirement:** A personal account
  - **Installation Required:** No
-

# Step-by-Step Installation and Instructions

## Install MySQL Community Server

- Visit the MySQL Community Server download page
- Select the installer for Windows Platform
- Download the MySQL Installer.
- Run the installer and select **Developer Default** to install MySQL Server, MySQL Workbench, and connectors.
- Configure MySQL during the setup by following on-screen instructions:
  - Set the root password.
  - Choose default or custom port settings.
  - Complete the installation.

## Install NetBeans IDE 17 or Higher

- Visit the NetBeans download page.
- Select the **NetBeans 17** version or higher based on your operating system.
- Download the installer.
- Run the installer and ensure that **Java SE** support is selected.
- Follow the on-screen instructions to complete the installation.

## Install Java Development Kit (JDK 17 or Higher)

- Visit the JDK Development download page.
- Select the appropriate installer for your operating system.
- Run the installer and follow the instructions.
- After installation, add JAVA\_HOME environment variable:
  - Right-click **This PC > Properties > Advanced system settings > Environment Variables**.

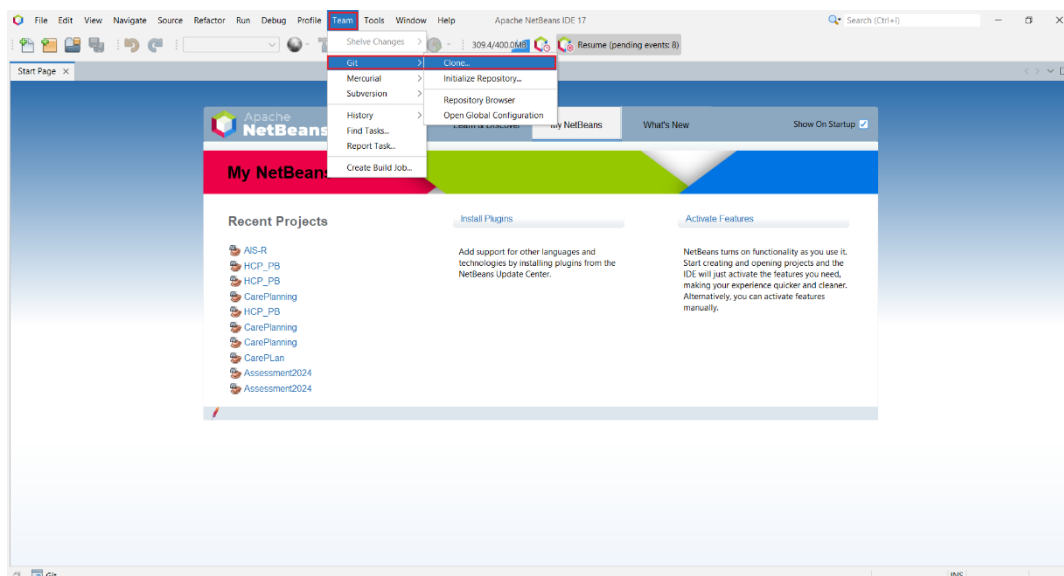
- Under **System Variables**, click **New** and enter JAVA\_HOME for the name and the path to your JDK installation (e.g., C:\Program Files\Java\jdk-17).
- Add %JAVA\_HOME%\bin to the Path system variable.

## Github Repository

1. Visit the Github repository website and browse to signup page
2. You will be required to enter an email, password and a username
3. Follow the on-page instructions to personalise your repository.

## Importing/Cloning the Project from GitHub

1. Open NetBeans to use the built-in Git tool.
2. Go to **Team > Git > Clone** to checkout the project directly from the Github Repository.

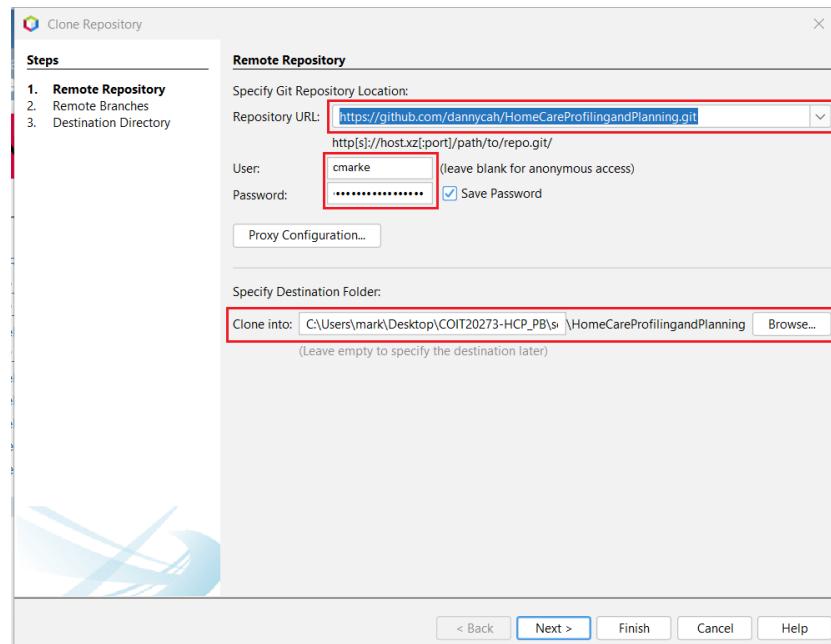


3. In the popup window, supply the provided Repository URL, GitHub Username and Password. You can also specify the destination folder where the project will save, then click on next

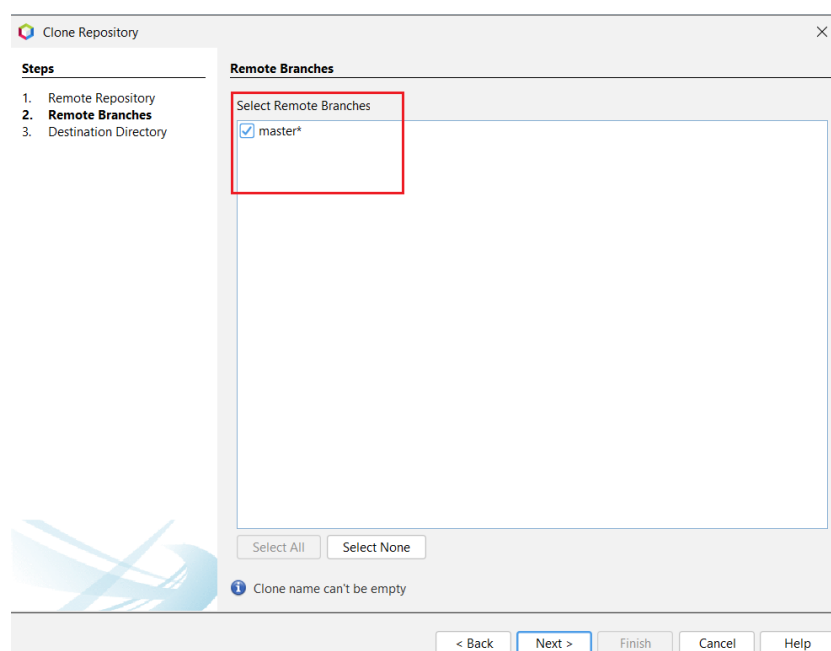
**URL:** <https://github.com/dannycab/HomeCareProfilingandPlanning.git>

**Username:** Your created Github Account <you can also leave blank>

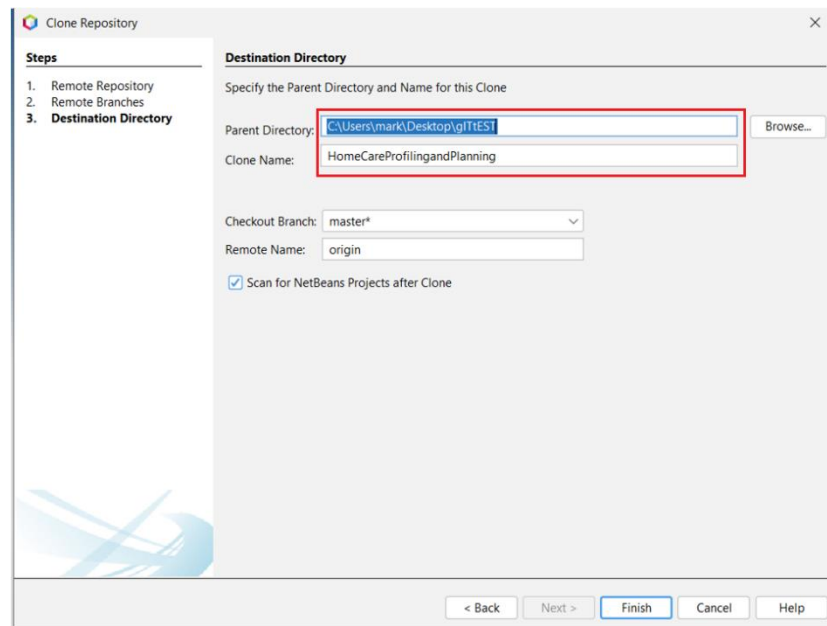
**Password:** ghp\_AoSnmch8n0CtMFIrfr5lbd9er7C37J05GovB



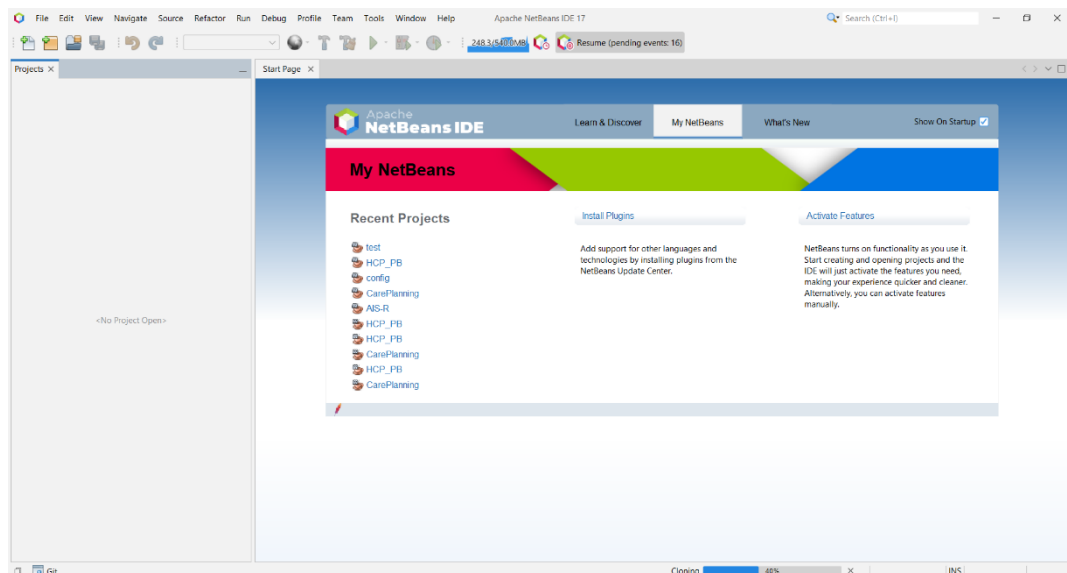
4. In the subsequent window, select the **Master Branch**, then click Next.



5. You have an option to update the **Parent Directory** and **Clone Name**, or keep whatever is generated, then click on Next.

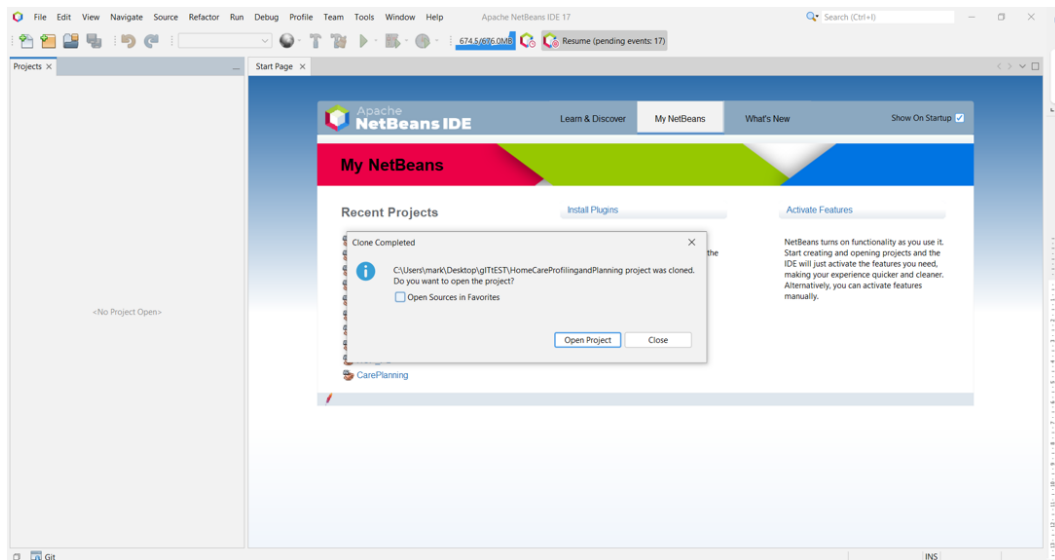


6. The checkout and cloning process will take its course and will take few seconds.

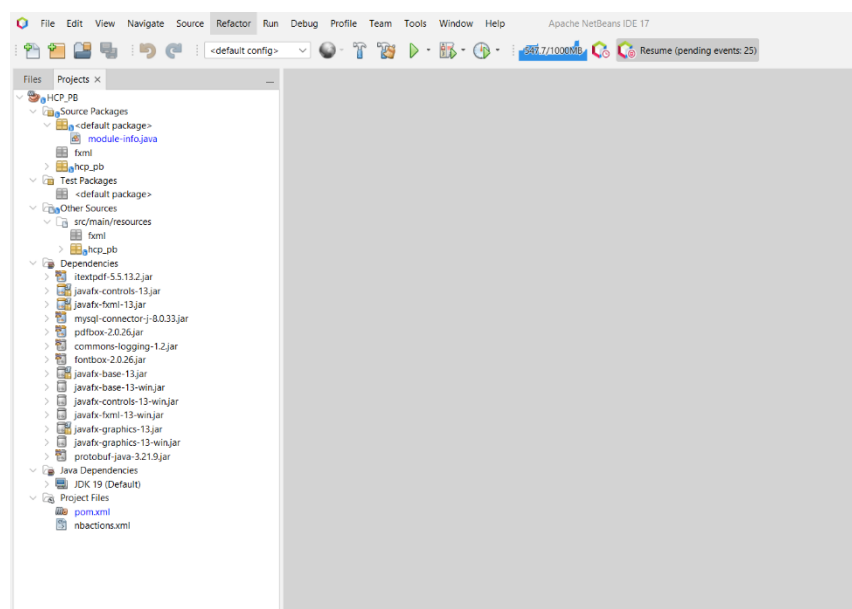




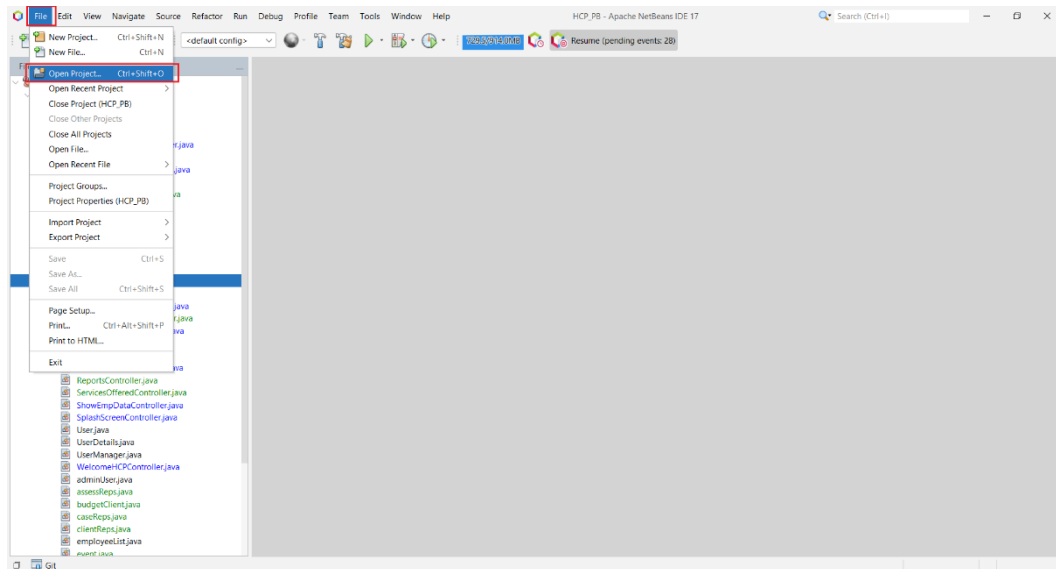
- Once the cloning process have completed you will be opted to open the project directly.



- If you choose to **Open Project**, it will automatically open the cloned project on the side pallet. Alternatively, the project can be open manually from the path that have been linked in the earlier steps.

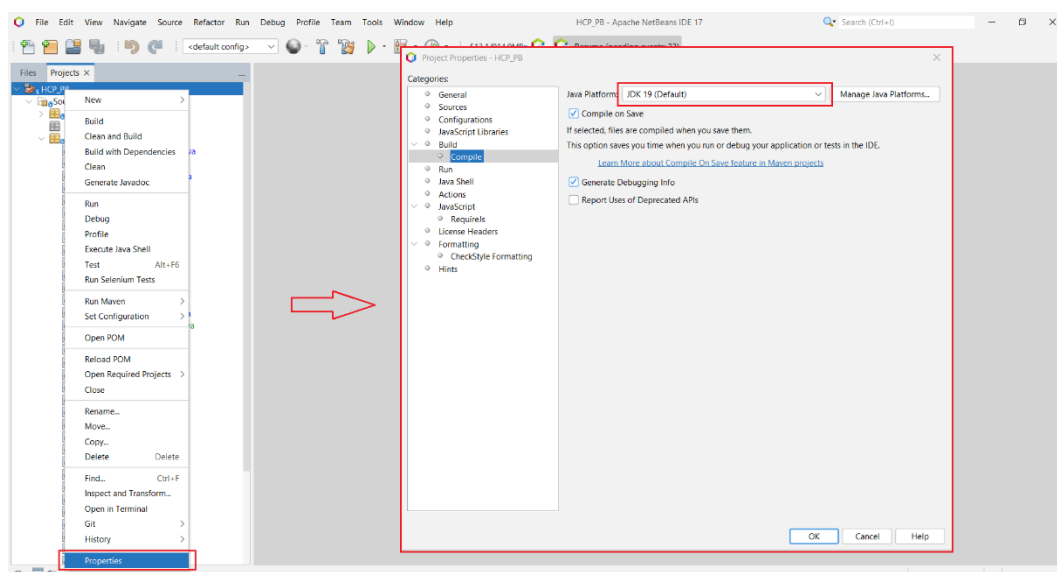


9. To open the project, **Go to File > Open Project**. Browse to the folder where you cloned the GitHub repository. Select the project and click **Open**. NetBeans will load the project into the IDE.



## Build and Compile the Project

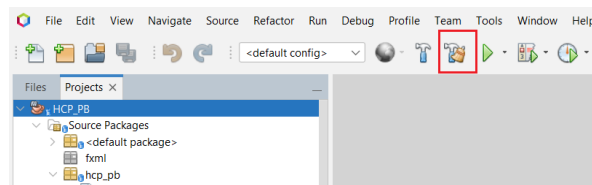
1. Ensure the correct JDK Version. Right-click on the freshly cloned project name in the Projects window and select **Properties**. Go to **Libraries** and make sure the **Java Platform** is set to **JDK 17** or higher.



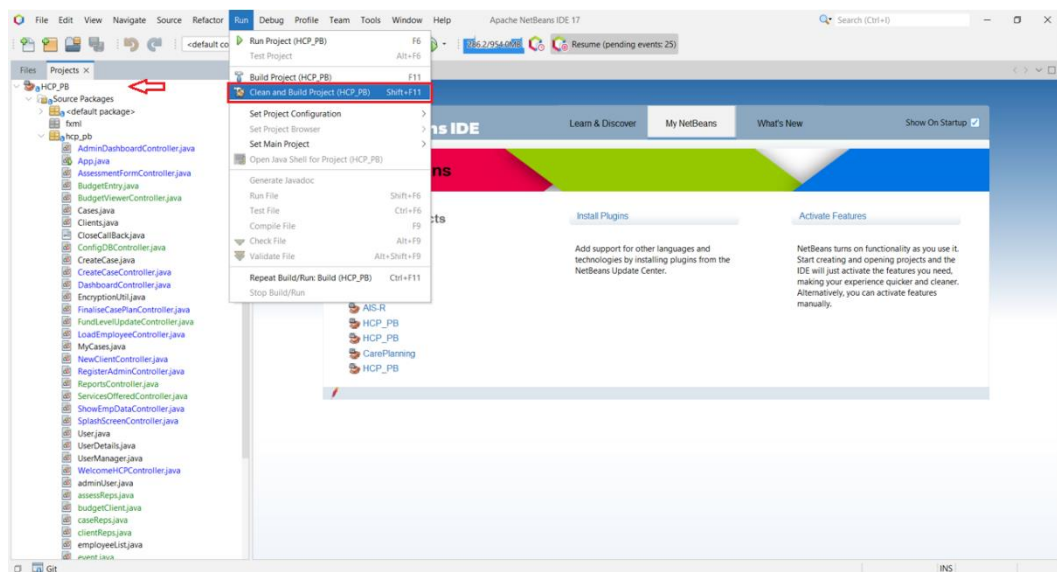
2. To compile the project, you can use the Clean and Build option. This option will delete previous compiled files (if any) and compile your project again from scratch.

Go to the menu and click on **Run > Clean and Build Project** (Alternatively, right-click on the project in the Projects pane and select **Clean and Build**).

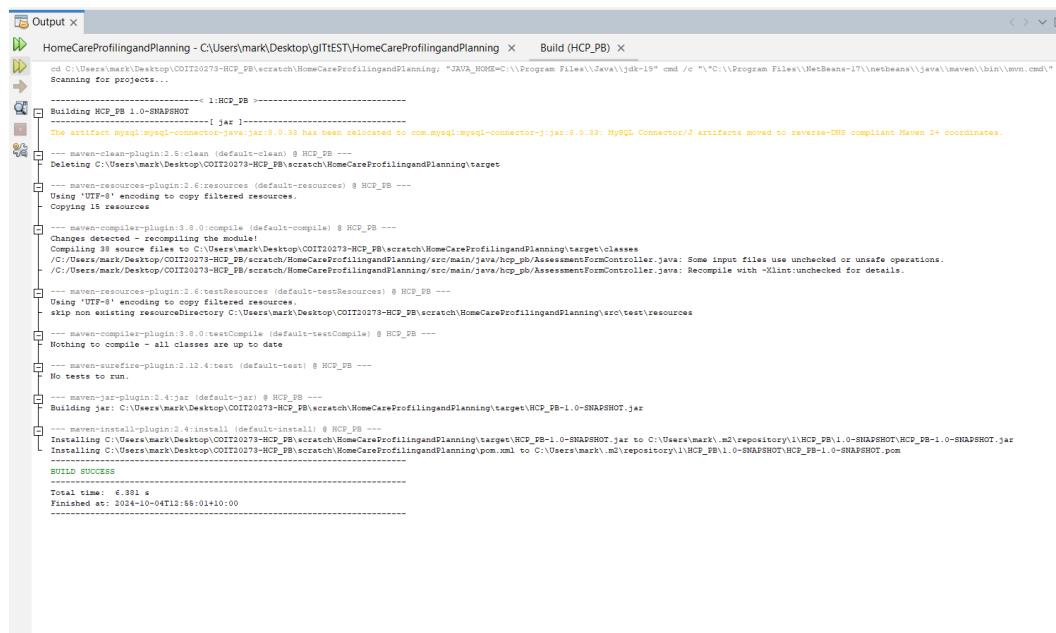
#### Option A



#### Option B



3. NetBeans will automatically compile the project and display any compilation errors in the output window at the bottom. Fix any issues, if necessary, before proceeding. (Default, issues have already been fixed prior this cloning segments)



```
Output x
HomeCareProfilingandPlanning - C:\Users\mark\Desktop\gitTEST\HomeCareProfilingandPlanning x Build (HCP_PB) x
cd C:\Users\mark\Desktop\COIT20273-HCP_PB\scratch\HomeCareProfilingandPlanning: "JAVA_HOME=C:\Program Files\Java\jdk-19" cmd /c "%C:\Program Files\NetBeans-17\netbeans\java\maven\bin\mn.cmd"
Scanning for projects...
-----[ 1:HCP_PB ]-----
Building HCP_PB 1.0-SNAPSHOT
The artifact mysql:mysql-connector-java:jar:8.0.33 has been relocated to com.mysql:mysql-connector-j:jar:8.0.33: MySQL Connector/J artifacts moved to reverse-DNS compliant Haven 2+ coordinates.
--- maven-clean-plugin:2.5:clean (default-clean) @ HCP_PB ---
Deleting C:\Users\mark\Desktop\COIT20273-HCP_PB\scratch\HomeCareProfilingandPlanning\target
--- maven-resources-plugin:3.4:resources (default-resources) @ HCP_PB ---
Using 'UTF-8' encoding to copy filtered resources.
Copying 15 resources
--- maven-compiler-plugin:3.8.0:compile (default-compile) @ HCP_PB ---
Changes detected - recompiling the module!
Compiling 38 source files to C:\Users\mark\Desktop\COIT20273-HCP_PB\scratch\HomeCareProfilingandPlanning\target\classes
C:\Users\mark\Desktop\COIT20273-HCP_PB\scratch\HomeCareProfilingandPlanning\src\main\java\hop\AssessmentFormController.java: Some input files use unchecked or unsafe operations.
C:\Users\mark\Desktop\COIT20273-HCP_PB\scratch\HomeCareProfilingandPlanning\src\main\java\hop\AssessmentFormController.java: Recompile with -Xlint:unchecked for details.
--- maven-resources-plugin:3.4:testResources (default-testResources) @ HCP_PB ---
Using 'UTF-8' encoding to copy filtered resources.
skip non existing resourceDirectory C:\Users\mark\Desktop\COIT20273-HCP_PB\scratch\HomeCareProfilingandPlanning\src\test\resources
--- maven-compiler-plugin:3.8.0:testCompile (default-testCompile) @ HCP_PB ---
Nothing to compile - all classes are up to date
--- maven-surefire-plugin:3.12.4:test (default-test) @ HCP_PB ---
No tests to run.
--- maven-jar-plugin:3.4:jar (default-jar) @ HCP_PB ---
Building jar: C:\Users\mark\Desktop\COIT20273-HCP_PB\scratch\HomeCareProfilingandPlanning\target\HCP_PB-1.0-SNAPSHOT.jar
--- maven-install-plugin:2.4:install (default-install) @ HCP_PB ---
Installing C:\Users\mark\Desktop\COIT20273-HCP_PB\scratch\HomeCareProfilingandPlanning\target\HCP_PB-1.0-SNAPSHOT.jar to C:\Users\mark.m2\repository\1\HCP_PB\1.0-SNAPSHOT\HCP_PB-1.0-SNAPSHOT.jar
Installing C:\Users\mark\Desktop\COIT20273-HCP_PB\scratch\HomeCareProfilingandPlanning\pom.xml to C:\Users\mark.m2\repository\1\HCP_PB\1.0-SNAPSHOT\HCP_PB-1.0-SNAPSHOT.pom
BUILD SUCCESS
-----
Total time: 6.391 s
Finished at: 2024-10-04T12:56:04+10:00
-----
```

# Configuring Server on Windows

This configuration is for the deployment of the system in an internal network where the server is different from the machine where the software will be used.

## 1. Verify MySQL Server Configuration

### Open MySQL Configuration File:

On the MySQL server, locate and open the configuration file (my.cnf or my.ini), which is typically found in the MySQL installation directory.

**Path:** *C:\ProgramData\MySQL\MySQL Server 8.0*

(C:) > ProgramData > MySQL > MySQL Server 8.0				
Name	Date modified	Type	Size	
Data	3/10/2024 6:50 PM	File folder		
Uploads	23/09/2023 8:27 PM	File folder		
installer_config	18/09/2024 7:34 AM	Microsoft Edge HT...	1 KB	
my	18/09/2024 7:34 AM	Configuration setti...	16 KB	

### Set bind-address:

Ensure that the following line exists in the configuration file to allow connections from remote hosts, If this line is missing, add it.

```

my - Notepad
File Edit Format View Help
# enable-named-pipe
# shared-memory

# shared-memory-base-name=MYSQL

# The Pipe the MySQL Server will use.
# socket=MYSQL

# The access control granted to clients on the named pipe created by the MySQL Server.
# named-pipe-full-access-group=

# The TCP/IP Port the MySQL Server will listen on
port=3306

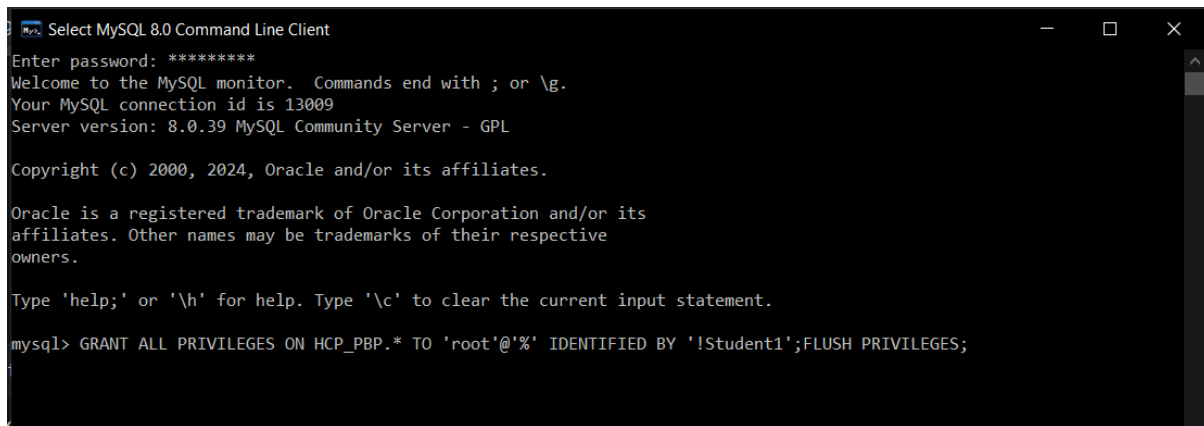
bind-address = 0.0.0.0

# Path to installation directory. All paths are usually resolved relative to this.
# basedir="C:/Program Files/MySQL/MySQL Server 8.0/"

```

## 2. Grant Privileges to Remote Connections

Open your MySQL terminal and execute these commands to allow access to the HCP\_PBP database from any host using the root user:



```
Select MySQL 8.0 Command Line Client
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 13009
Server version: 8.0.39 MySQL Community Server - GPL

Copyright (c) 2000, 2024, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> GRANT ALL PRIVILEGES ON HCP_PBP.* TO 'root'@'%' IDENTIFIED BY '!Student1';FLUSH PRIVILEGES;
```

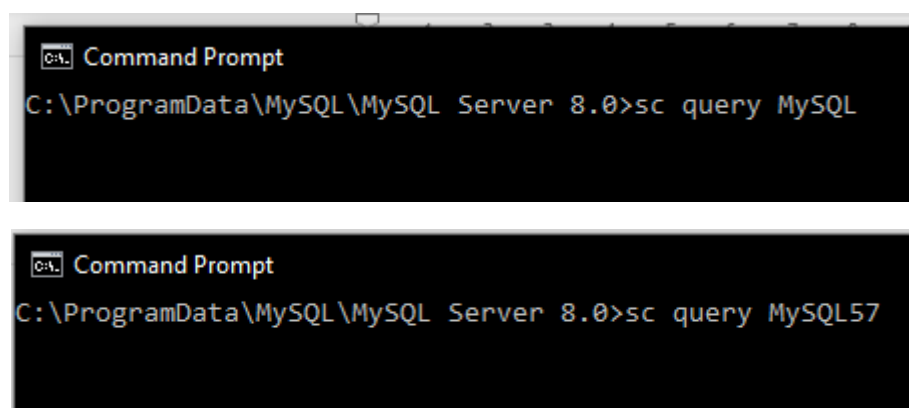
### 3. Check MySQL Service Status in Windows Services

- **Open Windows Services:**  
Press Win + R, type services.msc, and press Enter.
- **Locate MySQL Service:**  
Look for a service named MySQL, MySQL56, MySQL57, or similar, depending on your installed version.
- **Check the Status:**  
Ensure the service is running. If it's not, right-click on it and select **Start**.

### Check MySQL Status from Command Line

Run Command Prompt as an administrator. Navigate to the MySQL installation directory, usually located in: **\Program Files\MySQL\MySQL Server 8.0\bin\**

Run the following command based on your installed version:



```
Command Prompt
C:\ProgramData\MySQL\MySQL Server 8.0>sc query MySQL

Command Prompt
C:\ProgramData\MySQL\MySQL Server 8.0>sc query MySQL57
```

**Note:** Replace MySQL57 with your installed MySQL version.

Alternatively, you can also use Task Manager to check if the `mysqld.exe` process is running. Press **Ctrl + Shift + Esc** to open **Task Manager** and go to the **Processes** tab. Look for `mysqld.exe`. If it's running, MySQL is active, even if the service isn't registered properly.

## 6. Reinstall MySQL as a Windows Service

If MySQL is running as `mysqld.exe` but not registered as a service:

### 1. Stop the MySQL Server

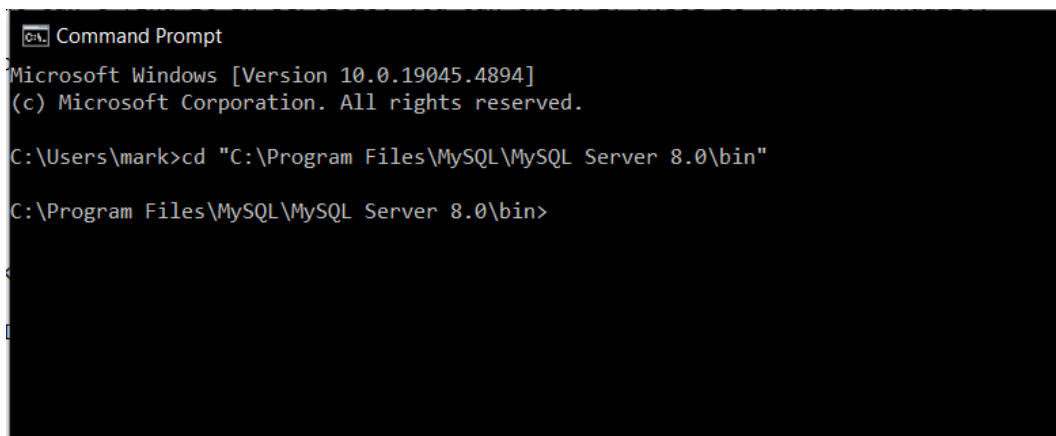
#### Open Task Manager

Press **Ctrl + Shift + Esc** and go to the **Processes** tab. Right-click **mysqld.exe** (or whatever program represents your MySQL installation) and choose **End Task** to stop the **MySQL server**.

### 2. Navigate to the MySQL bin Directory

#### Open Command Prompt

Change directory to the MySQL installation folder's bin directory:



```
Command Prompt
Microsoft Windows [Version 10.0.19045.4894]
(c) Microsoft Corporation. All rights reserved.

C:\Users\mark>cd "C:\Program Files\MySQL\MySQL Server 8.0\bin"

C:\Program Files\MySQL\MySQL Server 8.0\bin>
```

**Note:** Replace 8.0 with your MySQL version

- **Register the MySQL Service**

Run the following command to install MySQL as a Windows service. Adjust the service name (MySQL or MySQL57) as necessary:

```
Command Prompt
Microsoft Windows [Version 10.0.19045.4894]
(c) Microsoft Corporation. All rights reserved.

C:\Users\mark>cd "C:\Program Files\MySQL\MySQL Server 8.0\bin"

C:\Program Files\MySQL\MySQL Server 8.0\bin>mysqld --install MySQL
```

***Followed by:*** `mysqld --install MySQL57`

**Note:** Replace MySQL57 with your installed MySQL version

- **Start the MySQL Service**

Use the following command to start the MySQL service:

```
Command Prompt
Microsoft Windows [Version 10.0.19045.4894]
(c) Microsoft Corporation. All rights reserved.

C:\Users\mark>cd "C:\Program Files\MySQL\MySQL Server 8.0\bin"

C:\Program Files\MySQL\MySQL Server 8.0\bin>net start MySQL
```

***Followed by:*** `net start MySQL57`

**Note:** Replace MySQL57 with your installed MySQL version

## 7. Verify if the Service is Running

After starting the service, confirm that it is running using either the Services application (services.msc) or by re-running the command:

```
sc query MySQL
sc query MySQL57
```



# Creating an Executable (EXE) File

<Pending>

---

## Troubleshooting

### Common Errors and Solutions

#### 1. **MySQL Connection Error:**

Ensure the MySQL service is running.

Properly provided your MySQL credentials and JDBC URL in the configuration window upon initialization.

#### 2. **NetBeans Won't Build the Project:**

Ensure the correct version of JDK is installed and selected in the project's properties.

Verify that all dependencies and libraries are correctly added to the project.

### 3. **Git Clone Fails:**

- Make sure you have the correct URL and Passkey for the GitHub repository.
- Check your network connection and try again.

---

## 10. **Support and Contact Information**

For support or further information:

- **Support Email:** [c.markello@yahoo.com](mailto:c.markello@yahoo.com) | espinoza.joylyn@gmail.com | dannycan15@gmail.com | billy.bausin@gmail.com
- **Support Number:** 0456476471 | 0434865494 | 0480415045 | 0472788110

---

# Appendix

## Glossary

- **JAR:** Java Archive, a package file format used to bundle Java class files and resources.
- **EXE:** Executable file format used in Windows.
- **IDE:** Integrated Development Environment, a software application used for software development.

## Changelog

- **Version 1.0:** Initial release of the software manual.

## Developers (in alphabetical order)

- **Balibalos Danica**

Systems Analyst / Chief Operations Officer

Master of Information Technology

Baguio City, Philippines

- **Bausin, Billy Mhar**

Service Desk Analyst / Technical Support

Master of Information Technology

Taytay City, Rizal Philippines

- **Ello, Chrisle Mark**

Integration, Software and Data Engineer/ Business Intelligence Analyst

Master of Information Technology

Pangasinan, Philippines

- **Espinoza, Joylyn**

Technical Support Analyst / Workforce Analyst

Master of Information Technology

Pangasinan, Philippines