

# IT2155 – Full Stack Development Project

## Project Setup Guide

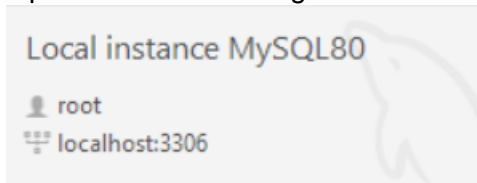
### Prerequisites:

1. [NodeJS](#)
2. [Visual Studio Code](#)
3. [nodemon](#)
4. [MySQL Community Server](#)

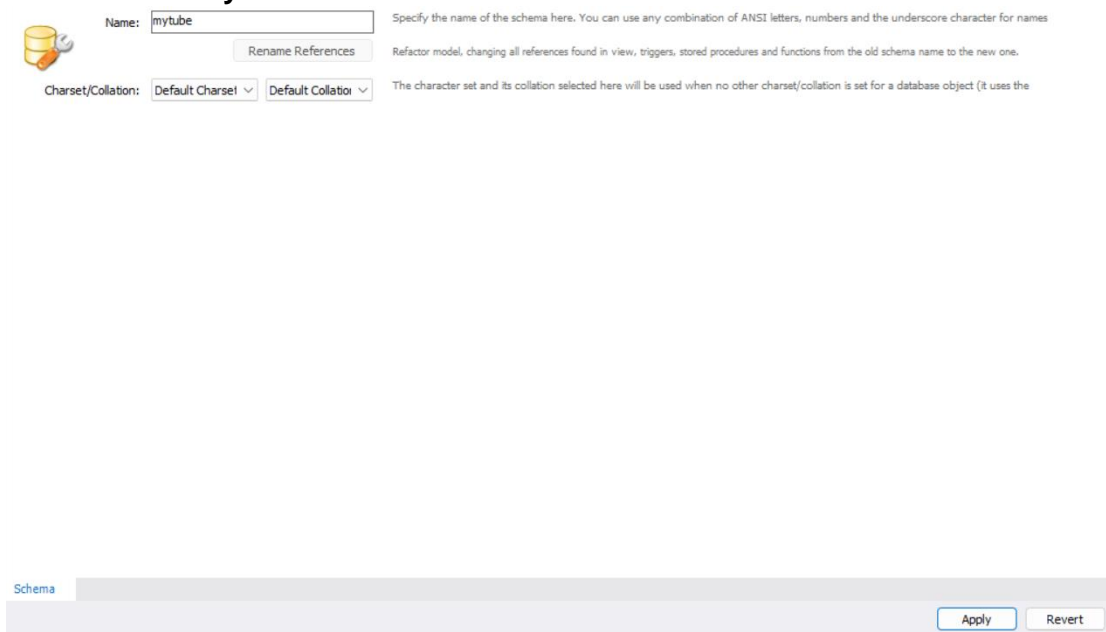
*\*Please go through the following steps in order.*

### Step 1 – Set Up MySQL Database:

1. Open MySQL Workbench.
2. Open connection using **root** account:



3. Create a new schema with the following attribute:
  - a. Name: **mytube**

A screenshot of the 'Create Schema' dialog in MySQL Workbench. The 'Name' field contains 'mytube'. To the right, there is explanatory text: 'Specify the name of the schema here. You can use any combination of ANSI letters, numbers and the underscore character for names'. Below the name field is a 'Rename References' button and another line of text: 'Refactor model, changing all references found in view, triggers, stored procedures and functions from the old schema name to the new one.' Below that, the 'Charset/Collation' section shows 'Default Charset' and 'Default Collation' selected from dropdown menus, with a note: 'The character set and its collation selected here will be used when no other charset/collation is set for a database object (it uses the...'. At the bottom, there is a 'Schema' tab and 'Apply' and 'Revert' buttons.

4. Create a new user with the following attributes:

a. Under *Login*:

i. Login Name: **MyTube**

ii. Password: **F\$DPMYTube**

Login Account Limits Administrative Roles Schema Privileges

Login Name: MyTube You may create multiple accounts with the same name to connect from different hosts.

Authentication Type: Standard For the standard password and/or host based authentication, select 'Standard'.

Limit to Hosts Matching: % % and \_ wildcards may be used

Password: \*\*\*\*\* Type a password to reset it.

Medium strength password.

Confirm Password: \*\*\*\*\* Enter password again to confirm.

Expire Password

Revert Apply

b. Under *Administrative Roles*, check the following role and privileges:

i. **DBManager** (role)

ii. **REFERENCES** (global privileges)

Login Account Limits Administrative Roles Schema Privileges

Role	Description
<input type="checkbox"/> DBA	grants the rights to perform all tasks
<input type="checkbox"/> MaintenanceAdmin	grants rights needed to maintain server
<input type="checkbox"/> ProcessAdmin	rights needed to assess, monitor, and kill any user process
<input type="checkbox"/> UserAdmin	grants rights to create users logins and reset passwords
<input type="checkbox"/> SecurityAdmin	rights to manage logins and grant and revoke server access
<input type="checkbox"/> MonitorAdmin	minimum set of rights needed to monitor server
<input checked="" type="checkbox"/> DBManager	grants full rights on all databases
<input checked="" type="checkbox"/> DBDesigner	rights to create and reverse engineer any database schema
<input type="checkbox"/> ReplicationAdmin	rights needed to setup and manage replication
<input checked="" type="checkbox"/> BackupAdmin	minimal rights needed to backup any database
<input checked="" type="checkbox"/> Custom	custom role

Global Privileges

- ☒ DELETE
- ☒ DROP
- ☒ EVENT
- ☐ EXECUTE
- ☐ FILE
- ☒ GRANT OPTION
- ☒ INDEX
- ☒ INSERT
- ☒ LOCK TABLES
- ☐ PROCESS
- ☒ REFERENCES
- ☐ RELOAD
- ☐ REPLICATION CLIENT
- ☐ REPLICATION SLAVE
- ☒ SELECT
- ☒ SHOW DATABASES
- ☒ SHOW VIEW
- ☐ SHUTDOWN
- ☐ SUPER
- ☒ TRIGGER
- ☒ UPDATE

Revoke All Privileges

Revert Apply

c. Click 'Apply'.

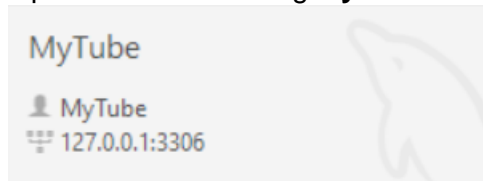
5. Add a new connection with the following attributes:
  - a. Connection Name: **MyTube**
  - b. Username: **MyTube**
  - c. Default Schema: **mytube**

The screenshot shows the 'Setup New Connection' dialog box. It has tabs for 'Parameters', 'SSL', and 'Advanced'. The 'Parameters' tab is active. The fields are as follows:

Field	Value	Description
Connection Name	MyTube	Type a name for the connection
Connection Method	Standard (TCP/IP)	Method to use to connect to the RDBMS
Hostname	127.0.0.1	Name or IP address of the server host - and TCP/IP port.
Port	3306	
Username	MyTube	Name of the user to connect with.
Password	[Store in Vault ...] [Clear]	The user's password. Will be requested later if it's not set.
Default Schema	mytube	The schema to use as default schema. Leave blank to select it later.

Buttons at the bottom: 'Configure Server Management...', 'Test Connection' (highlighted), 'Cancel', and 'OK'.

6. Click 'Test Connection'.
7. Click 'OK'.
8. Open connection using **MyTube** account:



## Step 2 – Install Required NodeJS Libraries:

1. Run the following command to install the required NodeJS libraries:
  - a. `npm install`

## Step 3 – Run the Application

1. Use any of the following commands to run the application:
  - a. `node app.js`
  - b. `npm start`
  - c. `nodemon`

*If you encounter any error running using nodemon, delete the file 'nodemon.ps1' in File Explorer under the file path specified in the error message, then try again.*