Creating MySQL users

While the MySQL root user is allowed complete control over the databases on the MySQL Server it is obviously inadvisable to allow other users such freedom for best security of the databases. The root user can therefore create users with specific “privileges” controlling what actions they may perform on the MySQL Server. For example, you may typically wish to allow database users the ability to retrieve, add, and amend data but deny them the ability to modify the database’s structure or remove it from the server.

The root user can create a user in the MySQL Command Line Client by issuing a “grant” statement that identifies the user and specifies the privileges they are allowed for particular databases. The grant statement has this syntax:

```
GRANT privileges ON database-name.*
TO 'user-name'@'host-name' IDENTIFIED BY 'password' ;
```

The privileges are specified as a comma-separated list of keywords that that user may use when accessing the specified database. For instance, basic privileges to SELECT, INSERT, and UPDATE.

1. Log into the MySQL Command Line Client as the root user then precisely issue this command to create a user with basic privileges to access the whole “site_db” database
   ```
   GRANT SELECT, INSERT, UPDATE ON site_db.*
   TO 'mike'@'localhost' IDENTIFIED BY 'easysteps' ;
   ```

2. Now issue a command to confirm the new user has been added and to reveal that user’s access privileges
   ```
   SHOW GRANTS FOR 'mike'@'localhost' ;
   ```

MySQL is case-sensitive and requires precise syntax – you must be sure to use correct spacing and letter case as it appears listed. For example do not leave spaces around the @ character that defines the user name and host.

Note that the password gets stored in encrypted format for security.