Setting the Project Structure and Sync with GitHub

simplilearn

You Already Know

Before we begin, let's see what we have covered till now:

- Agile
- Git
- SQL
- HTML or CSS
- JavaScript
- Angular

Recap

Agile

An iterative approach to manage the development of a software project

Git and GitHub

A distributed version control system that helps handle software projects

SQL or MySQL

Relational Database Management System to store data in a structured way using tables

Recap

HTML or CSS

Design interactive web pages

JavaScript

Programming language for the web pages

Angular

A platform and framework by Google to create single page web applications using HTML and TypeScript

A Day in the Life of an Automation Test Engineer

As an Automation Test Engineer, our key role is to test both client and server software with the latest test automation tools.

We shall be testing food delivery application built in Angular, Node as the front end with Spring Boot, Java, and MySQL/MongoDB as the backend.

We will clone the developed Angular and Java projects and sync them to our Git repo. Further, we will create the database in MySQL and necessary tables required for the project to run.

Learning Objectives

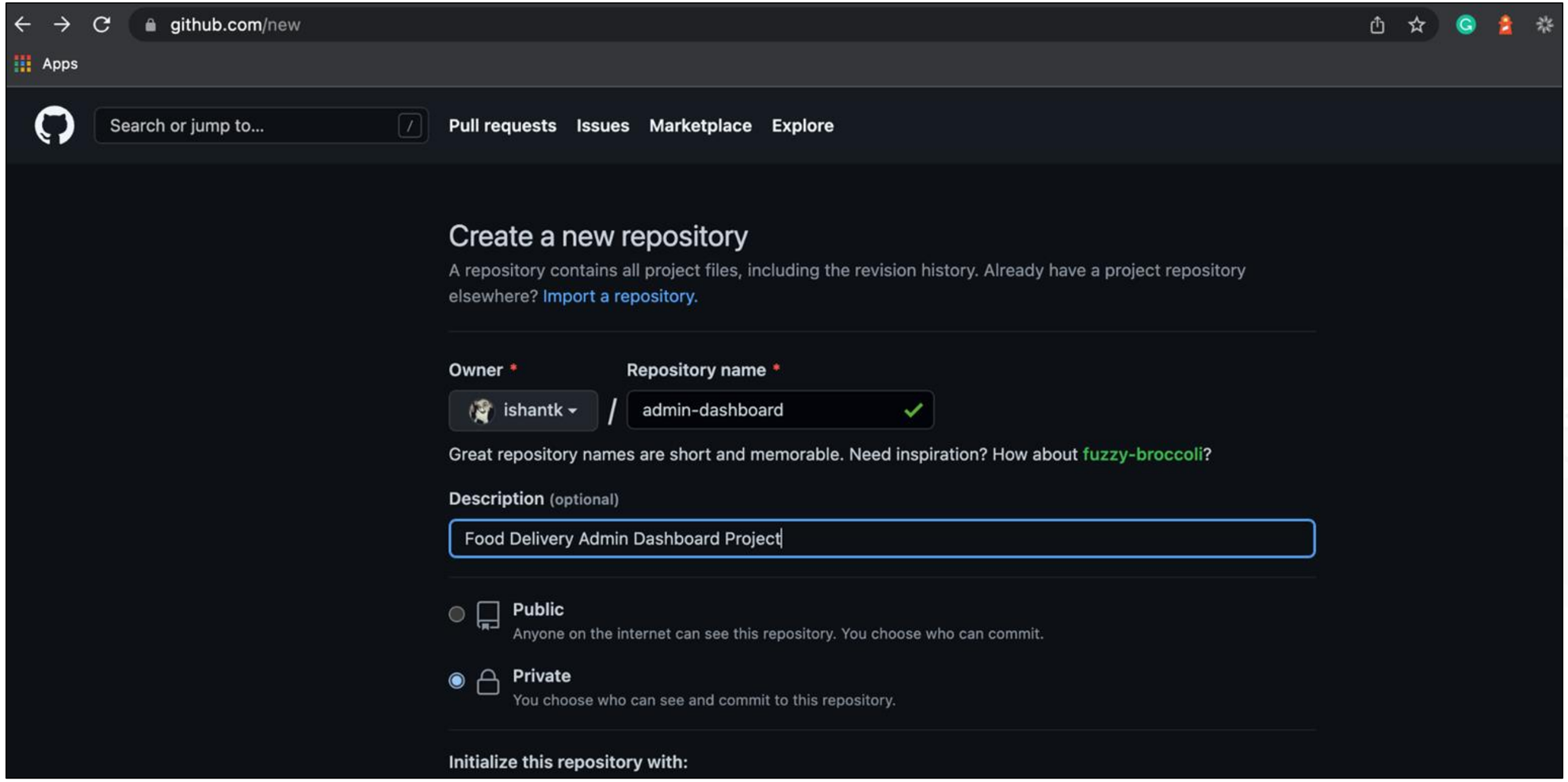
By the end of this lesson, you will be able to:

- Clone the code of Angular and Java Projects using Git on GitHub
- Push the code of Angular and Java Projects using Git on GitHub
- Create a database in MySQL
- Create tables required for the project in MySQL

Task 1: Sync Angular Admin DashBoard

Create a New Repository on Github

Log in to your GitHub account and create a new repository for Admin Dashboard Project:



Git Clone Command

Simply navigate to any of your working directory on your terminal or shell window

Type the following command to clone the project from the repository:

- **git clone https://github.com/username/foodinc-admin-dashboard.git**

Change directory to foodinc-admin-dashboard using the command:

- **cd foodinc-admin-dashboard**

Check the files in the project on the master branch:

- **ls**

You will see the given file structure:

README.md **package-lock.json** **tsconfig.app.json**
angular.json **package.json** **tsconfig.json**
karma.conf.js **src** **tsconfig.spec.json**

Git Remote Command

Rename the local repository current origin to upstream:

git remote rename origin upstream

Add the remote origin:

git remote add origin https://github.com/username/admin-dashboard.git

Git Push Command

Finally, push the code to the Github account. Type the following command:

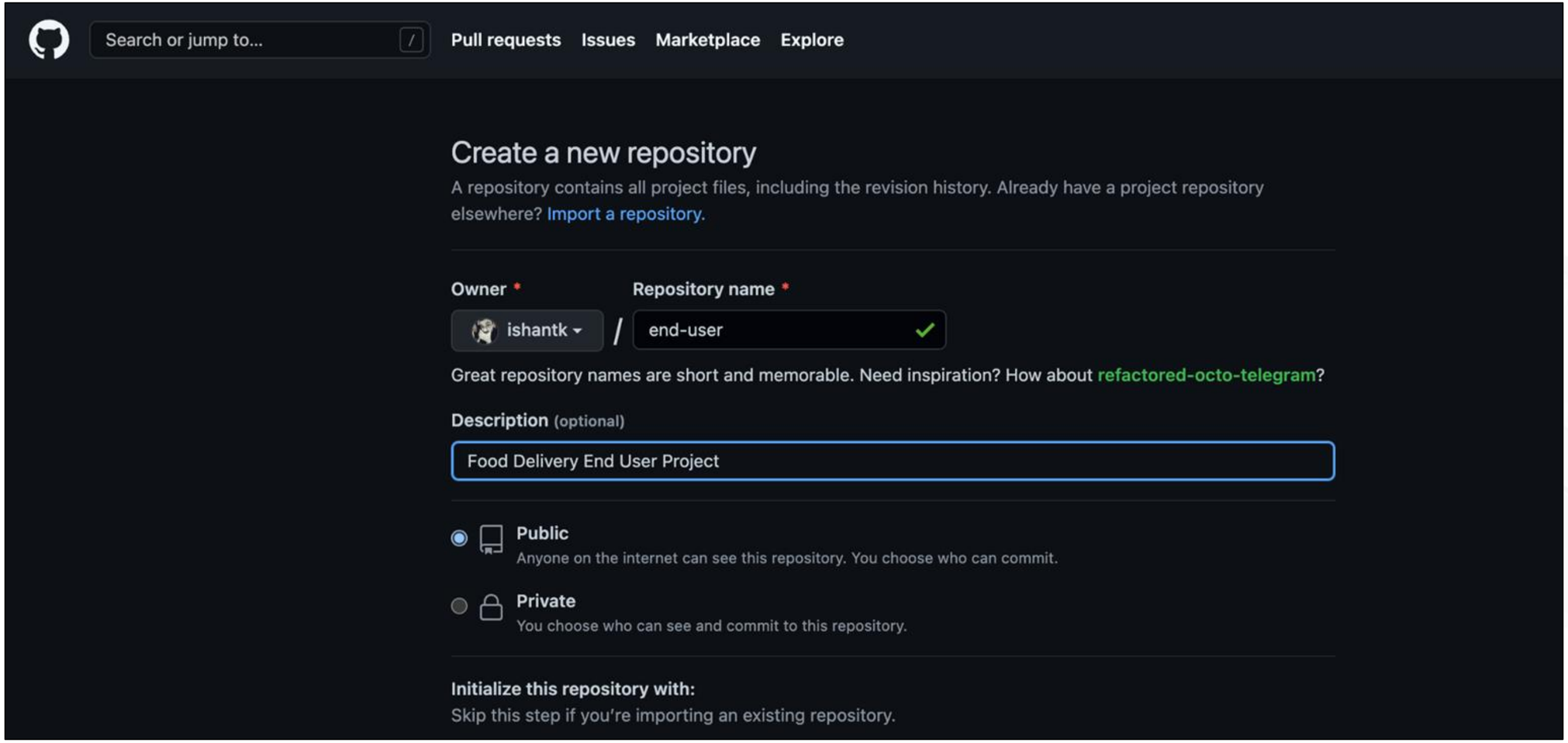
git push origin master

This command will update remote references using local ones while sending objects that are necessary to complete the given references.

Task 2: Sync Angular End User Web App

Create New Repo on GitHub

Log in to your GitHub account and create a new Repository for end user web app project:



Git Clone Command

Simply navigate to any of your working directory on your terminal or shell window

Type the command to clone the project from the repository:
git clone https://github.com/username/foodinc-end-user.git

Change the directory to foodinc-end-user:
cd foodinc-end-user

Check the files in the project on the master branch:
ls

You will see the following file structure:

README.md	**package-lock.json**	**tsconfig.app.json**
angular.json	**package.json**	**tsconfig.json**
karma.conf.js	**src**	**tsconfig.spec.json**

Git Remote Command

Rename the local repository current origin to upstream:

git remote rename origin upstream

Add the remote origin:

git remote add origin https://github.com/username/end-user.git

Git Push Command

Finally push the code to github account. Type the following command:

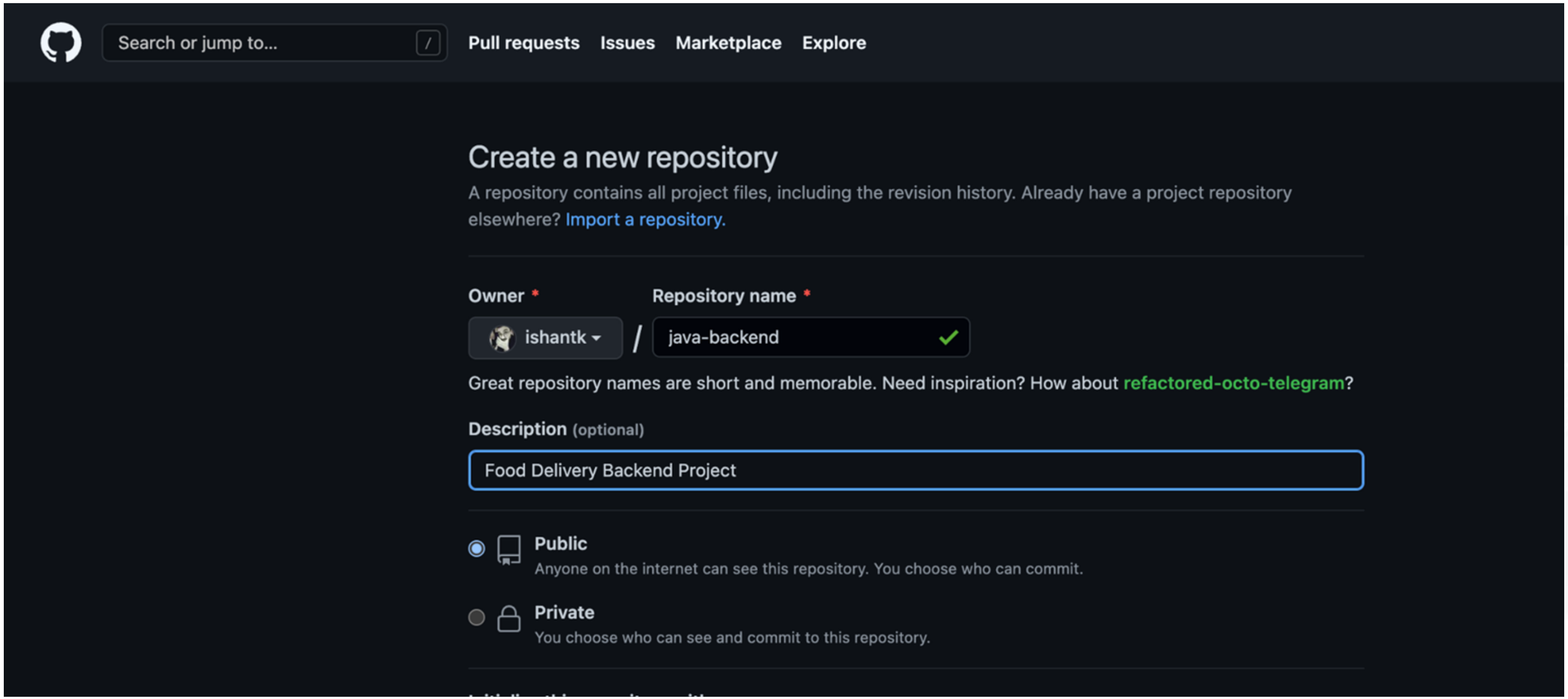
git push origin master

This command will update remote references using local ones while sending objects necessary to complete the given references.

Task 3: Sync Java Backend

Create a New Repository on GitHub

Log in to your GitHub account and create a new Repository for end user web app project:



Git Clone Command

Simply navigate to any of your working directory on you terminal or shell window

Type the following command to clone the project from the repository:
git clone https://github.com/username/foodinc-java-backend.git

Change the directory to foodinc-java-backend:
cd foodinc-java-backend

Check the files in the project on the master branch:
ls

You will see the following file structure:

mvnw	**pom.xml**
mvnw.cmd	**src**

Git Remote Command

Rename the local repository current origin to upstream:

git remote rename origin upstream

Add the remote origin:

git remote add origin https://github.com/username/java-backend.git

Git Push Command

Finally, push the code to GitHub account. Type the given command:

git push origin master

This command will update remote references using local ones while sending objects necessary to complete the given references.

Task 4: Set up the Database Structure

Creating DataBase in MySQL

In MySQL CLI, use the given command to create and work with database:

create database foodie;

- This command creates the database foodie

use foodie;

- This command changes the current selection of the database to foodie.

show tables;

- This command will list all the tables in the database. As of now, no Table is available so it will return an empty set.

Creating Tables

Create Admins Table

You must make sure the database is selected as foodie, or you can execute the command to make the DB selection for foodie as:

use foodie ;

```
CREATE TABLE `admins` (
 `admin_id` int NOT NULL,
 `added_on` datetime(6) DEFAULT NULL,
 `email` varchar(255) DEFAULT NULL,
 `full_name` varchar(255) DEFAULT NULL,
 `login_type` int DEFAULT NULL,
 `password` varchar(255) DEFAULT NULL,
 PRIMARY KEY (`admin_id`)
) ;
```

Create Users Table

use foodie ;

```
CREATE TABLE `users` (
 `user_id` int NOT NULL,
 `added_on` datetime(6) DEFAULT NULL,
 `contact` bigint DEFAULT NULL,
 `email` varchar(255) DEFAULT NULL,
 `full_name` varchar(255) DEFAULT NULL,
 `image` varchar(255) DEFAULT NULL,
 `password` varchar(255) DEFAULT NULL,
 PRIMARY KEY (`user_id`)
);
```

Create User Address Table

use foodie ;

```
CREATE TABLE `user_address` (
 `address_id` int NOT NULL,
 `address_tag` int DEFAULT NULL,
 `city` varchar(255) DEFAULT NULL,
 `country` varchar(255) DEFAULT NULL,
 `pincode` int DEFAULT NULL,
 `state` varchar(255) DEFAULT NULL,
 `street` varchar(255) DEFAULT NULL,
 `user_id` int DEFAULT NULL,
 PRIMARY KEY (`address_id`)
);
```

Create Restaurants Table

use foodie ;

```
CREATE TABLE `restaurants` (
`restaurant_id` int NOT NULL,
 `added_on` datetime(6) DEFAULT NULL,
 `address` varchar(255) DEFAULT NULL,
 `contact` bigint DEFAULT NULL,
 `description` varchar(255) DEFAULT NULL,
 `email` varchar(255) DEFAULT NULL,
 `name` varchar(255) DEFAULT NULL,
 `rating` int DEFAULT NULL,
 `thumbnail_image` int DEFAULT NULL,
 `status` int DEFAULT NULL,
 PRIMARY KEY (`restaurant_id`));
```

Generate Dish Table

use foodie ;

```
CREATE TABLE `dishes` (
 `dish_id` int NOT NULL,
 `added_on` datetime(6) DEFAULT NULL,
 `description` varchar(255) DEFAULT NULL,
 `name` varchar(255) DEFAULT NULL,
 `price` int DEFAULT NULL,
 `rating` int DEFAULT NULL,
 `restaurant_address` varchar(255) DEFAULT NULL,
 `restaurant_id` int DEFAULT NULL,
 `restaurant_name` varchar(255) DEFAULT NULL,
 `thumbnail_image` int DEFAULT NULL,
 `status` int DEFAULT NULL,
 PRIMARY KEY (`dish_id`));
```

Generate Orders Table

```
CREATE TABLE `orders` (
 `order_id` int NOT NULL,
 `address` varchar(255) DEFAULT NULL,
 `contact` bigint DEFAULT NULL,
 `email` varchar(255) DEFAULT NULL,
 `items_sub_total` double DEFAULT NULL,
 `name` varchar(255) DEFAULT NULL,
 `order_date` datetime(6) DEFAULT NULL,
 `order_status` int DEFAULT NULL,
 `payment_method` int DEFAULT NULL,
 `payment_method_title` varchar(255) DEFAULT NULL,
 `payment_status` int DEFAULT NULL,
 `payment_status_title` varchar(255) DEFAULT NULL,
 `shipment_charges` double DEFAULT NULL,
 `total_amount` double DEFAULT NULL,
 `total_items` int DEFAULT NULL,
 `user_id` int DEFAULT NULL,
 PRIMARY KEY (`order_id`)
);
```

Generate Order Items Table

```
CREATE TABLE `order_items` (
 `order_item_id` int NOT NULL,
 `order_id` int DEFAULT NULL,
 `price` int DEFAULT NULL,
 `product_category` varchar(255) DEFAULT NULL,
 `product_code` varchar(255) DEFAULT NULL,
 `product_description` varchar(255) DEFAULT NULL,
 `product_id` int DEFAULT NULL,
 `product_img` varchar(255) DEFAULT NULL,
 `product_title` varchar(255) DEFAULT NULL,
 `quantity` int DEFAULT NULL,
 `total_price` int DEFAULT NULL,
 PRIMARY KEY (`order_item_id`)
);
```

Generate Cart Table

use foodie ;

```
CREATE TABLE `cart` (
 `cart_id` int NOT NULL,
 `dish_id` int DEFAULT NULL,
 `quantity` int DEFAULT NULL,
 `user_id` int DEFAULT NULL,
 PRIMARY KEY (`cart_id`)
);
```

Key Takeaways

- Users can perform hands-on tasks with Git commands.
- They can create a MySQL database.
- They can create tables for the project.
- They can push the code to a GitHub account.

Before the Next Class

Since you have successfully completed this session, in the next discussion, you should know how to:

- Execute HTML and CSS
- Review Angular CLI
- Configure dependencies in Angular
- Brush up Protractor

What Next?

In the next class, we will:

- Build and execute Angular admin dashboard
- Build and execute Angular end user web app
- Configure dependencies for Angular projects
- Configure Protractor for Angular projects