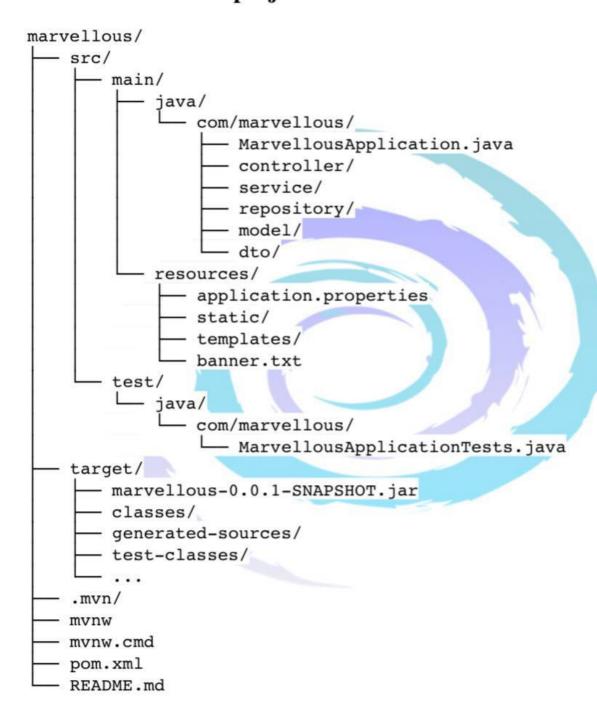


Spring Boot Project Structure

Consider the below project structure





Detailed Explanation of Each Folder and File

1. src/main/java/com/marvellous/

This is your main Java source code. Follows reverse domain naming.

MarvellousApplication.java

```
@SpringBootApplication
public class MarvellousApplication
{
    public static void main(String[] args)
        {
        SpringApplication.run(MarvellousApplication.class, args);
    }
}
```

controller/

Contains REST API endpoint logic using @RestController.

service/

Business logic using @Service.

repository/

JPA interfaces (UserRepository, etc.) using @Repository.

model/

POJOs with @Entity for DB table mapping.

dto/ (optional)

For Data Transfer Objects (pure request/response structures).

2. src/main/resources/

Stores resources needed at runtime.

application.properties

Main configuration file (e.g., DB connection, port).

static/

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Public assets like CSS, JS, images.

templates/

For HTML templates using Thymeleaf or other engines.

banner.txt (optional)

ASCII art displayed on app startup.

3. src/test/java/com/marvellous/

Unit and integration test classes using JUnit/Mockito.

MarvellousApplicationTests.java

Sample test case with @SpringBootTest.

4. pom.xml

```
Maven configuration file – dependencies, plugins, etc.

<artifactId>marvellous</artifactId>

<dependencies>

<!-- Example -->

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-web</artifactId>

</dependency>
```

5. target/ - Generated Folder After mvn package

The target/ directory is automatically created when you run: mvn clean package

</dependencies>



Contents of target/:

File/Folder Purpose

Final executable JAR with embedded Tomcat and compiled marvellous-0.0.1-SNAPSHOT.jar

code

classes/ Compiled .class files of your source Java code

generated-sources/ Auto-generated code by plugins (like MapStruct)

test-classes/ Compiled test classes

Metadata about compilation status maven-status/

Test results generated during mvn test surefire-reports/

This folder is used during deployment or to run the app:

java -jar target/marvellous-0.0.1-SNAPSHOT.jar

6. Other Files

File/Folders	Description

Maven wrapper, allows running Maven without local install .mvn/, mvnw, mvnw.cmd

Documentation or project instructions README.md

Ignore files in Git (like /target, .class, .idea) .gitignore

Summary

Component	Keyword / Annotation	Purpose
Main Class	@SpringBootApplication	Entry point
Controller	@RestController	Handles HTTP Requests
Service	@Service	Business Logic
Repository	@Repository, JpaRepository	Data Access Layer
Model	@Entity	Maps to DB Table
Configuration	application.properties	Project Settings
Final Output	target/marvellous-0.0.1-SNAPSHOT.jar	Executable File