

A CAPSTONE PROJECT REPORT

ON

DOCONNECT

Submitted in partial fulfillment of the requirements for the internship of

Angular Java and Spring boot by WIPRO by

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BATCH C3 GROUP 05

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PROBLEM STATEMENT

Do Connect is a popular Q and A form in which techniques questions was asked and answered.

There are 2 users on the application:

- 1.User
- 2. Admin

User Stories:

- 1.As a user I must be able to login, and also Logout and to Register into application.
- 2.As a user I must be ask any question under any given topic.
- 3.As a user I should search the question on any string written in the search box.
- 4.As a user I may be able to Answer any question that is asked.
- 5.As a user I should be able to answer more than one question at a time.
- 6.As a user I should be flexible to chat with other users.
- 7. As a user I should be able to upload images for reference purpose.

Admin Stories:

- 1. As an Admin I am able to logout, login and register.
- 2. As an Admin I should get mail as soon as any new Question is asked or any Answers are given.
- 3. As an Admin I should be able to delete inappropriate Questions or Answer.

ABSTRACT

We all previously know about Quora and Stack Overflow etc.

In the same way Do Connect is a popular Q and A form in which techniques questions was asked and answered. One can be able to login, Logout and Register into the application. One can be able to ask any question under any topic. One can be able to search the question on any string written in search box. One can be able to Answer any question asked. One can be able to answer more than one question and more than one time. One can be able to chat with other users. One can should be able to upload images to refer.

ACKNOWLEDGEMENT

We are profoundly grateful to **Mr. Javeed Mohammed Husnuddin** sir for his expert guidance and encouragement throughout the project. We would like to extend our sincere thanks to our institution for providing us with this opportunity. We are highly indebted to our guide for his guidance and constant supervision as well as for providing necessary information regarding the project and also for his support in project completion which is done by:

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CHAPTER 1:

INTRODUCTION

1.1 INTRODUCTION:

We all previously know about Quora and Answer Bag etc.

In the same way Do Connect is a popular Q and A form in which techniques questions was asked and answered. One can be able to login, Logout and Register into the application. One can be able to ask any question under any topic. One can be able to search the question on any string written in search box. One can be able to Answer any question asked. One can be able to answer more than one question and more than one time. One can be able to chat with other users. One can should be able to upload images to refer.

1.2 OVERALL DESCRIPTION:

1.2.1 Description:

- Any member can register and view available products.
- Only registered member can purchase multiple products regardless of quantity. There are two roles available: User and Admin. User can question and answer.

1.2.2 Using the code:

- 1. Attach the database in your "SQL Server Management Studio Express".
- 2. To Run application using the Microsoft Visual Studio as a website. 3. To Locate database.

1.2.3 Web Pages details:

- o Home Page
- o Login Page
- o Sign Up Page

CHAPTER 2:

SYSTEM SPECIFICATIONS

2.1 SOFTWARE REQUIREMENTS:

Technologies:

- Angular Java
- Spring Boot

Languages:

- Type Script
- Java
- SQL Queries

IDE:

- Eclipse
- Vs code
- My SQL

2.2 HARDWARE REQUIREMENTS:

Operating System:

• Windows 7/8/10/11 o Linux distros o MacOS X or later.

Processor:

• Intel or AMD dual core x86 processor.

Ram:

• 2 GB or above.

Hard disk:

• 500 MB of free disk space or more.

CHAPTER 3 ANGULAR ARCHITECTURE

Angular may be a platform or framework to build client-based applications in HTML and TypeScript. it's written in TypeScript. It implements core and optional functionality as a group of TypeScript libraries that are imported into applications.

There are main eight blocks of Angular:

- Module
- Component
- Metadata
- Template
- Data Binding
- Service
- Directive
- Dependency Injection

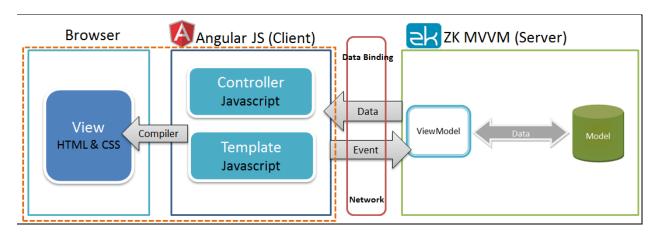


Figure 3.1 Angular Architecture

Module:

Angular apps are modular and Angular has its own way of modularity system referred to as Angular modules or Ng-Modules. Every Angular app will contains an Angular module class, and the root module, conventionally named as App-Module.

Ng-Module is function which take a single metadata object whose properties describes the module.

The most important properties of Ng-Module are as follows:

- declarations the view classes that belong to the present module. Angular has 3
 different typed view classes namely: components, directives, and therefore the
 pipes.
- exports the subset of declarations that ought to be visible and usable in the component templates of other modules..
- imports these are the other modules whose exported classes are much needed by the component templates declared in *this* module.
- providers these are creators of the <u>services</u>.

Metadata:

Metadata is employed decorate a class so that it can configure the expected behavior of the class. Annotations are part for metadata. Annotation is an array and also an example having both the @Component @Routes decorator.

Service:

Service is a function which satisfy our application needs.

Examples include:

- logging service
- data service
- message bus
- tax calculator
- application configuration

Directive:

Directives are classes that add new behavior or modify the prevailing behavior to the elements in the template. Basically directives are there to manipulate the DOM, for example adding/removing the element from DOM or changing the appearance of the DOM elements.

Dependen	cy Injection:			
Depe	endency injection, or D	I, a design pattern i	n which a class red	quests
dependencie	s from external sources	s rather than creatin	g them.	

CHAPTER 4 SPRINGBOOT ARCHITECTURE

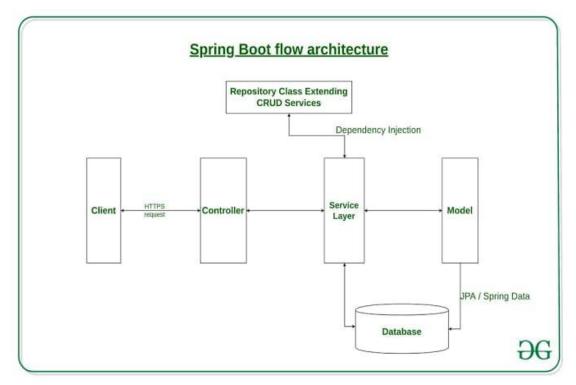


FIGURE 1: SPRING BOOT ARCHITECTURE

The spring boot contains following four layers:

- Presentation Layer
- Business Layer
- Persistence Layer
- Database Layer

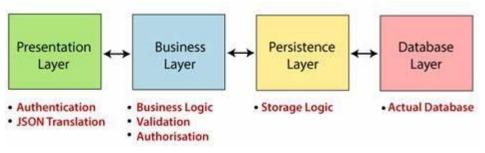


FIGURE 2:LAYERS

Presentation Layer:

It is the uppermost layer of the spring boot architecture. It consists of the many Views. i.e., the front-end a part of application. It take-care on HTTP requests and also performs the authentication.

Business Layer:

It contains business logic. It's responsible for the validation part and also for authorization.

Persistence Layer:

It translates business objects to database rows.

Database:

The database layer contains all the databases like MySql, MongoDB, etc.. It'is responsible for performing the CRUD operations.

CHAPTER 5: MICROSERVICE ARCHITECTURE

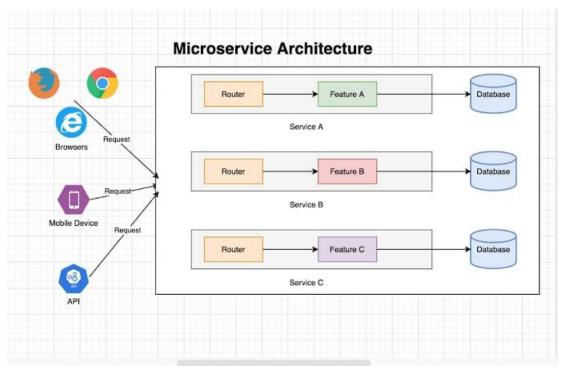
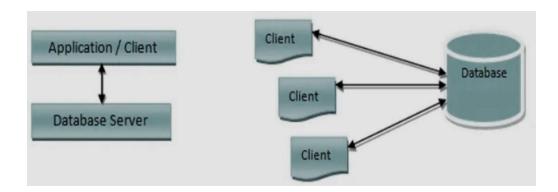


FIGURE3:MICROSERVICE ARCHITECTURE

- Typically, micro services are used to speed up application development.
- Micro services architectures built using Java are common, especially Spring Boot ones.

CHAPTER 6 DATABASE ARCHITECTURE



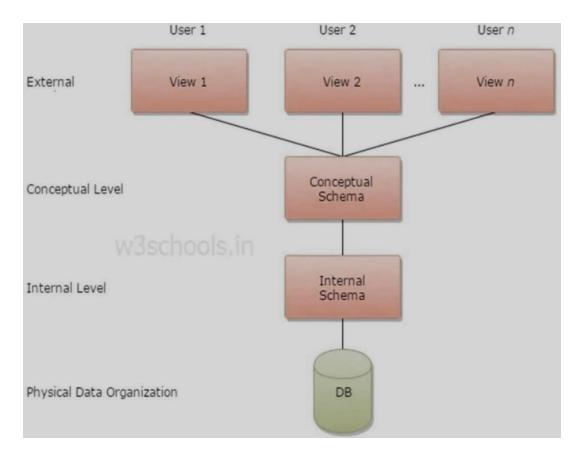


FIGURE 4: ARCHITECTURE OF DATABASE SYSTEM

Entities within the Database include:

- Topics
- Login info
- Users
- As an issue.
- Answer an issue.

CHAPTER 7 TOTAL PROJECT OVERVIEW

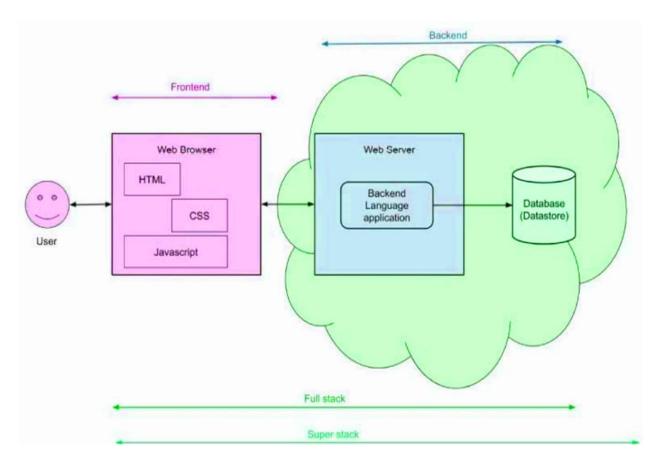


FIGURE 5: PROJECT OVERVIEW

Full-stack-web-development entails the creation of both the frontend (or front end) and backend (or backend) of an internet site or application. front and back end developers are usually necessary for every web development project; however, a full stack developer performs both.

7.1 FUNCTIONALITY OF USER

- As user I should be logged-in, Logout and Register.
- As a user I should be ready to ask any questions on any topic.
- As a user I should be ready to search the question written in the given search box.
- As a user I should Answer any question.
- As a user I should be ready to answer more than one questions at a time.
- As a user I should be ready to chat with the others.
- As a user I should be ready to upload images to refer.

7.2 FUNCTIONALITY OF ADMIN

- As an Admin I should be ready to login, Logout and Register into the application.
- As an Admin I should be ready to perform CRUD on Users.
- As an Admin I should be ready to Perform CRUD on the products.
- As an Admin I should be ready to get the stocks.

CHAPTER 8 PROJECT FLOW

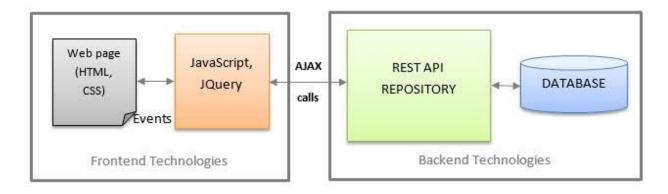


FIGURE 6 :PROJECT FLOW

CHAPTER 9: RESULTS

• Below image represents the home page of DOCONNECT where the user login can be viewed.

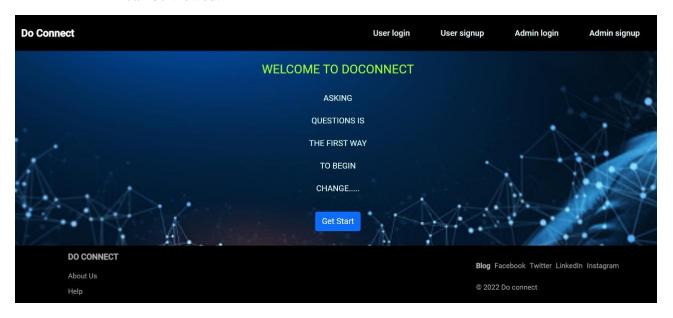


Figure 7. Home Page

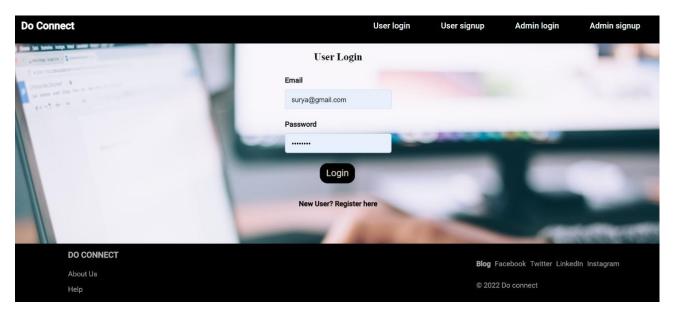


Figure 8. User-Login Page

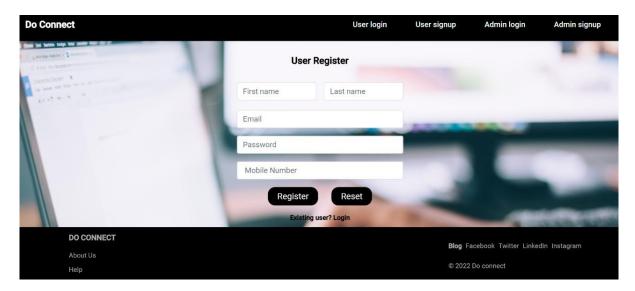


Figure 9. User-Register Page

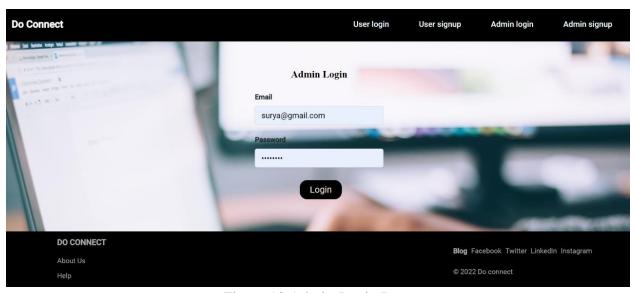


Figure 10 Admin-Login Page

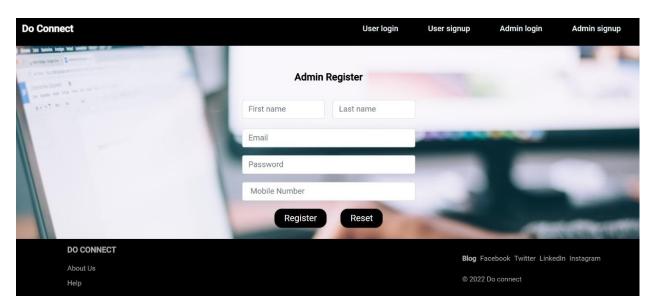


Figure 11 Admin-Register Page

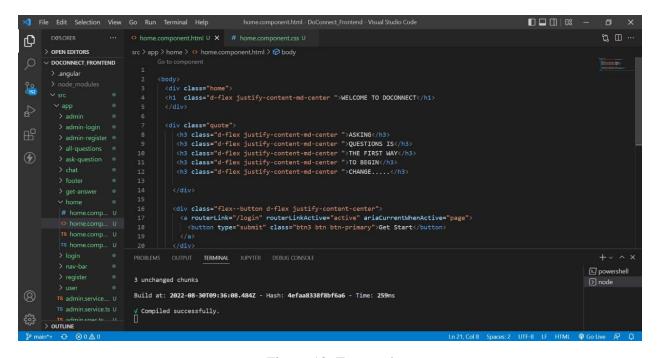


Figure 12. Frontend

```
Capstone - DoConnect_Backend/src/main/java/com/wipro/gl/doconnect/DoConnectBackendApplication.java - Eclipse IDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ×

> src/main/java

                                                                                                                                                                3*import org.springframework.boot.SpringApplication;□
               > 8 > com.wipro.al.doconnect
                                                                                                                                                      7
8e/*
9 * Author : B. Surya Mouli
10 * Modified date : 24-08-2022
11 * Description : Spring application is initialized
12 *
13 */
14
15
16 @SpringBootApplication
17 public class DoConnectBackendApplication {
                       ♣ > com.wipro.gl.doconnect.controller

⇒ > com.wipro.gl.doconnect.dto

→ ★ > com.wipro.gl.doconnect.entity
                 > ≰ > com.wipro.gl.doconnect.exceptions
                > & > com.wipro.gl.doconnect.repository
                 > & > com.wipro.gl.doconnect.service

⇒ $ > com.wipro.al.doconnect.vo

          > 🚜 > src/main/resources

♣ > src/test/java

➡ JRE System Library [JavaSE-17]

■ March 1 | March 2 | March 
                                                                                                                                                                              public static void main(String[] args) {
    SpringApplication.run(DoConnectBackendApplication.class, args);
               Maven Dependencies
                                                                                                                                                           20
21
22
23°
24
25
                                                                                                                                                                           }
          > @ bin
                                                                                                                                                                             @Bean
RestTemplate getRestTemplate() {
    return new RestTemplate();
.
               🍅 > src
         > @ target
                HELP.md
                ≧ mvnw
                                                                                                                                                           26 27 }
                3 mvnw.cmd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        > ➡ DoConnectChatService (in ChatService) [boot] [devto ☐ Console ×
                                                                                                                                                      DoConnect Backend - DoConnectBackendApplication [Spring Boot App] DAcedpse\plugins\org.edipse\pusij.openjdk.hotspot.jre.full.win32.x86.64 17.0.1v20211116-1657\jre\bin\jpav
2022-08-30 15:04:14.542 INFO 8856 --- [ restartedMain] o.s.b.a.e.web.EndpointLinksResolver : Exposing 1 endpoint(s) bene
2022-08-30 15:04:14.514 INFO 8856 --- [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s):
2022-08-30 15:04:14.519 INFO 8856 --- [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s):
2022-08-30 15:04:15.915 INFO 8856 --- [ on(3)-127.0.0.1] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring Dispatc
2022-08-30 15:04:15.917 INFO 8856 --- [ on(3)-127.0.0.1] o.s.web.servlet.DispatcherServlet : Initializing Servlet 'dispa
2022-08-30 15:04:15.917 INFO 8856 --- [ on(3)-127.0.0.1] o.s.web.servlet.DispatcherServlet : Completed initialization in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12x86_64_17.0.1v20211116-105/yetumnyo-

: Exposing 1 endpoint(s) bene

: Tomcat started on port(s):

: Started DoConnectBackendApp

: Initializing Spring Dispatc

: Initializing Servlet 'dispa

: Completed initialization in
0 items selected
```

Figure 13 Backend

CHAPTER 10 CONCLUSION

Hence, we have Created a website Do connect application using the database structure, using Entity framework database first approach successfully with all the requirements mentioned in the given question and we have successfully deployed our project in the Angular and spring boot.