Day 2 – 19 Mar 2024

Spring Framework or Adv Spring Framework

40 hours training

Spring boot, Spring reactive modules, spring web client, spring with hibernate.

Spring transaction management, spring security etc.

Spring with JDBC with Database Source features

1. Using JDBC we can connect to database.

Dao layer : Data Access Object which contains pure database logic.

try {

Class.forName(“load the type of driver”);

Class.forName(“com.mysql.jdbc.Driver”); // 5.x

Class.forName(“com.mysql.cj.jdbc.Driver”); // 8.x

Connection con = DriverManager.getConnection(“url”,”username”,”password”)

PreparedStatement pstmt con.prepareStatement(“insert into employee values(?,?,?)”);

pstmt.setId(1,100);

pstmt.setString(2,”Steven”);

pstmt.setFloat(3,35000);

int res = pstmt.executeUpdate();

System.out.println(res);

}catch(Exception e) {

}

Loading the driver and establish the connection we need to write in another class ie resource class and create the connection object using singleton design pattern.

Data Source : Data source provide data base connection using singleton design pattern with high secure environment with help of application server like web logic, jboss, Glashfish etc. those configuration we were doing using xml or some properties file in application server.

Spring dao or jdbc module provide data source features without application server.

That database information we can configure in xml file or properties files.

Virtual Lab :

Open the terminal

sudo mysql -u root -p

Simplilearn

create database testdb123;

create table employee(id int primary key,name varchar(30), salary float))

JdbcTemplate

ORM

Spring MVC with Hibernate or JPA

Spring boot

JdbcTemplate : JdbcTemplate is a pre – defined API provided by spring jdbc module which internally wrap core jdbc features and provide extra functionality to improve jdbc logic.

ORM : Object Relation Mapping

To develop the web application in java we need to use Servlet and JSP.

Spring MVC (model view and controller)

If we want to create servlet program.

We need to create normal java class and that class must be implements or extends type of servlet.

1. Servlet interface
2. GenericServle class
3. HttpServlet class

class MyServlet extends HttpServlet {

public void doGet(HttpServletRequest req, HttpServletResponse res) {

}

public void doGet(HttpServletRequest req) {

}

}

@Controller

class MyController {

@RequestMapping(value=”hello”,method=RequestMethod.GET)

public ModelAndView/String sayHello() {

}

@RequestMapping(value=”hi”,method=RequestMethod.GET)

public ModelAndView/String sayHi() {

}

}

Spring MVC with ORM hibernate / jpa

View can be JPA.

Spring boot with JPA with View as Thymeleaf