q.Spring MVC flow : implementation in web application

Model : interacts with database , execute business logic 🡪 java class

View : what user sees on the screen ., generaes UI for the user . 🡪 html,jsp or velocity

Controller : Takes user input (Request parameters), interacts with model and view . 🡪 servlet or servlet filter

When no handler mapping is explicitly specified in configuation, [BeanNameUrlHandlerMapping](http://static.springsource.org/spring/docs/2.5.x/api/org/springframework/web/servlet/handler/BeanNameUrlHandlerMapping.html) is created and used by default. "By default the DispatcherServlet uses the BeanNameUrlHandlerMapping to map the incoming request. The BeanNameUrlHandlerMapping uses the bean name as the URL pattern. Since BeanNameUrlHandlerMapping is used by default, you need not do any seperate configuration for this."

Note: handler mapping is in built in spring and controller is java annotation class

Ans :

Step 1st : Browser or client sends request (eg. Login request with user name and password) 🡪>> step 2nd : This request goes to web.xml file and find DispatcherServlet 🡪> step 3rd : now dispatcherServlet will check servlet configuration file (I.e. servlet.xml) 4th: send to login controller 🡪> now this controller will return the requested page , here we use modelANdView Name .

Login controller will decide which page or information need to send to client . so when controller find the information then this information will send to back to dispatcherServlet and dispathcerServlet will send this information to client .

2nd flow: by java guides (ramesh fadarete)

1st: Http request comes to dispatcherservlet :--🡪 2nd step: dispatcheServlet consult with Handler Mapper to identify controller which one is right one for coming request --🡪 3rd steps : handler mapper send controller details to dispatcher servlet 4th step:--🡪dispatcher servlet send that request to controller 5th step:-🡪 controller will return modelAndView to dispatcher servlet again 6th Step:-🡪 now dispatcher servlet takes help from viewResolver to identify particular location of the view 7th Step: dispatcher servlet send finally model and view to view component and view component will merge view and model and produce html page : 8th Steps:-🡪 this html or view resource will send to client as response .

Q2. How to do the flow of controller class to database in springboot or MVC ?

1. DAO Layer

Ans : first we need to make a entity class to bind the data that comes to database and goes out ,. So first make @Entity annotation to say Hibernate this is the class which talks to database . @Id annotation is used in one of the instance variable to determine this is the primary key for the table . Note : entity class acts as table and instance variable acts as column in database .

To connect with database we need to write an interface which extends jpaRepository<abc.class,integer> providing entity type .

Then we write the abstract method under this interface and give parameter as per requirement . eg

**public** Optional<Login> findByLoginidAndPassword(String loginid,String password);

1. Service layer:

This layer acts as middle man between DAO layer and controller class .

It brings information from controller class and do business logic and connect with DAO Layer .

Note: to bind or get database connection we make pojo class with @Entity ,

Like wise to bind information coming from controller or client we make DTO class which carries the data from client or as input from controller and do transfer to dao class entity in service layer implementation so that incoming data will get save in database by the help of repository ;

Spring annotation : Read in javatpoint site