

# **Placement Questions and Answers**

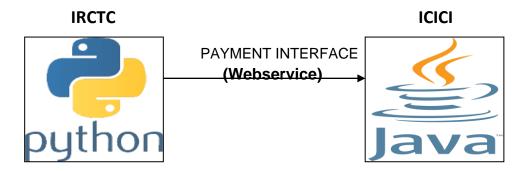
# "SPRING BOOT"

### Q.1 what are web services?

**Ans** Web service is a technology to communicate between two same programming languages or two different programming languages of two different projects or applications.

Or

The method of communication between two devices over the network. It's a collection of protocols or standards for exchanging information between two devices or applications.



### **Types of Webservices:**

- SOAP (SIMPLE OBJECT ACCESS PROTOCOL)
- REST (REPRESENTATIONAL STATE TRANSFER)

Rest web services can be develop by many programming languages like java, python, .Net, PHP.

## Q.2 what are the different technologies in java to build REST Webservices?

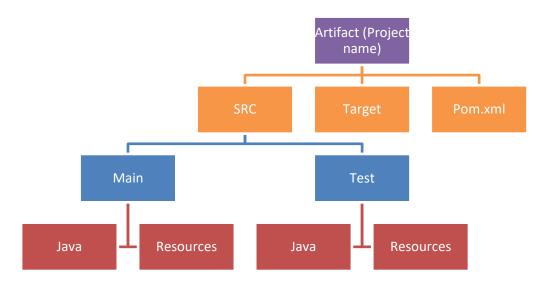
#### Ans

- Servelets
- Core java
- Jersy
- Spring
- Spring Boot

### Q. 3 What is Maven?

Ans Maven is a dependency management tool. It uses local and remote repository where .m2 is the local repository. It has pom.xml file in which we can mention dependencies and it download automatically the related jars. Maven download main jar and its dependent jars as well which can be very hectic to manage. So maven maintain dependencies.

#### Folder structure:



## Q.4 What is Spring?

**Ans** The Spring Framework (Spring) is an open-source application framework that provides infrastructure support for developing Java applications. Spring helps developers create high performing applications using plain old java objects (POJO).

But in spring we need to implement from scratch.

## Q.5 What is Spring Boot?

**Ans** Spring Boot is an open source, microservice based java web framework. The Spring Boot framework creates a fully production-ready environment that is completely configurable using its prebuilt code within its codebase.

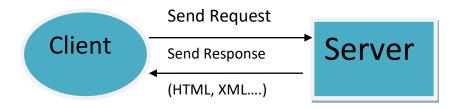
Spring boot is introduced to reduce the effort make by programmer and to reduce time taken to write piece of codes which are important but repetitive (Boiler plate code).

#### Q.6 What is REST API?

Ans Representational State Transfer (REST) is an architectural style that defines a set of rules or protocols to be used for creating web services. It is used to give or fetch some information from web service.

#### **Working:**

A request is sent from client to server in the form of web URL as HTTP GET or POST or PUT or DELETE request. After that , a response comes back from server in the form of resource which can be anything like HTML, XML, Image or JSON. But now JSON is the most popular format being used in Web Services.



## Q.7 What are the different types of methods in HTTP?

**Ans** In HTTP there are some methods which are commonly used in a REST based architecture i.e. POST, GET, PUT, DELETE these are used to create, read, update and delete ( OR CRUD) operations.

@GetMapping - This HTTP method is used to read or retrieve a representation of resource. GET returns a representation in XML or JSON.

**@PostMapping** - This is used to create new resources. Data posted in JSON or XML by hitting URL get converted into object by @RequestBody.

**@PutMapping** - This HTTP method is used to update in data.

@DeleteMapping - This HTTP method is used to Delete the data.

### Q.8 What is JSON?

**Ans** JavaScript object notation (JSON) is the lightweight data interchange format. JSON is used to store data in the particular format and to perform data sending or receiving operation between client and service provider JSON is used.

Data traverse in the format of JSON which is send by producer of webservices after call by client.

### Q.9 What is endpoint?

**Ans** Endpoint is the URL produced by producer company to use by the client at the time of HTTP Request Calling. For example <a href="http://localhost:8080/showemployee">http://localhost:8080/showemployee</a> here "showemployee" is the endpoint which is given by developer at the HTTP request like @GetMapping("showemployee").

#### Q.10 What is @RestController?

#### **Ans**

- It identifies that we are creating a REST API.
- It is a class level annotation.
- It is a starting point for any URL or endpoint we hit

## Q.11 What is @RequestMapping?

#### **Ans**

- It allows all type of requests (Get, Post, Put, Delete)
- It is a method level annotation.
- We specify URL here.

### Q.12 What is @Pathvariable?

**Ans** It is used to receive any parameter from end point. Parameter provided in method is written in curly braces after endpoint and "/".

example @GetMapping("shwoemployee/{ename}

# Q.13 What is @RequestBody?

**Ans** This is used to receive JSON data after POST by client and populate that data into java object. Means JSON send by client is converted into object by using @RequestBody annotation which is written in method parameter section with Class and object.

Example : public void getData(@RequestBody Student student)