**Sample Questions**

**Java**

1)Questions on Dynamic programming and backtracking.

e.g. There is list of channel and cost associated with the number of channel

2 channel cost 15

5 channel cost 20

8 channel cost 25

Find the minimum cost of 9 channels.

2)find the 4th and 5th row from the database.

3)How to implement new requirement.

**RoR**

1. Assume we have predefine table in database, can we create its corresponding model without creating migration.

I said yes we can done it manually but not sure about it

1. What is N+1 problem. An active record include query convert it into corresponding MySql queries.

I explained the N+1 query with an example , I mostly worked on active record query so I am not able to convert it into MySql Queries

1. Assume our server app running on different machines and sharing the same database , Now two request raise to update same row or object at the same time. How can we prevent this race condition.

I suggest  that we can block the object or we can used thread lock (mutex). But he didn’t seem satisfied.

1. Map vs each vs Select in ruby.

I explaind map and each with an example.

**.NET**

1. Difference between .net and .net core
2. What is dependency injection
3. What Repository pattern
4. What are micro services
5. How from angular to send data to back end
6. Project specific question like which pattern you have used.
7. What was your project structure
8. What are middleware in .net core
9. bout last project, technologies used, what it all about functionally, Roles and Responsibilities
10. What is Devops , benefits
11. How did you implement CI & CD in your project, How it works
12. Pull Request
13. If you developed feature 1 and it has dependency on feature 10 which is not yet complete, then how do you deploy feature 1 - feature toggling
14. what is microservices.
15. What is container.
16. Docker and Kubernetes, difference between them
17. GIT related question, like Pull Fetch Merge, Rebase command
18. How to integrate GIT for CI
19. Code Analysis in CI
20. Unit Testing in CI
21. Explain Inversion of control
22. Dependency injection, logging in .net core
23. What is .net core and its benefits
24. What is ORM
25. Entity framework, it's approaches, which approach you follow in your project
26. Repository Pattern
27. What is scrum, sprint duration in your project
28. Different ceremonies of scrum - Planning, Demo, retrospective
29. Why retrospective is important in scrum.

**Full stack**

Difference between responsive and fluid design?  
Difference between mobile first approach and responsive approach?  
What is the significance of DOCTYPE in html?  
What is specificity in CSS? Discussion around specificity of various selector.

h1 : first vs h1 vs .heading discussion around specificity and performance  
Difference in layout for nested div when the position: absolute and float: left.  
What are different techniques to hide elements in HTML?  
Question around accessibility and some of the technique being used to make code accessible.  
What is SASS and what are its advantages?  
What is the disadvantage of flex?  
Question around HTML template.  
What is Redux and what problem does redux solves?  
What is the difference between props and state?  
What is docker?   
What is Github?  
What is NodeJs?  
What is callback hell and discuss technique to avoid it.  
Discussion around some of the new feature in ES6.

**Android**

1. Introduce your self

2. Last project works

3. Your project working

4. About technology

5. Have worked in Kotlin

6. Architectural pattern(MVVM)

7. Foucsed on the CI/CD

8. Jenkins

9. Working of Jenkins with android gradle

10. Product flavors in andoird

**.NET**

1. Asked for previous projects.
2. How to create an office document using code programmatically, eg. Excel, ppt etc?
3. What is your favourite libraries for generating ppt files?
4. Pros and Cons of entity framework with ADO.Net
5. Exception handling in application, which framework is used for log?
6. About Unit testing frameworks.

**Full stack**

* New features of react(Hooks and how they are beneficial)
* Responsive Designs( i.e how you can make a page responsive)
* Lifecycle methods used in react
* Webpack(dependency graph)
* Redux flow
* React Router
* Virtual Dom
* Node architecture
* How we can use multithread in Node
* Callback hell problem and how we can optimize that
* Middleware in node.js
* Authentication and Authorization
* Database basics

**QA iOS Automation**

1. Appium setup
2. Certificate settings required for running scripts on real iOS devices
3. Briefing about work in current project
4. Experience on Native app automation testing
5. Diff between running automation scripts on Native and Web/Hybrid apps
6. Diff between Mobile app testing and mobile web testing
7. Experience with Data Structures – Stack, Linked List, Queue, example of Sorting Algo
8. Manual testing ques – test auto population of items in drop down when input is typed in search box
9. Program to shift numbers in an array by 1 position OR by any number ‘d’ positions
   * Example – I/P Array – 1 2 3 4 5 – Shift numbers by 3 positions

Expected O/P – 3 4 5 1 2

1. Diff between absolute and relative xpaths
2. Locator strategies used in mobile app testing and the most efficient one to be used
3. Questions related to BA role – capacity ratio, managing incoming items when capacity is full
4. Diff between interface and abstract classes
5. Usage of static variables and static methods
6. Execute a program without main method
7. Automation for payment related screens and flows
8. Diff observed between automation for iOS and Android apps

**Full stack**

1. Intro
2. Role & work done in previous project
3. MySQL-

              Table & schema

              Store json data in MySQL

              datatype to store large data in MySQL

1. Express -

              Middleware

              params for Middleware

              examples

              how to use it

1. GraphQL-

              purpose

              use of mutation

              how to authorize the request

1. Authorization techniques -

              JWT

              Security issues

              middle-man attack

              CSRF tokens

1. ReactJS -

              Functional & class components

              hooks

              context

              refs

              Fragments

              Error handling in components

1. Docker-

              docker build

              docker run

              docker image

1. Intro

2. Domains exposure

3. AWS services

4. Monolithic & Microservice Architecture

5. Real time problem scenarios and how to solve the same

6. Coupling between microservices and between client and server

7. Docker

**.NET**

1. Why do we use dot net core.
2. Explain DI, IOC. Detailed implementation of any IOC container from your project.
3. Explain all DI technique.
4. Use case discussion on how to configure DI without changing code base, on white board with examples.
5. How to automate VM configuration with all dependencies.
6. What is TDD & which framework you used for TDD.
7. What framework you have used for mocking.
8. How to configure Jenkins for CI/CD.
9. What are directives in Angular.
10. How do you review PR.
11. How to perform load testing & discussion on jMeter features in detail.
12. How to detect memory leak.
13. Which tool you have used for application profiling.

**Microsoft Addin (.NET)**

(1) What is Polymorphism.

(2)What is inheritance.

(3) Explain interface.

(4) Explain Abstract classes.

(5) What is overloading and overriding.

(6) Can we achieve Multiple inheritance in C#. If yes, How can we achieve that?

(7) Why we use interface and Abstract classes.

(8) What is partial class.

(9) Difference between string and string builder. When we use string, and when we use StringBuilder.

(10) What is multithreading.

(11) What will we do if our one thread is taking too much time in multithreading in some operation.

(12) How to overcome deadlock condition in multithreading.

(13) How to measure performance of C# code and Memory leak.

(14) Why we use namespace in c#.

(15) Use of virtual and new keyword.

Along with these question we have discussed about MS Add-ins only for word. I have to check which types of operation we can do for word add-ins.

**QA**

* >Selenium automation( Listeners, Exception handling, Windows handling)
* >Programs on Arrays
* >Project Architecture
* >BDD framework
* >General Manual testing Questions
* >Questions on your past projects and the way you have worked on them.
* >Problem solving ability.
* Architecture of app you’ve worked on- frontend- microservices- backend
* Database migrated from one sys to other sys- what all testing types are required- how to do it.  What is data reconciliation
* what is unit testing? how did you do it in your project
* what is schema validation
* Different types of http code error in API testing
* Automation test strategy
* Diff types of testing required to test an app
* java code to swap without using temp variable
* usability vs UI testing.
* Listeners selenium
* How to automate BDD test scripts when dev in progress
* what is TDD.

**.NET**

General:

* Tell about your projects.
* What software development methodology you use?
* How do you deploy your application?

SQL:

* Type of Joins in SQL?
* Type of Indexes in SQL?
  + When to use clustered index & non-clustered index?
* Minimum & Maximum no. of rows that can be returned when putting inner join and outer join on two tables.
* Difference between Joins & Subqueries. Which is faster and why?
* How to optimize a stored procedure.

C#:

* What are value type and reference type variables?
* Difference between ref and out.
* Difference between const and readonly.
* Write a program to return a factorial of a number using recursion.
* Write a program to find whether a point (x,y) lies inside, outside or on a circle of radius r. The center of circle is at origin (0,0).
* What is boxing and unboxing?

Web API:

* How to secure an api endpoint?
* How authentication works?
* Optimize the performance of an endpoint which return grid data having more than 20,000 records.
* What is an ORM? What are its pros and cons?

Angular:

* What is package.json file.
* How will you install a new package into your angular application?
* What does –save option do in npm install command?
* What is node\_modules folders? Should it be committed in the repository?
* How will you update a third party library in your app? Give steps.

**Interview Questions (HTML5, CSS, React.js, javascript)**

1. Introduction
2. About the projects done till now.
3. Divide the page into 4,4,6,6 columns for extra small, small, medium, large screens respectively. Which bootstrap class will you use for this.
4. Design a layout to show a text field and @ icon on entire width in same line. The @ should cover a width of 30px. (Answer - use calc function)
5. Display the text horizontally and vertically in the center of the page. Can you do this using flex?
6. New features in bootstrap4
7. Effect of padding and margin in display inline and inline-block.
8. How to make a website responsive.
9. Write the code in react to display sum of two numbers. Design the layout having two textfields for number input and the sum button. Do the validations to check that the text entered is a number and nothing else without using input type number. Display appropriate error messages if any anything except number is entered.
10. Store an array in react. And display the elements of array in form of list.
11. Why is key provided in react?
12. Difference between react15 and 16
13. What is session and local storage?
14. 3 tabs are open in a browser. Session is made in tab one. Will that session in other tabs be available if this tab is closed.
15. What are web workers?
16. Unit testing in react
17. Var one={x:2}

Var two={x:3}

Func abc(){

Console.log(this.x)

}

Def = one.bind(two)

Def();

What will be the output?

1. Significance of ‘this’.

**Role**: Product Owner

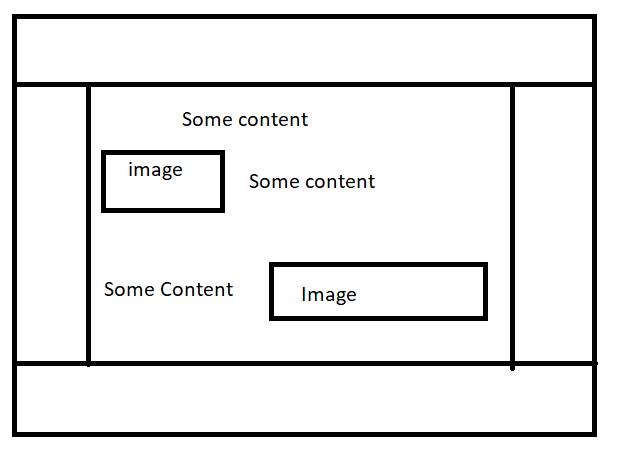
**Client**: McKinsey

1. 1. Tell me about yourself.
2. 2. Describe your roles and responsibility from your past experience?
3. 3. How familiar are you Agile?
4. 4. Can you describe the scrum processes that you followed?
5. 5. How are you going to manage a team of developers and testers for redisigning a website within 2 months timeline?
6. 6. Would you be able to travel from Noida?
7. Tell me about your last assignment and what were your roles and responsibilities?
8. How do you decide on the MVP for your last project? What factors will you consider?
9. Do you have any experience in Analytics?
10. You have primarily worked on implementation of Web & Mobile applications. Would you be comfortable in venturing into data and analytics? Why do you want to change your track?
11. You have been onsite in a couple of your past projects. Do you have any similar expectations in this project?
12. How comfortable are you with Agile ceremonies and how do you rate yourself on a scale of 1-10; 10 being the highest?
13. You may come across conflicts within your peer groups, internal stakeholders, development team or the business stakeholders. How would you manage such situations, and can you give an example of a real-life situation where you handled such conflicts?
14. It seems you were doing very good in your previous organization. What prompted you for a change?
15. Do you think as a PO you need to understand technology? Or you should focus on functional aspects only?
16. What skills in your view are most important to be a successful PO?
17. Can you talk about best practices you followed in execution of your roles and responsibilities as a PO?
18. Where are you located?

**HTML, CSS, JavaScript**

1. Write the html and Css structure of below image and answer the following question

1. Make herder and footer are fix.
2. Make the all the images responsive.
3. Make main content scrollable.
4. What is <picture> tag.
5. Difference <img src=””> and css property background =”../image path’.
6. What is display flex.
7. Difference between display flex and display inline block.



2. What are the storages in html5.

3. Write all the css selectors.

4. How to get the value from URL and store them in to Cookies for 50 days.

5. Write the css architecture of the website of 500 pages.

6. Change the 12 column grid layout to 8 column grid layout of bootstrap.

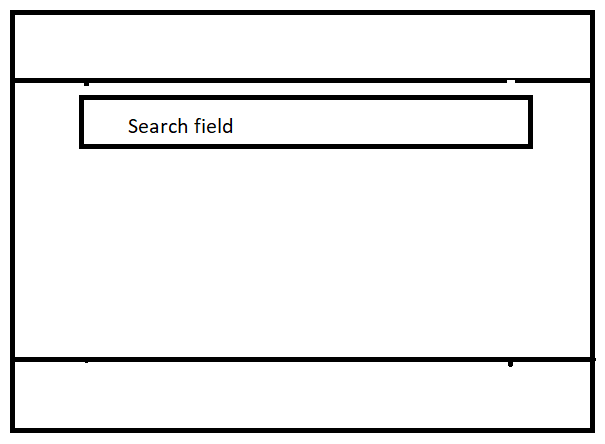
7. Image is appearing correctly on chrome browser of windows but not on the chrome browser of IOS device. Fix this issue.

8. Image is appearing correctly on android device but not on IPhone. Fix this issue.

9. Write media query.

10. What are the screen’s break points.

11. In the below image skip the focus sequence from “Search field” on click of tab key of keyboard using JQuery.



**Technology : React JS , CSS and Unit testing**

1. What is closure in JS?

2. what is redux and it's implementation in the project?

3. what are the production issue faced ?

4. What is the role of the package-lock.json?

5. How many types of component we can create in react?

6. what is bind and call method ?

7. How to restrict the user to enter anything except numbers in a some function (for ex for calculation function .)

8. what are semantic tags in HTML5?

9. What are the reasons to use preprocessor?

10. React lifecycle method ?

11. What are hooks in react?

12. What is the use of key in component?

13. What are styled components?  
14. Use of css selectors

15. Explain grid system and flex properties of CSS.

16. Difference between React 15 and React 16 ?

**Drupal**

1. What is CMI?
2. Difference between features and CMI?
3. Is features module still being used after CMI got introduced in Drupal 8, If yes then mentions the use case.
4. Have you used REST API in Drupal [explain in any version of Drupal (7 or 8)] ?
5. How will you achieve basic authentication of REST API in Drupal
6. What are bundles?
7. Can you reuse a field in Drupal and how?
8. What is Dependency Injection?
9. Can you expose the entity which you have created programmatically in views?
10. Write the code to create a menu in Drupal where the user will be given access to that menu only if he is logged in? Write in both Drupal 7 and Drupal 8 (a sheet was handed to write basic module structure and the hook menu and routing had to be written down for the same)

SQL

1. Difference between CTE, table variable, temp table
2. Optimize stored procedure

.Net

1. SOAP v/s REST
2. Design Patterns (Factory, Decorator)
3. Dependency Injection
4. Web API v/s WCF
5. ASP.Net core middleware
6. State Management .net
7. Sessions

Angular

1. Angular v/s AngularJS
2. How to make a GRID ?

General

1. Case study on how many cars are traveling between dhaula kuan to Gurgaon between 9 AM to 10 AM daily.
2. Calculate if a point in cartesian space is in outside/inside/on the circle of radius r
3. Agile methodology. How agile is implemented in your projects and how it should have been done if you think there is any flaw.
4. What is flaw in agile methodology
5. Major discussions on how you work with cross location teams, behavioural questions on how you handle adhoc and ever changing requests from client
6. Case study : How many cows are there in Delhi. Answer : calculate via milk consumption of Delhi.
7. Angle between hour hand and minute hand when clock is at 3:15.
8. The main focus of those interviews were to judge the behaviour, experience in working for a big corporate like them. So, a lot of focus was on agile, sprint planning, team management, work management. They wanted to make sure they are hiring the right guy who can fit in their culture.
9. Questions on tech challenges and challenges while working in cross location teams. Any fight with any business guy. How you handle clients. They wanted to tell them my experiences on above mentioned points.

**Generic**

1. Tell me about yourself.
2. Out of all the projects you have worked on which is your favourite and why.
3. A challenging situation either personal or professional and how you overcome it.
4. A failure either personal or professional and what have you learn from that.
5. Any situation when you and your senior team member have different opinion and how you deal with it.

**.NET**

1. Any ORM used in the current/previous project? Which ORM? Why used? What are its benefits over conventional ADO.NET?
2. Introductory ideas about Microservices architecture, cross-platform application development, containerization, deployment on Linux environment and Sitecore.
3. .NET Core – How to override the configuration of **appsettings.config** based upon dev, stage & prod environment? Any configuration management tool used?
4. How to handle the exception in .NET framework & .NET Core at different levels (Controller, Action Method & Global)? Any exception logging framework used?
5. How to check the performance metrics of containerized web application based on CPU Utilization, Average Response Time & Availability? Any performance management tool used?
6. The software architecture used in your current/previous project. What is the significance of each layer used? Explain in detail.
7. Any DI container used? Which, Why & How? What are the its benefits over explicit/custom DI implementation?
8. Any unit testing & mocking framework used? Which, Why & How? How to mock the dependencies for the CRUD operations in web application making use of ORM for database communication?
9. C# - Several questions on Garbage Collection & it’s generations, Memory management & Memory Leakage, Disposing of Managed & Unmanaged resources (deep insight required). When to use concrete and abstract class?
10. Security implementation in MVC web application. What are the different authentication techniques used? Difference between Form Authentication & Token Authentication. How does the Token based authentication supersede form authentication?
11. What are the differences between continuous integration, continuous delivery, and continuous deployment? What are the different tools & techniques used in your project for CI/CD? Questions on open source automation server (Jenkins) which can be used to automate build, test & deployment of software

**REACT JS , CSS and Unit testing**

1. How many types of components are there in React JS ? Explain their use cases.
2. Difference between React Context API and Redux ?
3. Explain life cycle methods of React in order.
4. Difference between React 15 and React 16 ?
5. Explain new features introduced in ES6.
6. Difference between arrow functions and normal functions ? Explain their use cases.
7. What are HOC ? Explain their use cases.
8. How can we align child div in centre (vertically and horizontally) of parent div ?
9. Explain grid system and flex properties of CSS.
10. Which tool you have used for unit testing ? How did you mocked data for unit testing ? What is your approach to cover maximum part of your code in unit test cases ?

**Soft Skills**

1. Explain a situation in which you had a disagreement with someone on your team. – I explained a technical disagreement with my lead.
2. How did YOU (individually) deal with it? -- I explained how I reacted to the situation and how it was resolved.
3. How did you react when the approach suggested by your lead was better in terms of business impact? – I realized that though my solution was better on the coding side but in the long run it would have had an adverse impact on the business.
4. Explain a situation which was difficult for you.
5. How did you handle it?

**iOS**

1. GCD vs Operation Queues, when to use which

2. What is enterprise build

3. Recursive function to find factorial of a number

4. Types of sort/search algorithm and which is best and how

5. Deployment Process on AppStore

6. Can we rename info.plist

7. What’s new in swift 5/4

8. Strong vs weak

9. Atomic vs non atomic

10. How to write a function to have any type of parameter which conforms to a given protocol

11. Memory leak

12. Strong reference cycle

13. How to use swift classes in objective c

14. Reverse a given string

15. Find reoccurrence of all letters in a string

**Shreyansh:**

1. Logical application of compound predicate in core data.
2. Universal linking – How does it work?
3. Core data light vs heavy migration - Versioning
4. Write program for Fibonacci series using recursion with time complexity.
5. Jira – Story points significance/Meaning
6. What are Shared Containers and App groups?
7. Keychain sharing.

**Sumit Bajaj:**

1. Swift Vs Objective C comparison.
2. Universal Linking again.
3. Any Challenges you have faced during development.
4. Discussion on current project as well as Roles & Responsibilities.

**Ankit:**

1. How to save/sync data in offline mode.
2. Push notification mechanisms.
3. How can application handle different environments like Production, QA, Integration & Dev?
4. For different environments, how did you share builds with stakeholders and QA?
5. How does Jenkins pipeline work?
6. Testflight/App store deployment through Jenkins or other CI tools.

**Rahul Rawal/Sumit Bajaj:**

1. Behavioral questions.
2. He was checking on communication skills.
3. How will you choose a tech stack based on client’s requirements?
4. What do you think about other Hybrid Technologies vs Native Development?
5. Are you fine with working on React Native or PWA or Xamarin?
6. Would you be able to contribute in design, user experience and development?
7. Suppose we want an app like Facebook, let’s call it Homebook. How will you compare the tech stacks based on Cost Of Development, Testing and deployment?
8. They want a person who can ask questions whenever needed, not just do whatever he is asked to do – This is very important to McKinsey.

**Varun Bansal: (This was just a discussion – not an elimination round)**

1. Which processes did you follow in Scrum – DSM, Sprint Planning, Grooming, Review, Retrospective.
2. What is burn down chart? I had to draw one and explain it.

**FE**

CSS Selectors

CSS-Inline styles, external CSS file, within the html file

Performance of an application- where to place CSS, Js files exactly

Web accessibility (tab Index, screen readers, which attribute it reads out loud)

JavaScript Prototypes and how to use it

CSS pre-processor- less or Sass advantages

How to compile multiple less files into one CSS file

Focused more on HTML, CSS basically, some questions on JavaScript as well.

**Sitecore:**

1. Have you worked on Sitecore forms / WFFM?
2. What difference did you find from Sitecore 8.2 to 9.0 to 9.1? Which do you prefer?
3. ORM used? How did it map items to C# classes?
4. How Sitecore JSS applications are editable in the experience editor?
5. How did you use language fallback in Sitecore? Did you use any external module?
6. Sitecore 9 item level language fallback.
7. How will you setup a site in Sitecore?

**.NET:**

1. Did you use DI in your project? How was it configured?
2. Why should instances be for per request only? What if I create a static class?
3. Which local variables are stored on heap and stack when a function executes?
4. How did you use Unit Testing? Which frameworks did you use? Why did you use Sitecore.FakeDb?
5. What if I create a static class which is called 4 million times simultaneously?
6. Why did you use regular MVC controllers instead of WebAPI controllers for creating custom APIs?
7. Why do I need inversion of control? Why can’t I create concrete instances of dependencies in the constructor? What problem does IoC solve?

**.Net**

1. Introduction and architecture of the projects worked in.
2. Testing framework used.
3. Why session authentication is obsolete.
4. Differences between SOAP and REST API and where to use.
5. ASP.NET Core benefits and how its different from other ASP.NET frameworks.
6. Action Filters
7. JWT Authentication scheme
8. Exception Handling in project.
9. Difference between var and dynamic.
10. ASP.NET Modules and how to create them.
11. Logging in the projects done so far.
12. Unit Testing principles, which mocking framework used.
13. Scenario regarding how to unit test a method UpdateRecord (in database) involving Connection and execute command statements.
14. If any idea about Devops.
15. Why updated to ASP.NET Core in the last project.
16. Single Responsibility Principle.
17. Different Collections used in .Net
18. Why Generics.

**Android**

General Into

Past experience

Cross questions related to your project.how did you implement it?

Activity,Fragments

Memory Optimization

Services intent services

Rx Java

Dagger

Inheritance

Surface Views

Material Designs

Use case to develope a ui similar to facebook

Image caching

retrofit

Junit test cases

Git bitbucket jenkins

Mvp Mvvm architecture

GCM/FCM

OOps concepts

how much experince you have in kotlin?

Are you aware of SDLD lifecycles?

**UX**The interview is to design the analytical financial data for users with major developing constraints.

1. What do you understand by term -Design thinking?
2. What design experience you have so far & is there anything specific you want to highlight?
3. (Followup Question) What exactly you have done at the front end - UI/UX Part? was it mostly Front end?
4. What design process do you follow for a certain kind of a requirement?
5. Were you working with any product manager?
6. Have you done any Analytical user research?
7. Were you a part of A/B testing analysis?
8. How did you come up with a specific way of user research? Who was responsible for A/B testing suggestions?
9. Mention your recent project where you followed the design process?
10. (Followup Question)To what level did you understand the functionality of the application?
11. Do you have any experience developing an analytical dashboard?
12. How did you manage to get the right insight from the analytical data shared with you?
13. How did you manage to create a system where you able to provide the all analytical data to the users in graphs/pies/lines?
14. Can you talk about the dashboard you created and what was user measuring or tracking?
15. We are looking for a designer to simplify all the complex analytics data to users with the major coding block?
16. In what format did you provide the data to developers?
17. What languages coders were using(if you remember)?
18. If things go well would you be comfortable working with developers with a lot of technical blockers on the way due to analytics tools which have a lot of design boundaries?
19. Did you face situations where due to technical infeasibility you had to go back & reiterate the design?
20. How would a figure out a way to find a solution to issues where technology is having design boundaries?
21. What are the best practices you try to follow(for analytics)?
22. Is there a best practice for like when you use bar graph/pie charts/lines?
23. How you put all that complex data on a page?
24. What UX research methods you have been exposed to so far?
25. Do you have an understanding of when to use what UX research method?
26. Do you have experience with usability testing?

**PO**

**Role**: Product Owner

**Client**: McKinsey

1. Tell me about your previous assignment with Nagarro & what was your role
2. Tell me about your previous experience
   1. How did you guided client to decide MVP
   2. What was your role post MVP
   3. How do you manage requirements coming from different client i.e. how do you plan the release when requirements are coming from multiple stakeholders
   4. If there is a urgent requirement from your client & you had already planned the next release, then how would you handle the situation
3. What was the release cycle in your last project? How did you ensure that you are warranting enough value in every release?
4. Case Studies –
   1. A startup company is looking for building a job portal and have selected you as their Product Owner. How would you go about building the job portal?
   2. A website viewership has gone down by 20%, however the research team has confirmed that there is no issues with the content. How can you increase the viewership of the website as PO?
5. Your frontend team is moving faster than your backend team. What strategy will you adopt to keep your frontend team moving and not wait for backend team?
6. A company wants to build an app for a blind person. If you are the PO for that application, what features you will build?

1. As a PO, how would you help a client transitioning from traditional waterfall methodology to agile based implementation?
2. What are different ceremonies of Agile? Which one is your favorite and why?
3. Would you make a decision if there is a conflict between / amongst stakeholder? If yes, why? If not, why?
4. What personal traits you have or you think you need to be a PO?
5. How will you handle a difficult stakeholder who is not willing to listen to you?
6. Describe your last two failures. What learnings you had from those failures?
7. Your team is not sharing things (failures) with you and trying to manage them on their own. You got to know of one such failure which put you in the bad light in front of all stakeholders. How will you handle the situation?
8. What is good about playing a dual role of Scrum master and PO?
9. What are the challenges that you will face while playing a dual role of Scrum master and PO and how will you address them?
10. How do you ensure that a story is good and ready to be picked up by the team?
11. Mistakes PO can make in a team

**FE (HTML, CSS, ReactJS)**

McKinsey Interview Questions: -

1. Brief introduction
2. How to design responsive layout of grid structure.
3. Angular vs React which one you choose if you think on perspective of project architecture.
4. What is Saas.
5. What are the benefits of SaaS over CSS?
6. How to create mixins in SaaS and what are the use cases.
7. What is the purpose of using PropTypes in React?
8. Difference between position: absolute and position: relative.
9. What are the new features in ES6?
10. Difference between let and const.
11. What the units in CSS (like px, rem, VW).
12. Difference between px and rem.
13. If you have used different font sizes on a page and on zooming the page you want to increase those font sizes by 20% than their original size. What are the ways we can do this?
14. How can we handle caching issue in any application on production site without reloading the page?
15. What is z-index.
16. How to include icon like email in a page in an application?
17. What are the ways performing which we can improve the performance of an application?
18. One coding assignment to be written on whiteboard.

**PO**

**Role**: Product Owner

**Client**: McKinsey

1. Tell me about your previous assignment with Nagarro & what was your role
2. Tell me about your previous experience
   1. How did you guided client to decide MVP
   2. What was your role post MVP
   3. How do you manage requirements coming from different client i.e. how do you plan the release when requirements are coming from multiple stakeholders
   4. If there is a urgent requirement from your client & you had already planned the next release, then how would you handle the situation
3. Scenario based question & role play
   1. How would you suggest to client, what should be the MVP
   2. How do you decide which would be the 1st user story
4. How do you estimate a story
   1. Role of PO during estimation
   2. Role play during estimation
5. Give example of a user story and acceptance criteria
6. Role of a scrum master and when should a scrum master be introduced
7. Where do you see yourself 2-3 years down the line

**QA**

1. Difference between Post and Put

2. Which request is created when we post a message

3 Which http request is created when we Put a message

4. If we set a get request and instead of Get we provide “Post” what will be the error

5. Which project worked upon (Mainly framework used)

6. In rest assured,

How to get the value of the id of an emplyee in a json array like emp{{id:"",name:""}{id:"",name:""}...so on} say we need to extract 50th Name

7. How do we handle oAuth in Rest Assured

8. How do you handle certificate in rest assured

9. How to handle WebPopup in Selenium (driver.switch.to()) with ok / Cancel button

10 How to handle WebPopup in Selenium with 2 dropdown values which need to be clicked

11. what is 401 error and some other 200 ok, 404 – significance (Page not found)

12. Find element using javascript executor

**Front End (HTML, CSS, react)**

1. Flex use in CSS- how you will make flex layout for all resolution of screen and what should be the approach (desktop first or mobile first) write some code for that.
2. How to code for blog articles in a container for all resolution in such a way that all article don’t get wrap and appear side by side or up down to each other.
3. In the blog container page, if you have to load more page through the scrolling then what would be the best approach  and code in calling Api or fetching data from database or another server.
4. JavaScript Closure, Arrow Function, Promise
5. About SASS
6. Write a code for adding and removing an element from an array in way of stack such as :   
   stack.addItem(10);  
   stack.addItem(4);  
   stack.removeItem();  
     
   Ans-given:  Function constructor or Factory Function  
   **Function constructor**  
   var arr=[];  
   function ArrImp(arr){  
      this.arr = arr;  
      this.addItem = function(ele){return arr.push(ele);}  
      this.removeItem = function(){return arr.pop();}  
   }  
   var stack = new ArrImp(arr);  
   stack.addItem(10);  
   stack.addItem(4);  
   stack.removeItem();  
     
   **Factory Function**var arr=[];function arrimp(arr){  
      return {  
               addItem: function(ele){return arr.push(ele);},  
                removeItem: function(){return arr.pop()}  
         };  
   }

var stack = arrimp(arr);  
stack.addItem(10);  
stack.addItem(4);  
stack.removeItem();

**Mobile QA**

1. Have you worked on Mobile app testing?
2. What is Native app?
3. What is Hybrid app and How it is different from Native app?
4. Have you worked on iOS? – Yes on iPad, then what was the resolution of the device?
5. Can you test something on safari on Andriod phone or some other plateform?
6. What will be the mobile specific test cases you will perform while testing an App.
7. What is Selenium? Explain it.
8. How would you find elements in Selenium?
9. How do you downloaded reports in Selenium?- My previous project related question.
10. How can you upload files on a website using selenium?
11. For reading excel you can use jxl why you used Apache POI?
12. Create a program for Factorial 4! .
13. What is Smoke Testing?
14. Have you worked on eggplant tool?
15. Do you know about Appium?
16. Have you worked on API testing?
17. What is recursion?
18. Please tell us about the test cases for Log In Page.
19. What happens if during you are Log-In and Internet connection goes off and But we got the API hit at backend, what will happen in this case? Will it let you Log in or something else?
20. Suppose you have raised a defect for ex. On iOS platform but later you found that the defect was not dues to application’s fault, it is because of the platform, what will you do in this case?

**Automation QA**

* Summary of work and ex and tools worked upon.
* What info would you need to start with Automation framework creation?
* Any experience in Accessibility testing and how would you approach it.
* Any experience in browser stack
* How would you do multi platform / multi browser testing using automation.

**Business Analyst**

1. Detail out your experience.
2. Explain the journey of your business analyst role.
3. Explain the movement from a Oracle consultant to a functional consultant.
4. 2 basic challenges faced as a business analyst? Tip: Don’t just focus on linguistic and geography as answer which is common. Focus on some real time project example
5. If stakeholders push for additional requirements during an ongoing sprint? Tip: Focus on quality as answer.
6. Onsite aspirations? Tip: Not for personal interest but as and required for company’s business
7. How to manage global stakeholders in different time zones and how to get consensus in such case?
8. What is user story and its components? Format of writing and how to define acceptance criteria? Real time scenario was given – bank account statement. Give its detailed user story.
9. Banking and accounting experience, if any?
10. How to slice and dice data using SQL.
11. Tableau experience and dashboard creation experience.
12. OBIEE experience and some details about the tool. Why it is different from rest?
13. PO experience and roles and responsibilities. Difference from role BA and PM.

**Product Owner**

Brief Description about the project and key people associated with the product development from Mckinsey perspective and their expectations

1. Give me your brief introduction of experience and project worked upon
2. Have you worked upon Dashboard and data validation and display on UI? Which tool you have used?
3. Tell me what was your roles and responsibilities when you acted as a PO and BA in your past project?
4. Tell me what will you do when you join our team as a PO right from the inception?
5. Major challenges you faced in your previous project and how did you handle it to success?
6. How will you track the team’s progress in a sprint and ensure any team member is laid back or not working as per the expectation?
7. Some SQL basic query questions
8. Questions on test case creation and execution
9. More scenario-based questions like what went wrong in the Sprint how to bring in front of the team- Retrospective meeting, Daily Scrum, etc.
10. Questions of Estimation of Stories- User Stories, Acceptance Criteria, Persona, Triggers
11. As Is , To Be Process, UML models, Requirement Elicitation and Management, etc.

Some HR questions to check if you are serious about the

**SSIS/ETL/Data Analyst**

a)Last Project Overview and kind of Work done b)Overall Experience and which all domains I have worked c)SQL Query for follow scenario:

I/p table : A column having 1 to 10 numbers i.e. 10 rows

O/P Table(2 columns):

Sum of even and odd numbers

d)Suppose client is sending excel to you on daily basis and format of excel can be changed on daily basis.How will you automate the same.

e)Suppose client has sent an excel to you, What will be your quality checks.

f) Suppose client tell you that he has budget of 2000 dollars and he needs to allocate it to 10 Customers ,How will you advise him to do this process.

g)SQL Query: List of dates of all the Sundays of last year.

h)Types of joins and business use in which different types of joins are used

**SQL**

1. Scenario:

Where we have table like below and we need to get maximum iterations for the individual drink

|  |  |  |
| --- | --- | --- |
| Queue | Drink |  |
| P1 | coke |  |
| P2 | coke |  |
| P3 | fanta |  |
| P4 | fanta | **Output:** |
| P5 | fanta | coke -4 |
| P6 | coke | fanta- 3 |
| P7 | coke |  |
| P8 | coke |  |
| P9 | coke |  |
| P10 | fanta |  |

1. What are indexes? Its use and types.
2. Use of triggers?
3. Rank vs dense rank
4. Window function
5. Difference between stored procedure and functions

**SSIS:**

1. Incremental loading
2. Lookup and fuzzy lookup
3. Scenario for SCD implementation
4. How to use temp table in SSIS.

**Salesforce**

1. Why there are limitations in Salesforce platform as compare to Java, Oracle
2. How can we overcome these limitations?
3. Unlike SQL, Oracle database, Salesforce SOQL doesn’t have Joint available, how can we overcome that?
4. How many type of relationships in SOQL and explain the difference between those
5. Syntax for querying master or child field in SOQL and what’s there structure in Apex?
6. Different tools for deployment and explain about ANT tool in detail
7. How to overcome code coverage issue while deploying with ANT tool
8. Best practices of test classes
9. Which components can’t be deployed using ANT tool
10. Difference between Classic and Lightning platform in terms of components. Explain difference between Visualforce pages and Lightning Components
11. What are the static tools available for Code review
12. Service and Sales cloud difference. Questions regarding Service cloud for Cases, Dashboards
13. Steps to create custom Dashboard.
14. Can we filter components in custom Dashboard?
15. Any hands on experience on Lightning component? If yes, explain.
16. How many look up or master details relationships can be created on an object.
17. While retrieving relationships in queries, up to what level we can extract in a single query.
18. What are the types of relationship in Salesforce? [ Explain both relationship]
19. What is the difference of Lightning and Classic salesforce?
20. Basics of Lightning App.
21. What are the types of Component in one bundle of Lightning?
22. What is the difference between VisualForce page and lightning?
23. Questions around the Governing limits and their solution/workaround.
24. Describe the use-case where you faced a governor limit exception and its possible solution.
25. Explain trigger and its various context variable.
26. Some conceptual question around Before and After DML operations.
27. Difference between New and NewMap.
28. Governor limits for: SOQL, DML (records + queries), Emails
29. How to avoid recursive loop in trigger?
30. Best practices of Trigger.
31. What are the asynchronous processes in Apex? [ Batch class, future method]
32. A use-case was given to provide the solution. [ pseudo-code was required]
33. Use-case Questions around Sharing and Permission.
34. Questions based on SOQL. [ A use-case was given and you need to give correct SOQL query]
35. Deployment using change-set, ANT, Salesforce DX.
36. Explain about the Rest API and Tooling API.
37. Some questions related to Workflow.

Some questions around triggers like of you have an update and delete trigger on an object, how would you avoid redundancy of data retrieval?

Questions about different licenses in salesforce and what customers get of they purchase community license?

Questions regarding governer limits and possible solutions for that.

Object designing like different relationships

Among objects in salesforce and a working example where you can apply that relation.

Why salesforce removed ‘ salesforce’ term from force.com? What it is all about?

How unit tests performed in salesforce?

**BA/PO :**

**Questions**

1. Tell me about your experience.
2. Where do you stay? How much time does it take to reach their office?
3. What challenges did you face  transitioning from business analyst => product owner => product manager role
4. Your stakeholders are asking to deliver product in 2 weeks and the dev team is saying 6 weeks. What would you do as a product owner?
5. Moving from web/ mobile applications to data will be boring. Are you comfortable with that?
6. How comfortable you are with SQL queries?
7. Suppose you joined a well-established scrum team, how would you make team agree with your thought process?
8. How would you go about new getting knowledge about the new domain?
9. At times there could be long working hours. Are you comfortable with that?
10. The difference in roles and responsibilities ( BA vs PO vs PM )
11. Your aspiration- as a learner and stability with the project.
12. Do you fight? To check if you are aggressive in terms of deliveries and making your point.
13. Estimation techniques used and their comparison
14. Challenges faced while working with diverse teams
15. Kanban, Velocity
16. Agile estimation
17. Different SDLC approaches worked on till date.
18. Sample scenario given to see how you estimate
19. Client pushes a lot, how do you ward off the pressure

**PLSQL Questions asked in Interview**

1. Brief introduction of the work done in previous projects.
2. Types of scripts of PLSQL written so far.
3. Difference Between Procedure and Function
4. %ROWTYPE and %TYPE
5. What is package and why we use package?
6. Name some packages provided by Oracle
7. Given a scenario and asked to write PLSQL code for that
8. Cursors – What is cursors and its type?
9. How to do debugging in PLSQL Code?
10. Asked to write SQL query for below scenario –

Given a table Emp(EID, ENAME, ManagerID), asked to display EID with their Manager name and display NULL if any EID don’t have Manager.

1. Exception Handling (mainly user defined)
2. Bulk Collection.
3. Given two tables A and B having only one column each with value ‘1’ in all rows, 3 rows in table A and 2 rows in Table B. Asked to give the result of all Joins (Cartesian product, Inner Join, Left Outer, Right Outer, Full Outer) on these two tables.

**QA Automation**

1.           Tell me about yourself ?

2.           What is Page object model and page factory model?

3.           Tell me about your framework architecture and folder structure?

4.           How to select elements from drop down and if select tag is not available then what approach you will apply?

5.           How to open browser in particular size ?

6.           What is TN ? Different annotation? Order of execution ? how TC dependency implemented using TestNg?

7.           String base program-

A.           I/P – We are automation engineer O/P – engineer automation are We

B.           I/P – 54679 O/P – Fifty four thousand six hundred seventy nine

C.           I/P – 3214 O/P – Print all possible combination which these four digit like 4123,2134,etc

8.           Action classes in selenium? What is use of build() and perform() ? Can we use perform() without build()?

9.           What is BDD? Why we use BDD? What is difference between scenario and scenario outline?

10.         How feature file bind with definition file in spec flow? What approach Spec flow use to bind

**Sitecore**

1. Total experience and previous project work.
2. Reason for working in Sitecore and not other CMS tools
3. Reason to update to Sitecore 8.2 from 8.0? What are the benefits to business??
4. Steps to update to Sitecore 8.2 from 8.0
5. Steps to add new CD server. Is sitecore instance required at CD server?
6. Difference b/w shared and final layout.
7. Algorithm to sort array of numbers? What sorting algorithm has least complexity?
8. If A=5 and B=7. How to switch values of A and B without using third variable?

**Backend**

Panel: 2 persons

Duration: 2+ hours

Questions:

1. JAVA
   1. Which version of Java you have worked on? - I told Java7 and Java8 both
   2. Java 7 and Java 8 new features? Why they came into picture?
   3. Why Functional Programming came into existence?
   4. Stream API conceptual questions
   5. Can we have private constructor in java?
   6. Internal working of HashSet and HashMap?
   7. JVM Memory architecture
   8. Significance of OutOfMemoryError
   9. Throw early catch late exception handling paradigm
   10. Custom exceptions
   11. Multi-threading concepts
2. Projects worked on
3. Spring
   1. Design Patterns in Spring?
   2. Dependency injection logical question
   3. A lot of questions on Spring Security.
      1. Authentication vs Authorization?
      2. Ways to secure REST API's?
      3. Which Token based Authentication technique worked on?
4. Algorithms
   1. Find Anagrams of a string.
   2. Some dictionary question.
5. Unit Testing Framework used?
6. CI/CD techniques worked on?
7. Any NoSQL database worked on?
8. Javascript event looping

Note: The interviewer was more interested in knowing "Why sort of questions, Why things came?" instead of "How things work?".

**.NET Developer**

1. Brief technical introduction.
2. Major change in .Net.
3. Types of project and technology worked on.
4. Why react is better than other.
5. States in react.
6. Uni-directional biding vs Bi- directional binding.
7. DotNet core benefits.
8. Description of AI based BOT(I have created a chat bot for my client).
9. Ways to communicate between components in react.
10. IIS configuration.
11. Is it possible we can run our .Net app in UNIX/LINUX directly?

**ETL Developer**

* Detailed introduction of the project- all layers, tools etc
* how to handle multiple flatfiles in single informatica mapping.
* Performance Tuning of Lookups
* How to maintain pk,fk relationship while loading the data in informatica.
* performance optimization of informatica
* how to merge different databases using informatica
* Load strategy related questions
* versioning
* 3rd highest salary
* senerio on dense rank and rank
* how to get the 3rd field in unix
* different ways to create blank files
* diff b/w grep and find

**Question asked by McKinsey  for ETL profile**

* Started with brief introduction and Project worked upon.
* Suppose Clients asks to you deliver one functionality in 8 Weeks, but you are sure it will take 12 weeks to complete , How will you manage or convince client to extend timelines ?

**SQL ::**

* Delete duplicate rows from Table
* Given a table, and asked what would be the value of RANK and DENSE\_RANK.
* How can you Tune slow running SP?
* Ways to find slow running SP
* Column Store Index and How they are different from other index in terms of their storage.
* Given a Table Like , Find all dept which are participating 70% of total Cost allocated

|  |  |  |
| --- | --- | --- |
| Dept ID | Dept Name | Cost Allocated |
| 1 | A | 10,000 |
| 2 | B | 20,000 |
| .. | .. | 50,000 |
| Nth row | .. | 5,000 |

* One query in which Interviewer using avg in where clause , and asked output  ?

**SSIS ::**

* Performance tuning of ETL packages
* Merge Join vs Look Up
* Blocking and Non – blocking Transformation ? why there are termed as so ?
* Can we do inner Join in lookup Transformation ? Explain in which scenario it will give problem.
* What is the diffetence between rank(), Row number() & Dense Rank()
* What is CTE
* What are the different type of Joins
* What is Pivot Table
* What is Unpivot Table
* What are the issues you have faced while loading Excel Files In SSIS
* What all sources you have used in ETL
* What all transformations you have used in SSIS

**iOS Lead**

1. Show passion & contribution to open community
2. Previous 2 projects. More emphasis on recent
3. Sprint initiation-end & your contribution
4. Unit Test
5. UITest
6. Code Coverage & tools
7. Test Coverage & tools
8. 2 other technologies apart from your existing involvement
9. Technical question related to Swift

Proficiency in C

**Java Lead**

1. Technology used in last Project.

2. how have done docker implement .

3. How you have done logging, any logging framework.

4. once application is containerize with docker it will be in docker run, How then generate a log file for that.

5. why Authentication required, How have you done that.

6. What is the need for Domain driven design.

7. ORM libraries used.

**Selenium**

1. How to handle dropdowns?
2. What are the different kinds of pop ups? How to click a checkbox in a pop up?
3. How to drag and drop a component?
4. How to maximize a window?
5. How to set custom width height of the window?
6. How to find an element using JavascriptExecutor?
7. TestNG: How to disable/not run a test?
8. TestNG: How to run tests in parallel?
9. Which framework have you worked on?
10. How do you create reports in your framework?

**Core Java**

1. What is a constructor? Its use?
2. What is method overloading and method overriding?
3. Difference between a class and an interface?
4. What is final? What is finally?

**Logical**

1. How to swap x and y values without using a temporary variable?
2. If 12=6, 6=3 then 10=? Given that ? is not 5 here.
3. Answer: 3 (12: twelve: no of characters =6, 6: six: no of characters =3, 10: ten: no of characters=3)
4. If there are 9 balls in which 8 balls are of same weight and 1 ball is heavier. There is 1 weighing scale, in how many minimum possible combinations can you find out the heavy ball?
5. Answer: 2 (Make 3 pairs of 3 balls each)

**Other questions:**

Any hands on in Mobile Testing?

Any hands on in API Manual/Automation Testing?

**Role - Back end developer - Java**   
  
- Kind of work in your last project  
- Which spring version you have used, Are you comfortable with spring 4 ?  
- How to write filter in java  
- Service class is singleton ? what other types are there ?  
- You have used annotation or xml based in your project

1. How to find middle node in given linklist?
2. Write a program to convert a given number into words?
3. Write a program to return key corresponding value “Arun” in Map? Map can have other map object. Map <String, Object> mp = new hashMap<>();
4. [Difference between sums of odd level and even level nodes of a Binary Tree](http://www.geeksforgeeks.org/difference-between-sums-of-odd-and-even-levels/)?
5. How you will implement security for an application? Proper design and implementation.
6. Reverse a number without using data structure and Memory?
7. [Printing brackets in Matrix Chain Multiplication Problem](http://www.geeksforgeeks.org/printing-brackets-matrix-chain-multiplication-problem/)?
8. Multiple questions on spring framework?
9. Questions on restful webservice and soap service?
10. Question on database designing and query optimization?
11. Questions on stored procedure implementation?
12. There are multiple question on sceneries  based application designing and development?
13. How you will do profiling in spring boot based application?
14. Questions on spring boot based application?
15. Questions on hibernate implementation?
16. If your application is connecting with multiple database then how automatically database create based on input client request  ?
17. Question on software architecture design principles?
18. Questions on design patterns and usage with example? Write code for design pattern?
19. Implement security for Restfull webservice and manage authorization?
20. Multiple questions on Thread in java?
21. Questions on applications performance, how you will manage application performance?
22. End to End application design with proper solution and writing unit test cases?
23. Selenium integration with TestNG framework?  Program.
24. Question on JMS, messaging queue and Kafka  ?

**Angular 4**

1. Years of experience in Angular 2/4
2. Comfortable in creating components and Modules.
3. Lazy Loading
4. IDE used
5. CSS, responsive design
6. Comfortable if backend is Nodejs/java
7. Browsers that you have used for development
8. If a file is not there in npm, how come you can use it.
9. How to pass data between different controller.
10. Digest cycle
11. How to create custom directive
12. Typescript OOPS concept.
13. Singleton pattern
14. Project folder architecture
15. Routing
16. How promises works in angular
17. What are all the steps we should take to deploy our code on server
18. Watchers in angular js
19. Closures in JavaScript
20. what all news things got introduced in angular 2 from angular 1
21. All about observables
22. What is the use of dockers in our application
23. Unit testing for service and controller
24. 1) what all new things introduced in angular 2 from angular 1
25. 2) what all packages used in angular
26. 3) how can we setup rest api using express in node
27. 4) performance wise which one is good angular 1 or angular 2 and why
28. 5 ) for unit testing what I have used in my last project
29. 6 ) core java oops concept

**NodeJS**

1. About yourself
2. Idea about ORM
3. Idea about docker/containerization
4. Version of node
5. Which framework of node I worked upon
6. CI/CD
7. How to handle some uncaught exception in node and send user an error message/info
8. Bootstrapping of node app
9. Debugging of node app
10. REST APIs (stateless or state full)?
11. Which tool/framework I use for NodeJS testing?
12. Mocking / stubbing tool/module for testing

**ReactJS**

1. Difference between javascript and jquery
2. Explain in detail about Browser lifecycle

(example:- what will happen in the browser after we hit some url)

**Java**

1. Tell me about yourself and technologies you have worked on.
2. Architecture of last project.
3. Brief about Drools.
4. Abstraction in Java.
5. Serialization.
6. Deadlock and how to create deadlock
7. Spring Modules worked upon.
8. @PathVariable, with code
9. AOP and how it works with real time project example
10. Transaction management in  Hibernate.
11. OneToMany mapping n hibernate
12. What is DevOps.
13. How to maintain Application standard? (Expectation was to answer Unit testing, Integration testing, Pen testing, Automation testing )

**QA**

What is jvm & its functioanlity?

How java is platform independent?

What is run time & compile time polymorphism?

Difference between Abstract class and interface?

Access modifiers?

Use of this, super, final keywords?

Usage of finalize() method?

Locators in Selenium?

How to select a value from dropdown?

A program to sort the integers in descending order w/o using collections?

A simple program in webdriver to open chrome & perfoem basic operations & assertions?

Usage of AssertEqual, Asserttrue, AssertFalse?

**docker**

basic about infrastructure

how to write a docker file

what is layering in docker

why we have workdir

what is the difference between command used with or without ""(double quotes)

have to write the dockerfile and the questions arisen from it.

can we change the name of Dockerfile, if yes how

difference between cmd and run command

how you will open a port in docker

kill vs stop command

how to stop a running container and subsequently remove the container

why we separate commands with multiple & structures

how to make 2 sevices communicate in docker compose

how to access services outside from containers in docker compose

**kubernetes**

service vs pod vs deployments in kubernetes

moving Images from local machine to minikube(kubernetes)

how to communicate with kube cluster

ssh into kube container

**(Java) for South Africa**

Tech stack you worked and project descriptions with role and responsibilities.

Rest API flow and integrating security and guidelines while designing.

JWT security implementation and how JWT token decrypts .

When a client consume a rest URL and how the authentication works.

What we store in Header.

Do we store JWT token in database.

How you create Jenkins pipeline and configures it.

About micro services and accessing service.

Knowledge on Spring boot and deployment.

Git rebase and Git Merge.

Code commit process.

**(Angular) for South Africa**

1. Introduction about current project
2. Technologies used in the current project and in past experience.
3. How do you manage sprint and releases in the current project.
4. Code commit process.
5. Testing strategy in your current project
6. How do you handle hot fixes in a release?
7. Describe your current project structure.
8. Introduction about yourself and your experience.
9. HTTP rest API calls.
10. How to do Unit testing for HTTP calls.
11. Continuous Integration.
12. Git rebase and Git Merge.
13. Code commit process.
14. TDD.
15. How to merge release branch bugs to master branch.
16. Optimization of code.

**React JS**

1. About my last main projects.
2. How data is updated using Angular JS? How will you show pop-up by clicking a button on a page?
3. What is the difference between Angular JS and React JS ?
4. How 2-way data binding works in Angular JS?
5. What are the lifecycle methods of React JS? Which one is mandatory?-render
6. How to submit form through React, JS and html? Follow up questions on the same.
7. What is repaint and reflow?
8. If you have a grid of elements with rows and columns, how would you make a search bar , for highlighting the element with a specific color after matching the substring written in the search bar?
9. What is the use of writing bind while doing function call in react js? Can we write something else instead?
10. What is the use of using arrow notation for function in ES6? Does passing ‘this’ have any advantage?
11. How to use Javascript to get an element in the DOM, other than using getElementById or class?

**React JS**

What are the different types of components in React JS and which type to use when?

Component lifecycle  
In which phase of lifecycle we should set the state and different ways of setting state.

What if we set the state in render method, will it work or throw some error.

Write a small component to increment counter on click of button.

Have you used componentDidUpdate

SetState is sync or async

What if I set this.setState({counter:count++}) 3 times in same function

Which library used for routing

What all ES6 features have been used such as spread operator, fat arrow etc

Shallowcopy and Deepcopy

How to achieve deepcopy by using es6

Questions on Call, apply and bind

Experience on CSS and HTML.

Overview on preprocessor Sass

Using the flex layout of css to design the web pages

Responsive websites  
What will you preffer rem, em or %

**React JS – Trishala Saini**

1. About my last main projects. One task you felt which was challenging in your experience, how you achieved it? Follow up questions on that(Angular JS).
2. Why you used $timeout instead of setTimeout ?
3. How is React JS different from Angular JS?
4. How did you do code reviewing in your projects.
5. If you have to start a project, what will be the workflow of the project?
6. What if 5 developers have committed all at once on git, what steps will you take to correct that on git?
7. What is gitflow?
8. How would you reduce page load time ? What steps would you take first?
9. How would you implement jQuery using javascript? - createElement
10. What is git branching?
11. Have you worked on Node JS?
12. What is redux used for?
13. What is the react lifecyle?
14. Some follow up questions on the above content.

**Java**

* Explain previous project in detail.
* Frameworks used in past
* Layers of spring worked upon
* Kind of security used for web services
* Understanding of Spring AOP, Advice, aspects etc.
* How have you done spring MVC configuration in your projects.
* Spring Interceptors
* How Json objects are converted to java objects(in context of HttpMessageConvertors)
* Spring Controllers
* Hibernate best practices
* Loading of entities in hibernate (Lazy, Eager scenarios)
* When do we get LazyBeanInitializationException and how to resolve it.
* How CRUD operations are performed using entity manager.
* How to create a repository
* Program for sorting using any algorithm.

**Automation QA**

What is a nested class?Can a nested class be protected?if yes/no,why?

How do you validate the response of a POST request?

How to get the value of the id of an emplyee in a json array like emp{{id:"",name:""}{id:"",name:""}...so on}

How to handle a popup in javascript?

How do you refresh a page in javascript?

How to verify a text in bold in selenium?

**Sitecore**

1. About my last project
2. What I did in Sitecore Customization?
3. Why to do migration from 7.2 to 8.2 ?
4. How to create component ? e.g. slider
5. How to manage media files?
6. How to add new CD server?
7. Glassmapper
8. Custom Datamapper vs Glassmapper
9. Branch Templates
10. Buckets
11. Publishing targets
12. Sitecore Config files
13. Write Pesudo code for Converting  a number to English string. Example: Input-756 , Output- Seven Hundred Fifty Six
14. Reasoning for the use of technologies in my last project. E.g. Akamai CDN, OOYALA Player, AWS cloud.
15. Experience in CMSs other than Sitecore. I told Umbraco, NopCommerce, and Pimcore. Then He asked me to explain each CMS and its comparison with Sitecore.
16. Session Management in Sitecore
17. Experience in AZURE Sitecore or any other cloud setup
18. Unit Testing and Performance Testing.

**Automaton QA(Tina Dhankhar)**

1.Test cases for a boat.

2.Flow of Continous Integration after deployment.How to do that in Jenkins.

3.Explain the automation framework.

4.Program to find the occurrence of a character in a string.

5.REST APIs.What is statelessness?

6.Actions in Selenium,

7.How to handle a dropdown in selenium.

8.What happens in backend when you hit a url.

9.How to get the return type in java script.

10.How to resolve a promise in java scipt.

11.Appium Questions.How to do setup for iOS.

12.Order of execution of testNg annotations.

13.Can we have multiple testNg.xml files in a framework?

14.Have you worked on BDD?

**Reactjs Frontend – Chetan with Onsite**

Precise description of recent work

Several Types of components in reactjs

Difference between reactjs and angular

Change detection strategies reactjs and angular

How pass the state from top level components to grandchild components in reactjs

How to use props

What is redux. Usage of redux in the state management

What is this keyword in JavaScript

Difference between apply and call functions

Design Patterns in Javascript such as singleton, PubSub

Composition and Inheritance. Which pattern is recommended

What are commonjs and amd

Explain closures

Sass Mixins, nested, variables , import

Aria tag in html 5

Importance data attribute in html

**SQL Questions:**

What type of Joins in SQL and differences.

Difference between Stored procedure and Functions.

Is Data manipulation possible with stored procedure and functions both.

Difference between partition by and group by clause.

Use of ranking function and tell any scenario for rank and rownumber function use.

How to get latest record from Order table based on latest date.

What is bulk insert and how it is different from simple insert.

How to do bulk insert from text file through SQL.

What does merge join and how to do through SQL.

Indexes – Type, Difference, Advantage and disadvantage.

What is covering indexes.

General approach for performance tuning of slow running query.

What is use of Execution plan and how to read it.

How many non-clustered indexs we can have.

Windows functions in SQL.

**SSIS:**

Transformations which you mostly used.

What sources you used for data load.

Five shortcoming of SSIS over SQL query or vice-versa for integration.

Incremental load approach for update existing record and insert new record.

SCD Type 1 and Type 2 difference.

Performance approach for SSIS.

5 scenarios while loading data from text files and how did you handle it.

How to skip rows in text source file while extracting data.

What does merge join in SSIS.

How to handle date format issue in SSIS.

How to use CSV file where extra commas are there.

**SSIS/SQL**

1.  Joins

2.  Partition in Row number function

3.  Difference between SP’s and Functions

4.  Why SP’s are faster ( Compilation in Execution plan)

5.  Merge Function

6.  Query Optimization

7.  Rank and Dense Rank

8.   Indexes

Topics based on SSIS

1. Lookup Transformation
2. Incremental Load
3. Data Conversion

**Automation QA**

1. About youself
2. Explain Framework
3. API types
4. POM
5. How to handle dependencies in Junit
6. Covert 123456 into words “One lakh twenty three thousand four hundred and fifty six”.
7. How to get repeated character in string “abcdakjhfd”
8. Difference between Soap and Rest Api
9. How to select value in dropdown using selenium
10. How about learning new tools

**HTML,CSS**

1. What is the Difference between relative, absolute and fixed css properties
2. How to design responsive layouts using flex and grid
3. How to improve website’s accessibility.
4. Difference between promises and observables.
5. Design pin interest type layout
6. How to modularize javascript files
7. Explain different type of components in react
8. Benefits of using Sass/Less
9. What is preferred to use webpack, gulp or grunt.
10. How angular is different from react.
11. Implement inheritance in javascript both ES5 and ES6 ways.

**Reactjs Frontend - Chetan**

Most of the questions were purely reactjs. Hardly any questions on core concept of JavaScript.

What are the different types of components in reactjs?

Component lifecycle

Do functional components have access to lifecycle compoenents

What all ES6 features have been used such as spread operator, fat arrow etc

When to use functional components and when to use class components

Overview of redux and what are its benefits

What are the benefits of using Yarn over Npm

Small coding assignments to be written on the white board.

Experience on css.

Overview on preprocessor Sass

Using the flex layout of css to design the web pages

**HTML & CSS questions:**

How to use retina images in html/CSS. What's the approach?

What's the use of ‘srcset’ in html?

What's the approach for responsive design?

How can we use high resolution image in both desktop & mobile?

Difference between CSS flex, grid and floats. How they will work?

What are the inline, inline-block & block elements in HTML?

What are the semantic tags in HTML?

Difference between '%(percentage)' and 'VW' units in CSS?

Difference between ‘local Storage’ and ‘session storage’?

How we can handle caching issue in any application?

What is flex? What are their properties and their values?

How we can make grid layout without using any library?

What is CSS grid? And their limitations?

Can we achieve Pinterest/Masonry style layout by CSS only? If yes, then how?

**PL|SQL**

Most of the questions were scenario based. There main focus were on PL|SQL but they asked few informatica questions as well:

Procedure, Parametrize procedure   
How to select and process records which have millions of rows  
How to handle exceptional handling  
Cursors  
Nested cursors  
Try catch  
Packages in pl/sql  
Debugging  
How to store the erroneous records in different table and correct record in some other table.  
How to link to different server in oracle

**Informatica**  
Difference btwn router n filter  
Lookup  
Souce qualifier  
Sequence generator

**Sql**  
How to delete duplicate rows using sql query

**ETL/Informatica Dev**

1. Informatica (only 1 ques) : We have 1million records in Source to be inserted in target table. Informatica workflow is started and it wrote 10000 records to the target and failed. Now we need to prepare a logic/strategy, so that during re-run these 10000 records are not read from Source again and remaining records should be picked.

NOTE : 10000 records should not be read from source during re-run  this is the main logic to be developed.

1. Oracle PL/SQL : panel wanted to know about my expertise level. No questions asked.
2. Project Specific(~30mins) :

* Entire lifecycle of datawarehousing :

How to read data from source, how to process the data, how reports are generated. I explained different ETL layers and my current project experiences.

Why Slowly changing dimension1 or 2…. Lots of basic ques around my project experience.

* What is Data Lineage document, requirement document etc.

1. You are working with business team and need to transform 10 excel reports into dashboard (using ETL/reports) – explain entire strategy and questions to be asked from business
2. There were only 1-2 technical ques and they spent entire time understanding my project experience (with small questions around it)

**ETL QA (14 November – Ankit -- Ritdhwaj Singh Chandel )**

1. About your self
2. ETL Tools you have worked on
3. Architecture of warehouse of your last project
4. Scenarios while testing ETL?
5. Basic SQL’s Questions: -
   1. Joins more than 3 tables
   2. Finding the no of repartees from 3 tables—required to use join and group by
   3. 2nd highest salary from employees table
6. Automation in ETL –
7. How will you mask your data while firing test queries?
8. How will you find rows with only numeric data in a column with varchar field?
9. How will you handle popups in selenium?
10. Web services testing- what all kinds of requests are used
11. SOAP UI- how much experience?

**Angular**

* Basic introduction
* Dependency injection
* Project work flow
* Project environment setup
* What are the request methods in rest
* Difference between put and post
* Authentication and authorization
* In depth discussion on authentication and authorization
* Git rebase
* Process of pushing code to master branch.
* Merging all commits to one in git
* CSS difference between relative and absolute
* CSS box layout
* Sass basics
* Observables

**Android**

* What kind of projects worked upon.
* Touch ID implementation in Android.
* Jenkins and Git experience.
* How to save password in Android Application.
* Questions related to UTC.
* Design patterns worked upon.
* How to store bitmap/images to use application offline.
* ReactiveX programming.
* Other general question like Knowledge about Kotlin, project experiences, How to check quality and performance of the android application etc.
* About Touch Id.
* Secure way to save password in device.
* Best practice of coding
* About Junit
* About Jenkin
* GIT – How much experience you have?

**Front End**

1. 1.brief introduction.
2. 2.How to debug if any script library is stopping a page from loading.

3. In a container element how to dynamically pass a random number and created similar number of child blocks using css only?

4. What is event bubbling?

5. What is sass?

6. Write a program to track number of click between 2 buttons.

---Modify the program to track first clicked element.

7. Difference between async and differ

8. Grid layout

9. How to expand outer container to more than 12 sections in bootstrap.

1. Brief introduction.
2. Why angular 1.x is slow?
3. What is a directive?
4. Difference between angular1.x and 2.x
5. Digest cycle in angular1.x
6. Components and its advantages.
7. Webpack configuration.
8. Knowledge of any other framework?
9. How many kinds of inheritances are there in ecma 2015?
10. Media query and its usage
11. If we have to change a JS calendar library according to our requirement, how would you do that?
12. What is inheritance in JS?
13. Can we say JS is an OOP language?
14. Introduction
15. In angular how can we run something before view or controllers load
16. Difference between run and Differ
17. Karma jasmine configuration
18. How to unit test using karma-jasmine in angular1.x and 2.x
19. How to mock localstorage in unit testing
20. Usage of webpack
21. Usage of gulp and grunt
22. How to secure your SPA?
23. Have you done penetration testing?
24. Have you created test cases?
25. What is XSRF?
26. Interceptors and its work.

**Product Manager:-**

1. Tell me about yourself
2. How do you handle stakeholders having conflicting requirements?
3. How do you handle stakeholders wanting their requirements ready first instead of another stakeholder’s?
4. Have you handled difficult stakeholders earlier in any of your projects? How did you handle them?
5. Explain the entire cycle for any of your projects and what were your responsibilities at each stage you were involved in.
6. How did you handle test planning and test strategy in your projects and how much was your involvement in testing?
7. As you have mostly worked in web application projects where UI is given supreme importance, are you ready to work on a data intensive project as the focus of projects here is more on accurate data than on good looking UI?
8. Have you worked on any data warehousing project? Do you know SQL?
9. How do you handle last minute changes in requirements / acceptance criteria?
10. The biggest challenge every project of ours faces is that the Product Owner does not push back the last-minute requirement changes to stakeholders and just tells developers to complete everything by the date dictated by stakeholders. Will you be able to push back to stakeholders when really necessary?
11. We need a Product Owner who also maintains a checklist and keeps reminding our developers to do Unit Testing and Code review every time a requirement changes suddenly because developers might want to escape that. Will you be able to strictly monitor that checklist (testing / code reviews etc.) and push back to developers and testers when needed ?
12. How do you plan releases and how did you handle deployment of different releases in any of your project?

(Frontend Developer Vishal Kumar – Sumit Bajaj) on 27th Oct,2017

* Brief introduction.
* Canvas and SVG.
* Vertical and center alignment css.
* Flex box css properties.
* Media query.
* How to create responsive design.
* AJAX calls. CORS handling.
* JSONP
* Directives.
* Difference between div and section html tags.
* Webpack, gulp, babel.
* Did you worked CSS3 preprocessors (like Sass or Less) ?
* ES6 features.
* React Redux

(Angular4 Aashish Nagpal – Abhishek) on 10th Oct,2017

1. Brief Introduction.
2. Experince in angular
3. Experice on css and its tools
4. Expirence on web pack
5. Which vesion controll tool have you used
6. Have you built test cases
7. What frame work used to build test cases

(Angular4 Renu Gupta– Mahesh) on 6th oct,2017 -Rejected

1. Difference between put and post
2. My experience in working on Vuejs
3. How is Angular2/4 difference from AngularJS 1.x
4. What Web security you take care while coding?
5. Difference between Authentication and Authorization
6. What process is involved when a user wants to login to an application (mainly he wanted to know about csrf/bearer token )
7. Intro about my current work

(Angular4 Stuti – Mahesh) on 5th oct,2017

1. Brief Introduction.
2. RESTful API.
3. Difference between put and post.
4. Difference between component and directive.
5. Why angular and react are using components. What is your call for the same.
6. CSS and preprocessor directives.
7. How much comfortable you are in HTML CSS along with Angular.
8. Which version control system you have used and further discussion on the same.
9. Detail discussion about routers in angular.
10. Component Lifecycle.

**PO – Sumit Sehrawat – Chirayu – 5th Oct 2017**

Below are the areas he checked me on:

* Professional Experience Overview
* My role and responsibilities in the last project, team structure, communication medium, etc.
* Product Backlog management
* Banking experience

**Drupal (Ujjwal – Vivek – T&D)18th Sep**

1) What is entity?

2) What is bundle?

3) Differentiate entity & bundle with example?

4) How to increase website performance?

5) How to create custom URL through custom module in Drupal 7 & 8 ?

6) what is hook & tell about hook\_permission ?

**QA (Yogita Chandra – Mohit Sharma – T&D) – 13th Sep**

Brief intro

-Questions about android .

-Business test cases on an android phone.

-How do you collect logs.

-How do you identify errors.

-What will you do if application crashes on opening in landscape mode?

-You have created a boat and you want to check that it does not leak .Only one best test case with minimum resources.

- given a scenario  pop up with two checkboxes and ok button in javascript, how will you automate when there are no locators in this case.

- how will you automate key actions using selenium and java?

- How will you automate to upload a file using selenium?

- What framework do you use and why?

- Tell me about POM.

- How do you initialize elements in page?

- How do you locate elements in POM?

- Dummy framework for a test scenario using POM.

- Java try catch and final questions.

- Java questions

- Another java array  problem , Give a generic solution for the problem

  You have an array for example [1,2,5,10] – result should be 2\*5\*10, 1\*5\*10, 1\*2\*10 , 1\*2\*5 so final result will be 100,50,20,10.

- Interviewer mentioned that he is not asking any  questions on angular JS, Cucumber, Protractor and BDD as it is not mentioned in my CV.

- Also he mentioned that you seem to be a very good lead with good analytical skills but this position is for individual contributor , will you be okay with that?

**Java Developer (Gaurav Shukla)**

1. Tell me Something about yourself (Mostly Want to Hear the Technical Stack.)
2. Tell me About your Previous Project?.
3. Asked question from Previous Project Technology? ( Viz. Spring Integration)
4. What is Spring Integration?
5. What are pipelines?
6. What ORM Frame work you have worked on ?
7. What is Difference between JPA and Springs JPA?
8. Write a query in Springs JPA which finds top 3 Employees from 2 tables with Employee and Rank.

**Angular/JS (5-Sep)**

1. Tell me about yourself
2. What is a Dependency Injection and where do you use it in Angular 4 ?
3. Develop a code in Angular 4 to display a table showing rows containing account details (like name, type of account, balance, contact etc) of various account holders. The data should be a mock json.
4. Explain the above code.
5. Did you worked on unit testing ? Which libraries are used for it?
6. Write and explain the approach for a unit test case of the service used in the above code.
7. Have you worked on CSS3. Did you worked CSS3 preprocessors (like Sass or Less) ?
8. Do you have experience on GIT?
9. Do you use webpack?
10. Explain the configuration and how did you use webpack ?
11. Explain the ways in which controller can communicate with one another. Which is the best out of them?
12. Have you used Continuous Integration ?

**PO (1st Sep) Abhishek, Rajat**

I was asked to solve a case and the question is as follows:

(I tried to remember the exact the case and this is the closest I could get)

“*Cinepolis is  operating in tier-2 city and their profits are stagnant now and the new CEO has a vision to entry into tier-1 city. Also I believe we have problems with the booking portal of Cinepolis*.”

1. Suggest how to improve profitability of Cinepolis in tier-2 city and advise whether to foray into the tier-1 city or not.
2. How will you do market research
3. Suggest a short-term road map
4. Define success metrics

While solving the case I also drew wireframes  but that was not mandatory and is solely dependent on the interviewer.

Also it was an interactive session with a lot of follow-up questions from them with respect to my answer.

**Angular/JS (1st Sep) Unnat Aggrawal - Mahesh**

What is prototype?  
What is call method?  
How does import and export of es 6 get converted to es 5?  
How does import and export work when they are not supported in a browser?  
What are closures and where to use them?  
  
Also there was lot of general discussion on technology, the rate at which frontend technologies are evolving etc.

**iOS (28th Aug) – Gaurav Sharma - Himanshu Mishra**

1. What is map and flat map?
2. Git related discussion.
3. Jenkins related discusson.
4. Autolayout and size classes related discussions.
5. Custom xcode configuration discussion for different schemes and target.
6. Most recent problem faced in last project. Told about the cocoapods issue I faced in my last project.
7. How core data multithreading done?

**PO (21st Aug)**

1. Tell us about your favorite project as a PO
2. What were the learnings from the same.?
3. Do you enjoy BA role more or PO role? And Why?
4. What as per you is the most important quality of a PO? Followed by, what’s the second most important quality?
5. How do you structure the backlog?
6. What all features did you implement for your product? How many users used your product?
7. Tell us how you started your work/assignment?
8. How long were the sprints? What was the team size?
9. How long were you associated with the client in your role as PO?
10. Tell us about your work experience and work you have done as a Product Owner in your past project(s).
11. How many projects have you been a part of which were executed in Agile Scrum?
12. How much percentage of your total work experience has been as a Product owner?
13. Tell us about a project in which you worked as a product owner and explain briefly the feature sets in that project. What was the size of the teams you worked with as Product owner?
14. Have you faced any stakeholder conflicts in the past and how did you manage such scenarios?
15. Have you ever been involved in Product discovery phase as a Product Owner?
16. You must have written user stories while working as a PO. Give us an example of a user story that you had written.
17. Are only functional requirements captured in a user story or it should contain any other specific details as well?
18. What was the size of QA team members in your team and how did you handle the work done on bugs along with the already existing user stories being worked upon?

**Angular (22nd Aug) Monisha**

* Brief introduction
* Have you worked on HTML and CSS?
* Experience with GIT – explain workflow.. pull requests… commits etc
* Can you manage to write CSS without Bootstrap? If yes, then how? – media query
* Have you done any CI or CD in your previous project – mention Jenkins and explain what you know
* Unit Testing – Since I have worked on Backbone, I was asked about how I handled unit testing in it (Mocha-chai)
* Testing APIs in Angular – TestBed.Get will give you mock instance of a service
* Hands on -> Read list of account details from a JSON file and display on UI
  + Ensure that you use a service
  + After POC was done, he asked to explain the entire workflow -> which code where and why?
  + Mention about provider and injectable
  + I was further asked to add a Delete functionality and how I would I do it -> event binding
* Discussion on CLOUD and security -> This was offhand, not related to interview

**Angular (21st Aug)**

1. Have deployed angular app? how?

2. do you know about lint and how it works?

3. Have you created lint for any project?

4. Have you worked on git? Little bit of git info.

5.  Unit testing in angular 2.

6. What are mixins?

7. How comfortable are you in css if you will not have bootstrap kind of library?

**Angular:**

1. What is Linting ? How it is done in angular?
2. Explain folder structure of your project?
3. Build a demo todo app

Requirements:

1. User can enter a new todo task.
2. Added task should be displayed in a todolist.
3. What is CI/CD? Explain how Jenkins works?
4. How unit testing done in jesmin? How to do use mock services?
5. AOT compilation?
6. Have you worked on angular universal?

**Node:**

1. What happens when we run **npm-install <package name> --save** ?
2. What is package.json meant for?
3. How can I create a Node module and make it available for the outer world to use?
4. Following is a directory structure:

* A
* B
* Foo.js
* D
* abc.js
* C

How can I require foo in abc.js?

**JavaScript:**

1. What is the difference between function declaration and function expression?
2. Given a piece of code:

function foo( ){

function bar( ){

}

}

bar( ); // Can I access “bar” outside?

**Angular**:

1. What is MVC? What is the role of a controller in an MVC application?
2. How many types of bindings are you aware of?
3. What are differences between two-way and one-way data binding? When will you use each of them?
4. If I have a text box and a paragraph such that, whatever I write in the text box gets updated as text of the paragraph. Which type of binding I will have to use for both these components?
5. Consider there is a shopping site, which does not have a shopping cart module. How will you add a shopping cart to this site? (design/architecture of the cart module)

**Java:**

1. Your experience specific questions, questions from your last project related to design and architecture
2. Spring Integration questions
3. ClassLoader concepts, troubleshooting deployment scenarios wrt multiple classloaders
4. Caching: Caching design from a solutioning perspective, best caching solution for a scenario
5. Databases: Materialized Views, Troubleshooting on performance issues in databases
6. Responsive webapp, native and hybrid app design. Checking your comfort level on front-end solution design
7. Enterprise architecture related questions: ESB, Queues and multiple databases - how to manage transactions, failover etc.
8. JSF Pagination and implementation
9. HashMap internal functionality and related questions.
10. Level 2 Caching of hibernate and its implementation related questions.
11. Hibernate Many-to-Many association questions
12. Spring dependency injection
13. Make an application of Calculator with Junit test cases
14. Spring concepts: DI + an example
15. Spring boot: usage and example?
16. Unit testing + functional testing.
17. Mockito: in which scenario it is used?
18. What is the CI (Continous integration) process that we follow? Environment variables that are required to set.
19. Are there any scripts that we write that automates the units testing and further deployment on server?
20. Devops: configuration of Jenkins (w.r.t. automatic build run when you commit the code); automated testing.
21. What are the best practices to follow when you are writing a code: code coverage, sonar etcetra?
22. DB configuration: how to establish a connection; where to provide the respective values.
23. Spring Annotations and functionality.
24. About hibernate, What we prefer to use hibernate or JDBC.
25. Design Solution: we have to create Group for email, which update daily automatically based on different attributes of the employee.

What are the entities we create for this system. If we have large number of records then how can we handle it.

1. Multithreading: Tools for Thread analysis.
2. We have two singly linked list they have one merging point. we have to find that point.
3. We have two singly linked list they have one common element. we have to find that point.
4. Example of batch processing in your current project.
5. Have you used multithreading in any module of your project?
6. If yes, what are the tools that you use to monitor the performance of these threads?
7. How large is the data that you are applying multithreading on, 1000s or more rows?
8. Which ORM technology is being used in the current project?
9. Which web - services have you worked on: SOAP/REST?
10. Your experience specific questions, questions from your last project related to design and architecture
11. Caching: Caching design from a solutioning perspective, best caching solution for a scenario
12. Databases: Materialized Views, Troubleshooting on performance issues in databases
13. Level 2 Caching of hibernate and its implementation related questions.
14. Hibernate Many-to-Many association questions
15. Unit testing + functional testing.
16. Mockito: in which scenario it is used?
17. What is the CI (Continous integration) process that we follow? Environment variables that are required to set.
18. Devops: configuration of Jenkins (w.r.t. automatic build run when you commit the code); automated testing.
19. What are the best practices to follow when you are writing a code: code coverage, sonar etcetra?
20. About hibernate, What we prefer to use hibernate or JDBC.
21. Spring Annotations and functionality.
22. How to use GIT and what rebase do?
23. What is Rest Service and is it stateless or statefull?
24. What is static in JAVA?
25. Difference between Put and POST and Option?
26. What is Normalization?
27. How to maintain time zone in REST?
28. Internationalization in Rest?

**Android**

1. Questions on Urbanairship API usage in android. Pros and cons of urbanairship over GCM

2. How to use Jenkins to build android application

3. Clustering in Google maps

4. OOPs concept

5. Concurrent queue vs serial queue

6 Multithreading in android. (Which is better to use single thread or Asynctask)

7 Concurrent downloading of videos and images

1. Gradle script

9 Algorithm writing to sort a binary array  
10 Android Architecture

1. Activity Life Cycle, Fragment Life Cycle
2. Services, intent service
3. Content provider
4. GCM/FCM Notification
5. Git Rebase And Squash
6. Jenkins
7. Static keyword in java
8. Memory leak
9. Project Discussions
10. Material Design and Custom Views
11. Firebase and Fabric Library
12. How GCM works?
13. Fragments with FragmentPagerAdapter
14. SQLite DB
15. Interfaces in Java (Why interface is used)
16. Fragments and ViewPager – implementation use case
17. Downloading and saving data offline in app
18. Image downloading and caching
19. Service – implementation and usage
20. Use case to design inshorts app page to read news and scroll horizontally among pages to read further news
21. How to develop/test application on multiple screen sizes
22. Picaso library for image laoding

**AWS**

1. How Load Balancer Works
2. How session is maintained when using load balancer.
3. How Cache is maintained using load balancer over multiple instances.
4. What are sticky sessions.
5. Are sticky sessions good?
6. If you use sticky sessions, suppose you have two instances and one instance goes down for a 1 min and all the load goes the 2nd instance. Now how will you move your load to first server as all the users have their session on second server.
7. CloudFront- CDN – how it works
8. How you scale your application over server.
9. On what criteria you choose server(which ec2 instance is better in which scenario)

**Ruby**

1. Scope methods and class methods
2. Fetch all the users that were active in last 24 hours(column : active\_at) using both scope meths and class method and which s better to use.
3. What is lazy Evaluation.
4. How to create dynamic methods on runtime.
5. Why we call ruby a duck typed language.
6. Difference b/w duck typed and dynamic typed language.
7. Suppose your application is going down at 10 AM on Sunday and will be up by 11AM, and we want every api should return “We are under maintenance”(DB is also down). How will you do that. Also it should be one time effort. In future whenever we are going down we don’t have to change the code.
8. What are microservices.
9. Lambda and proc
10. What is try ? . How and when to use this
11. Program that gives output:

Suppose there is a class A

When you write

A.name\_rahul it should give output “Hello Rahul”

A.name\_varun it should give output “Hello Varun”

**iOS**

1. OOPS concept. What is Inheritance. Does ios support multiple inheritance
2. What are closures in swift. What is difference between map and flatmap?
3. What are categories
4. How to use swift and objective C in same project.
5. What are optionals in swift.
6. How Core Data works? Multithreading in core data.
7. What are protocols.
8. Reactive Programming – Just Basics, like what is reactive programming
9. Autolayout
10. How to use Cocoa Pods
11. Git Merge,Pull,Push and How to resolve conflicts (specially related to storyboard)
12. What is difference between Swift Arrays and Dictionaries and Objective C Arrays and Dictionaries
13. Unit Testing Basics.
14. Past Project discussions
15. Experience on Banking / eCommerce discussion
16. Write a Single-View application for a ToDo List to be displayed in TableView
17. What is GIT Rebase and GIT Stash.
18. Draw APNS architecture.
19. What are RESTful services and difference between REST and SOAP services.
20. Write a single view application that fetches data from open source weather API and display in on screen.
21. Why is tableview’s scrolling so smooth?
22. How to write functional test cases
23. CI/CD
24. Swift- Write a program that takes string from a textfield, click on Add button and that strings should be added as a row in tableview below on the same screen.
25. Swift- Write a program that downloads JSON data from a URL and convert JSON into string, filter out and find the value for a key. Display that value. Use autolayout.
26. Work experience in technologies
27. What is bundle identifier?
28. Parse json from string

[{"movie\_name":"A", "movie\_release":"2015"},{"movie\_name":"B", "movie\_release":"2016"},{"movie\_name":"C", "movie\_release":"2017"},{"movie\_name":"D", "movie\_release":"2018"},{"movie\_name":"E", "movie\_release":"2019"},{"movie\_name":"F", "movie\_release":"2019"},{"movie\_name":"G", "movie\_release":"2020"}]

Populate a collection view from above json. Collection view shows two cards at a time. Scrolling direction is horizontal. Each card shows two fields

1. Movie Name

2. Release Date

1. I have mentioned him I have knowledge of React Native so he asked me about hot booting in react native and its concepts.
2. He asked me to write a program in swift to parse JSON and to show in vertical scroll (Collection view), with each cell taking complete window size and cell showing parsed details
3. He asked me about Auto Layout and size classes
4. He asked me about test cases in swift
5. He asked me about react swift
6. He asked me about different approaches to handle thread in swift

**Sitecore**

1. Experience specific question.
2. How many Sitecore project have you done?
3. Discussed few Sitecore project implementation
4. Have you worked on Sitecore MVC
5. Have you used TDS? What is the benefit?
6. ORM for Sitecore
7. Lucene vs SOLR search
8. Discussion related to Sitecore multisite implementation
9. Shared vs Versioned
10. What is .net core
11. Algorithm to sort array of numbers
12. Build and deployment process

**Product Owner:**

1. Tell about yourself, your ways of workings
2. What is the difference between Product Owner and Business Analyst? How these roles differentiate?
3. How will you gather the requirements from various stakeholders? What are the challenges you have faced while gathering the requirements and how have you resolved those?
4. There is a carpool app that we want to develop for internal employees to reduce car on roads how will you develop that? what will be your approach? What are the various stages?
5. Question on Team communication – What are your thoughts on your team communicating directly with the business?
6. How do you decide the MVP?
7. How often do you interact with the dev team? Is it just in Stand ups?
8. IF you just get a limited requirement that create an app on car pool and this is the only information you have, then what all will you tell to the dev team?
9. Have you worked with extended teams (like external delivery vendors)?”
10. How do you make sure that you get all the requirements?
11. How do you decide that the implementation or delivery has been successful?
12. Knowledge on CI/CD
13. Decision on buy vs make

**JavaScript:**

Introduction of each other followed by following questions

1. Q1 what will be printed on console in following questions

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

function foo(x){

x=20;

}

var abc= 10;

foo(abc);

console.log(abc);

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

function foo(x){

x={};

}

var abc= 10;

foo(abc);

console.log(abc);

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

function foo(x){

x.x=20;

}

var abc= {};

foo(abc);

console.log(abc);

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

function foo(x){

x={

y:10

};

}

var abc= {};

foo(abc);

console.log(abc);

1. What does $('#abc') give?
2. what does $('#abc .foo') select on DOM?
3. what is a directive?
4. Suppose there are two html pages home page and foo page?

Home page display top 100 albums

foo page display 50 songs of an artist

Design a directive which will contain a table which can render the both

1) what will be your approach which type of directive will you make Element or Attribute or Class or Comment

2) Explain how directive it going to communicate whether you are going to make a call a api through directive or make a service for it.

3) How will you make document for others to reuse?

1. Now implement the same in plain vanila javascript?
2. Suppose there is a table and you have implement a click event handler which will highlight that row that you have selected.
3. What is event capturing and event bubbling?
4. How will you make angular library yourself?
5. **Knowledge of Ecmascript** – I told the few differences that I knew between Javascript and Ecmascript.
6. **Experience with any different forms of writing JS like coffeescript, etc.** – I said no.
7. **What is Object inheritance** – Answered correctly
8. **What is Functional inheritance** – Might have answered wrong
9. **How to detect change made in CSS by someone else has started affecting your module** – Couldn’t answer
10. **What are Promises** – Answered correctly
11. **What is Babel** – Answered very briefly. (This is concept used in React)
12. **Differences in react and angular** – Answered very briefly. (Less knowledge in React)
13. **Why angular is slow and how to improve performance of angular page** – Answered correctly. (He wanted to understand how angular gets slow due to several watchers and digest cycles)
14. **How two way binding actually works in angular** – Answered correctly.
15. **EXERCISE – How to wrap a word at specific letter only when placed inside a div in HTML**– I assume I answered correctly. (I suggested a way to which they said they did it almost the same way)
16. **CSS min using Grunt / Gulp** – Was a Yes/No question – I answered yes and gave details too.
17. **Comfort levels with npm commands** – Was a Yes/No question – I answered yes

**JS**

1. What is object oriented javascript? Is javascript really object oriented?
2. What is Inheritance, how would you implement Inheritance ?Given a base class , how would you inherit its properties.
3. What the difference between functional inheritance and prototypical inheritance?
4. What are the new things in ES6, how are they better than ES5?
5. What is a transpiler? Have you used any?
6. Given there are 5 script files, how would you make the page load faster.
7. In the above example , what if there is an issue is in one of the files and its on production, how would you make sure the page loads fine, no other functionality breaks.
8. Given

function f(Name){  
 this.name = Name;  
}

f1 = new f(‘Ankit’”);  
console.log(f1.name); //line1

f1.name=”arun”;  
console.log(f1.name); //line2

1. What will be the output in line 2 and line1;
2. What will you do to force line 2 to log “ankit”, such that the name does not gets overwritten?

**CSS**

1. What is flexbox?
2. How will you arrange three div elements vertically and horizontally center?
3. How will you arrange three div elements vertically and horizontally center using flexbox?
4. Given:

<div>  
 Diva

<span>

SpanB

<input type=”submit” value=”send” />  
</span>

</div>

1. Considering the structure, how would you structure your classes.
2. How will you style it using a single class.
3. How will you do it in SASS.
4. Have you worked on mixins, explain mixins.

**BA Questions (AC)**

1 Please explain the work that you have done on multiple projects, some basics of domain.

2 What development methodologies have you used.

3 Explain sprint life cycle that you would have managed.

4 What is your expectation from the role.

5 Case study: I was given a case study to solve and then there was a discussion session on that.

**QA**

WebDriver/Appium :

# WebDriver basic architecture

# Basic knowledge of Appium,

* Advantage/use of Appium w.r.t native app and hybrid app
* How we can find locators of mobile app
* What is Appium inspector
* Basic pre-requisite to use Appium

# Implicit and Explicit wait. How we can put wait to find out a locator or page to load. (due to n/w delay).

# Explain existing Framework with tools and technologies used.

# Java - <http://www.gcreddy.com/2013/01/core-java-interview-questions.html>

**Drupal**

What are contextual filters in drupal views?

What are bundles and nodes in drupal ?

How to migrate a views change from 1 server to another?

What is difference between Headless and normal Drupal?

Why Drupal is slow?

When not to use drupal ?

**Web API**

Q- How authentication works in Web API?

Q- How to implement Windows authentication?

**Angular**

What are the things you didn’t like in angular?

**Dot net Core**

How dot net core facilitates cross platform application development?

How kestrel web server works? How to setup it?

**Azure**

What is Azure container?

What is Azure service fabric? How it works?

**MicroServices**

Q- What is microservices and how it works?

Q-If an operation requires use of multiple entities then how will you design your microservices in that case?

**Python**

1. Architecture of current application

2. Testing in python

3. Web scraping in python

4. How to solve slow page loading issue on production.

**NodeJS-**

1. Which all framework used for NodeJS - used HapiJS?

2. Authentication

3. Difference between Authorization & Authentication

4. JWT

5. Middleware’s

6. Docker - how to scale

7. Orchestration process - which framework used

8. Oracle Database

9. Which all AWS services you have used - have you used Cognito?

10. CI/CD – CircleCI

QA Interview – Akshat

1. Testing Strategy for a project with FE and BE – Basically how and when what kind of testing to be done.
2. Test Plan
3. Selenium Framework + What kind of purpose if can solve best for web testing.
4. Jmeter – Strategy for Load Testing/ Stability Testing
5. RestAssured – Purpose and strategy

React JS – By Akshat

1. Difference between class component and functional component

2. How redux works.

3. What all the modules you used in react.

4. How to call a model in react.

5. What is the use of hooks.

6. Lifecycle of react.

Interview Questions asked by Akhat

How many types of components are present in React

How Redux works and why we need it.

What all imports are required to create basic component.

What is hooks

What is Jest and Enzyme

What is ESLINT

Create a sample app by calling the api and populate the data in component.

React Js – By Akshat

* Progressive web apps
* What is Webpack and babel and what is use in react
* How we will persist redux store
* How many types of components in reacts?
* How I will setup unit test case in react and what is JEST and Enzyme.
* What is redux and how I will use redux
* React Hooks lifecycle
* React Route
* What is Eslint and how will add rules.
* Create a Sample two-page App with route and calling Api and populate data.