

By OnlineInterviewQuestions.com

SAP UI5 has emerged to be as one of the incredible stimulating innovation which is associated with the involvement of developer with application development software. Believing in the fact it has been declared that market share covered by ui5 is around 45.8%. The field of SAP ui5 is still progressing in its possibilities hence searching for the opportunities will do you only good. UI5 comprises of CSS, JavaScript, and HTML5 as its instances which makes it the most preferable front end development tool, follow the perfect set of **UI5 interview questions** to practice better.

Q1. Why multi flow design pattern is use, how splitting is implemented in it?

When any complex application flow is used then multiplied design pattern is suggested. it also covers the need to utilise all the design patterns in order to build a single working application. Navigation in multiply pattern from full screen to split and then again full screen is done following the sub-routes. For this purpose, manifest.Json is used along with some targeted properties like

- Parent
- ControllID
- Control aggregation

```
"master": {"parent": "objectMDR", controlId: "YOURSPLITAPPID", "viewName": "MD.MD_Master", "viewId": "MD_Master", "viewLevel": 3, "controlAggregation": "masterPages"},  
  
"detail": {"parent": "objectMDR", controlId: "YOURSPLITAPPID", "viewName": "MD.MD_Detail", "viewId": "MD_Detail", "viewLevel": 4, "controlAggregation": "detailPages"}
```

Q2. Can you tell us about the formatter in ui5 and how to use it?

The formatter is used in ui5 when any changes have to be performed on the back end property data. The entire backend executions are done considering the front and property data. As a formatter can be used while data binding to any property which follows as-

```
ocontrol = new sap.ui.commons.TextField({  
  
value: {path: "/path", formatter (o Event){  
  
return "Value:" + o Event:  
  
}}});
```

Q3. What is UI5 and why it is considered?

SAPUI5 is a single client side rendering library (similar to HTML 5) which strictly follows which internet application protocols. It is based over the JavaScript to provide lightweight programming hierarchy. Its standards also follow for system or mobile applications all at once. It is actually a kind of new age front technology covering all the aspects of internet application. Earlier SAP used old web dynpro for building the web applications which were actually lesser in features end user-friendly components. UI5 what is the revision of custom HTML5 library.

Q4. Explain the concept of navigation and component in ui5?

Navigation- do i5 uses two mechanisms for navigation in any applications which are eventBus and routing. In SAP ui5 1.16. 'sap.ui.core.routing' is a class which is basically used for routing. The routing is defined under components metadata in the routing key. Component- we can say component or component.js which serves as index to encapsulate the application details that is routing details, names, application type, application service etc. It is the first point in the application.

Q5. Mention the lifecycle method in ui5 view controller?

In ui5 view controller there are 4 life cycles present which are as

- onInit ()- it is called when the view is instantiated if its control has already been created
- onExit ()- this method is called when the view is destroyed. It also helps to finalise the activity and to use the free resources
- onAfterRendering ()- this method is called when the view has been rendered in which clears that HTML is a part of document.
- onBeforeRendering ()- this method is called when the controller view has to be re-rendered.

Q6. What is SAP ui5 bootstrapping?

SAP Wi-Fi bootstrapping actually means the loading and initialization of ui5 in the HTML pages. The most important or rich in resources library which is loaded in ui5 bootstrapping is "sap.ui.core.js". This script is used in the pages to initialize ui5 runtime in an automatic manner as the script gets loaded and executed by browser. UI5 provides a large number of bootstrap files for multiple use cases, some are mentioned below-

- sap-ui-core-all.js - this script contains the resources of same library
- sap-ui-core-lean.js - it is similar to the sap-ui-core.js file but it is used in case of jQuery.

Q7. Mention the number of ways you can bind data to controls?

The data can be bind to controls in three possible ways-

- Property- property binding is used in order to allow the actual properties of the system to get automatically initialized. It also checks over the model data.
- Element- element binding is used to allow any specific element to bind with predefined object in the model data. It also creates a binding context which allows relative binding within the control system and all of its subsets. Element binding is helpful in detailed scenarios
- Aggregation binding- this binding is used for collective values like binding of multiple columns or rows of a table. For this binding you have to use any control which can act as a template.

Q8. What are SAP ui5 fragments?

In ui5 fragment stand for the definition of any lightweight stand alone control tree which is very similar to the sap.ui.core.mvc. Views. They do not have any controller on their system neither they are the representative of HTML. UI5 fragments can be defined in multiple formats like XML, declarative HTML, JavaScript and many more where their declaration syntax remains the same as in declarative view.

If the need to use similar UI path surfaces number of times in an application, then we create the fragments of those specific UI parts because they are reusable. Segments can be stored within the application and can be used by the same application only. Different types of fragments in ui5 are

- XML
- HTML
- JS

Q9. Give us a brief about the types of data models available UI5?

UI 5 follows model-views controller which is followed by four predefined data models which areas

JSON Model- it is a client side model which supports two way binding.

XML model- it is also client side model which is assigned for small data sets. This model is rarely used.

Resource model- it is the client side model which is used to organise resource bundles and texts

ODATA model- among four this is the most important model as it is server side and supports the two-way binding. Currently, it supports ODATA and version 2.0

Q10. What do you understand by SAP Fiori?

SAP Fiori is a collection of applications which are based over SAP ui5 framework, as SAP ui5 is a client side HTML5 rendering library. Owned by SAP, SAP Fiori is an advanced user experience framework used to build the applications. It is also an accumulation of all the major applications having basic and simple engagement to

maintain the comprehensive utilization of programming capacities. It is also consistent over gadgets like desktop, cell phone or tablet. It also provides 300+ applications which are role based say like management, HR, financiers for manufacturing. SAP Fiori insurance the availability of multiple device applications so that user can start the process on their system.

Q11. Mention some of the types of SAP Fiori apps?

There are basically three types of SAP Fiori apps which are-

- **Transactional-** these applications allow the user to perform transactional tasks like creating a leave request and many more. It also represents classified view in interaction with current business hierarchy and its solutions.
- **Analytical-** these applications allow the user to get a role based in site following the real time implementation for the business by collecting and visualizing the key figures into the browser. These applications run on SAP HANA database and also utilize the virtual data models.
- **Factsheets-** apps under this, display the contextual information and all the minute details about Central object which is used in the business execution.

Q12. Explain what is model view controller?

Model view controller or MVC is a pattern which explains the domain modeling, GUI of any application and all the inputs associated upon the action based on devices. In SAP ui5 it has the following segments-

- **Model-** it acts as a bridge between data and view of the application. Model accepts request available from view and then response collectively independent on any class.
- **View-** it manages the visualization of GUI of the application and depends upon the model.
- **Controller-** it communicates with the above two statements in order to take the appropriate action. It also entertains the user requests which are received from the view.

Q13. Tell us the components which are configured in frontend server of SAP?

The deployment architecture or components of front end SAP server are -

- SAP Web dispatcher- it will serve as a reverse proxy and also enables smart routing or static routing.
- SAP front end server- based upon SAP netWeaver it includes

1. Applications
2. Central UI technology
3. SAP Central gateway optional content
4. SAP gateway server
5. SAP netweaver AS ABAP stack

- SAP backend application systems

Q14. What do you understand by openui5?

The open source JavaScript UI library is known as OPENUI5 which is maintained by SAP. It is available under the licence 'Apache 2.0'. This UI library enables you to build the web applications which are enterprise ready and responsible to all the devices. It can run on any browser of your preference as it is based upon JavaScript using jQuery as the foundation following major web standards. The whole development till procedure with client side HTML5 rendering library is also simplified visit including a set of controls and support system for data binding in accordance with various models.

Q15. What are the differences between SAP ui5 and SAP Fiori?

SAPUI5- UI5 is a development tool for HTML5 containing predefined JavaScript library in order to design new user interface. It is a framework which is based upon the model-view-controller system, and using this framework, the user can easily create web applications. It is a hybrid application as it can run upon several platforms.

Fiori- it is the advanced SAP software which was designed to overcome the complexity offered by SAPUI5. It uses SAP ui5 for its front and Odata for the backend. Fiori also contains the essential business processes which are role-based.

Q16. Name the SAP ui5 control metadata which are used to configure the UI elements during runtime?

The name of the **SAP ui5 control metadata** which are used to configure the UI elements during runtime are as follows -

- Association
- Properties
- Aggregations

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