

UNIT – V : IONIC Framework

1. Define IONIC Framework

Ionic Framework is an open source UI toolkit for building high-quality hybrid mobile and desktop apps using web technologies (HTML, CSS, and JavaScript).

2. What are prerequisites for installing IONIC Framework?

NodeJS , npm are required in order to install Ionic. You need NodeJS 6.0.0+ or a higher version in order to install ionic.

3. Predict the use of IONIC CLI

Ionic CLI (Command line interface) comes with a number of helpful commands that let you create a new project, pages, components, providers, directives, pipes and so on. We need the CLI to run, emulate, debug, build and deploy your application.

4. Highlight the pros and cons of IONIC Framework

Pros

- Free and open source software
- Angular JS is being embedded in this framework
- It Is Mainly Developed In HTML, CSS, And JS
- Apps developed on Ionic are very maintainable and easy to update

Cons

- Ionic Applications may not be as safe/secure as The Native Applications
- Ionic Apps are not as fast as Native Apps
- The Ionic Apps may lack in native functionalities.

5. Predict the role of AngularJS in IONIC framework

Ionic framework is HTML+CSS+JS based mobile app platform to create native-like mobile applications which is based on Apache Cordova on the top of Angular JS. Whole ionic framework directives are written in angular and it follows MVC model.

6. Compare native apps and hybrid apps

Native apps are those which are developed for specific platform or device. Hybrid apps are run on multiple platforms or multiple devices with different display size.

7. State webview

WebView is a view that display web pages inside our applications. A “webview” is a browser bundled inside of a mobile application that producing hybrid app. Mobile apps to be built using Web technologies using Webview.

8. Rewrite the definition of Node.js

It is a free, open sourced, cross-platform JavaScript run-time environment that executes JavaScript code outside a web browser.

9. Examine the Ionic Grid system positioning the components on the page

Ionic Grid system is that it is FlexBox-based one, provides a box model for an optimized user interface design. It allow us to have as many columns as you want inside a row and they will be automatically assigned with equal width.

10. Show the purpose of card component in IONIC.

Ionic card makes it easy to display the same information across many different screen sizes. Cards can be a **single component**, which often broken up into several other **sub-components**. These sub-components are header, title, subtitle, and content.

11. Point out the usage IONIC segments

Segments are a collection of related buttons that displayed in a **horizontal row**. It is useful when the user toggle between different views inside of the content (like tab control). A Segment can act as a **filter**, which shows or hide the elements based on the segment's value.

12. Specify the role of navigation stack in IONIC navigation

Ionic uses a **navigation stack** for implementing navigation between the pages. It can simply work as a stack of pages, where one page id on top of another page. IONIC allows to view the page on top of the navigation stack and by using Push and Pop, we can navigate to other pages.

13. Define SASS

Sass('Syntactically awesome style sheets) is a preprocessor scripting language that is interpreted or compiled into Cascading Style Sheets (*CSS*). SASS makes CSS Programmable by introducing things like variables, nested rules, inline imports and more.

14. What is the function of SCSS?

SCSS(Sassy CSS) is a most commonly used syntax for CSS was derived from SASS. Using SCSS, we can add nested rules, variables, mixins, selector inheritance, and more.

15. Discuss about the SCSS workflow

- Set up Ionic SCSS
- Open the scss/ionic.app.scss file
- Add/update the variables you want to override before you import the Ionic SCSS framework
- Add the required fonts before you import the Ionic SCSS framework
- Add/override pre-defined classes or create new classes after the Ionic SCSS framework is imported

16. IONIC service

It is a class that contains business logic and it doesn't have UI. The service class contains methods and properties that can be reused by injecting them across application components, directives, and other services

17. Why we need IONIC service class?

- Manage the state of data across the application
- Retrieving and sending data to remote server using REST API
- Centralize code containing business logic
- sharing data across components

18. IONIC Directives

The directive allows us to attach attributes to the element and with this attribute we can manipulate the appearance or behavior of a DOM element. Angular defines directives as components without views.