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**Delegation, Protocol & NotificationCenter, Introduction to Push Notification**

Q4. What is push payload size in iOS?

Apple Push Notification service (APNs) refuses a notification if the total size of its payload exceeds certain limits. For example, for Voice over Internet Protocol (VoIP) notifications, the maximum payload size is 5 KB (5120 bytes). For all other remote notifications, the maximum payload size is 4 KB (4096 bytes).

Q5. What is push notification? How it works?

Push notifications enable developers to present information to their users outside the app and to redirect them to the app if necessary. Important events will arrive in the form of badges, sounds or banners. A push notification is a message that pops up on a mobile device. App publishers can send them at any time; users don’t have to be in the app or using their devices to receive them.

Working:

1. Operating system push notification service (OSPNS). Each mobile operating system (OS), including iOS, Android, Fire OS, Windows, and BlackBerry, has its own service.
2. App publisher. The app publisher enables their app with an OSPNS. Then, the publisher uploads the app to the app store.
3. Client app. This is an OS-specific app, installed on a user’s device. It receives incoming notifications.

Adding to an app

1. The app publisher registers with the OS push notification service.
2. The OS service provides an application programming interface (API) to the app publisher. The API is a way for the app to communicate with the service.
3. The app publisher adds the SDK to the app. The SDK is a code library specific to the OS’ push notification service.
4. The app publisher uploads the app to the app store.

User activation

1. The user visits an OS app store, downloads and then installs an app.
2. The user opens the app. Unique identifiers (IDs) for both the app, and the device, are registered with the OS push notification service.
3. The unique identifiers are passed back to the app from the OS push notification service. They are also sent to the app publisher.
4. The app publisher receives and stores these registration details, including the unique identifiers.

Sending

1. The app publisher composes a manual message through a message composer user interface. Or, the publisher sets up an automated message to be sent via the API.
2. The publisher defines the audience to whom the push notification will be sent.
3. The publisher determines whether the message should be sent immediately or scheduled.

Q6. Implement Push notification using firebase (If Apple device not available, check how we can send it on simulator).

Tried doing this question but since I didn’t have an Apple developer’s account, couldn’t use Firebase to generate push notifications.

Q7. What is required to send a silent push.

In order to send a silent push notification, obtaining the Firebase cloud messaging server key and Firebase FCM token is a must for which an Apple Developer account is important. After that, any API client tool can be used to make a POST request to Google API, which will then send the notification payload to the testing device.

Q8. Name the key a payload should have to indicate that push has a media to show?

Alert – This key is used when we want the system to display a standard alert or a banner. The notification settings for the app on the user’s device determine whether an alert or banner is displayed.

Alert -> launch-image (child property of alert) key can be used to indicate that the push notification has some media to show - The filename of an image file in the app bundle, with or without the filename extension. The image is used as the launch image when users tap the action button or move the action slider.