Types of the Mobile Application Testing:

The following are the types of testing that can be performed on mobile:

1.Installation Testing:

● Need to cross check users are able to download the app from playstore/app store and able to install successfully on mobile devices.
● Also need to verify the user will able to un-install that app
● Need to check if the app is crashing or not at the time of installation.

2.Upgrade Testing:

● Need to test the user able to update the latest version of app
● If there is force update then need to check the proper validation message is there or not
● If it's auto upgrade then app must be auto updated successfully

3.Usability Testing:

● Usability testing ensures the user that the mobile app is easy to use and gives a satisfactory experience to the user.

4.Compatibility Testing:

● Compatibility testing is done on different mobile devices, on different browsers, screen sizes, and the versions of the Operating system according to the requirement.

5.Network Bandwidth Testing:

● Testing is done on the application after changing the connection from 2G,3G to WiFi
● Mobile apps must work properly with all network bandwidth.
● Need to test mobile applications on all network bandwidth to ensure mobile apps are not crashing on any network bandwidth.

● If it's not working due to the network then it needs to show a validation message.

6.Security Testing:
● Security testing is done to test the application to validate the information to protect it.

7.Localization Testing:
● The app must be work and available in different country according to their languages

8.Battery Testing:
● Need to test how much battery is consumed by the app when we are using the app.
● Also need to verify that how app is working when battery is low and when battery is about to die.

9.Memory Testing:
● Need to verify how much memory is consuming the mobile app.

Virtual Device:

● Virtual Device is a software program on the computer which act as the real device.

● It replicates all the important functions of the real device in the form of software.

● We use it for testing purpose like if we are developing android app we will test it on the virtual android phone.

● There are two types of virtual devices:
      1. Emulator
      2. Simulator

1.Emulator: The virtual device which replicates the hardware and software of the target device on a computer is called the emulator.

2.Simulator: It is also a type of virtual device which replicate only software functionality of the target device to the computer for testing purposes.