

Chapter-9

Testing Web & Mobile Application

Web Testing:

- Web testing focuses on web applications.
 It is better to completely test a web-based system before going live
 - Issues such as:
- · basic functionality of the size

 · accessibility to handicapped users and fully able users

 · readiness for expected traffic I load testing.

 · ability to survive user traffic.
- A web applicable application performance tool (WAPT) is used to test web applications and web related interfaces - These tools are used for performance, load, and stress testing of web applications, web sites, web servers and other web interfaces
- The foole is useful & to check for bottle neck and performance leakage in the website or web application being tested.

 - · Browser compatibility
 · Operating system compatibility.
 · Windows application compatibility.

FUCIPS 1 Testing Methods for Web Application Testing: Testing Techniques for web application testing are.) Functional Testing - It includes checking all the links of the webpages.

It also includes & form testing, cookie testing and database connection testing. 2) Usability Testing - This testing chicks the navigation and user friendlings of the webpages. - It ensures whether the content is properly checked and is easily understandable to the users.
- It checks whether the anchor text links are working properly 3) Interface Testing This checks if the web server and application server interface, application server and database server interface have proper interaction or not compatibility Testing
This checks if the web server and application

(ampatibility Testing:

This checks browser compatibility operating system compatibility; mobile browsing and printing options.

S) Performance Testing:

This performs web and testing, web stress testing.

It checks if many users can access the same page at the same time and whether a web spage.

C) Security Testing:

This checks the security of these web applications. For security purposes, internal pages should not apen if we are not logged into the website.

CHPTCHA for automated scripts logins and ssi should be fested for security measures.

After completing all the web application testing a live testing is necessary for web based applications and websites.

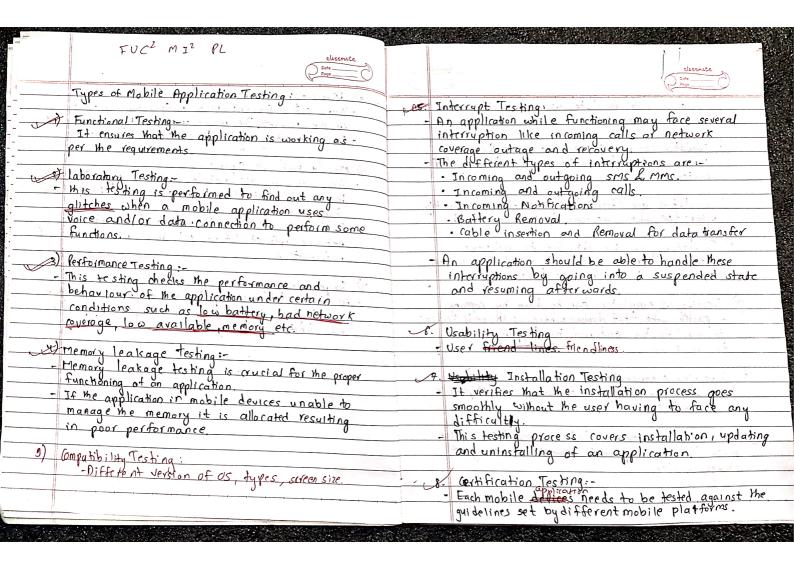
In web application, the testing (Entry-Exit) paths are possible with varying backgrounds & Fechical

skills may use me application.

classmate (ii) Even on the same browser, applications may be executed differently based on local issues such as screen a resolution / b hardware software Diversity in Mobile Platforms los:There are different Mobile Operating systems in the market. The major ones are Android, Ios etc Each operating system has it's own limitations. configuration of the system. 3) Mobile Network Operators: Problems in Web application. There are over 400 mobile network operators in the world . Out of which some are '(DMA, some Cross sit scripting GSM 16,79,39:49. Poor redirect & query Pass Each network operator uses a different kind network infrastructure and this limits the flow of sensitive Pata Explosure. information . Dos (y) Scripting: # Mobile Application Testing
- It is a process by which application is we developed for hand held mobile devices is tested for its functionality, usability and consistency.
- The It can be both automated or manual. As devices differ in in put memods, menu structure and display, properties, so a single script does not function on every device Key challenges in mobile Application Testing.

Nariety of mobile Devices:

Mobile devices differ in screen sizes, in put memods (OWERTY, touch, normal) with different hardware capabilities.



classmate Date _____ 1 Memory issue cannot be correctly tested in Emulators. Testing with Emulator vs. Testing with · Year devices. (8) The processor of the PC is ten times more powerful 1) Emulator covers full range of devices for testing where as heal device cover only from ange of Man mat of a given android device Even with constraints placed, the emulator can borrow the processing power to get the job done. This affects the testing for low end devices in emulator. @ Emulators are often free or ofter low man thy user fee where as real device cost high. Many sensor issues cannot be tested via emulators (3) Emulators can be adjusted to achieve different any ereen size and resolution which (1) Battery is a physical afficient of a reale real phone and cannot be tested by an emulator. annot be done in real device. (1) It is easy to achieve multiple screen sizes and resolution, however an emulator does not give the information like brightness, saturation etc. Testing in emulator can be done by copying a pasting where test data where as in real device it has to be entered by typing on me think screen touch screen. Emulators cannot deal with issues such obtained due to various interrupts such as phone, messaging or push notification interrupts. 3 Capturing exceenshots of UI is easier from emulator because this feature is developed in PC and is fast. interaction with keyboard and mouse positions in emulator is different from interacting with fingures in real device touch screen. (1) Emulator can extract data in real time which makes the development easter and fixing of bugs easier. (4) private set by distantantantal test contesting