



AiNS Computer Institute

MOBILE

"Precision through Expertise:
Manual Testing Unveiled"



TESTING

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ainscomputerinstitute.com

What is Mobile Testing?

Mobile testing refers to the process of evaluating the functionality, usability, performance, and security of mobile applications across different devices, platforms, and network conditions. It involves various testing techniques such as functional testing, usability testing, performance testing, security testing, and compatibility testing to ensure that the mobile app meets the expectations of users and performs reliably across diverse mobile environments. Mobile testing is crucial for delivering high-quality mobile applications that provide a seamless user experience and meet the demands of today's mobile users.



Who are supposed to pursue Mobile Testing?

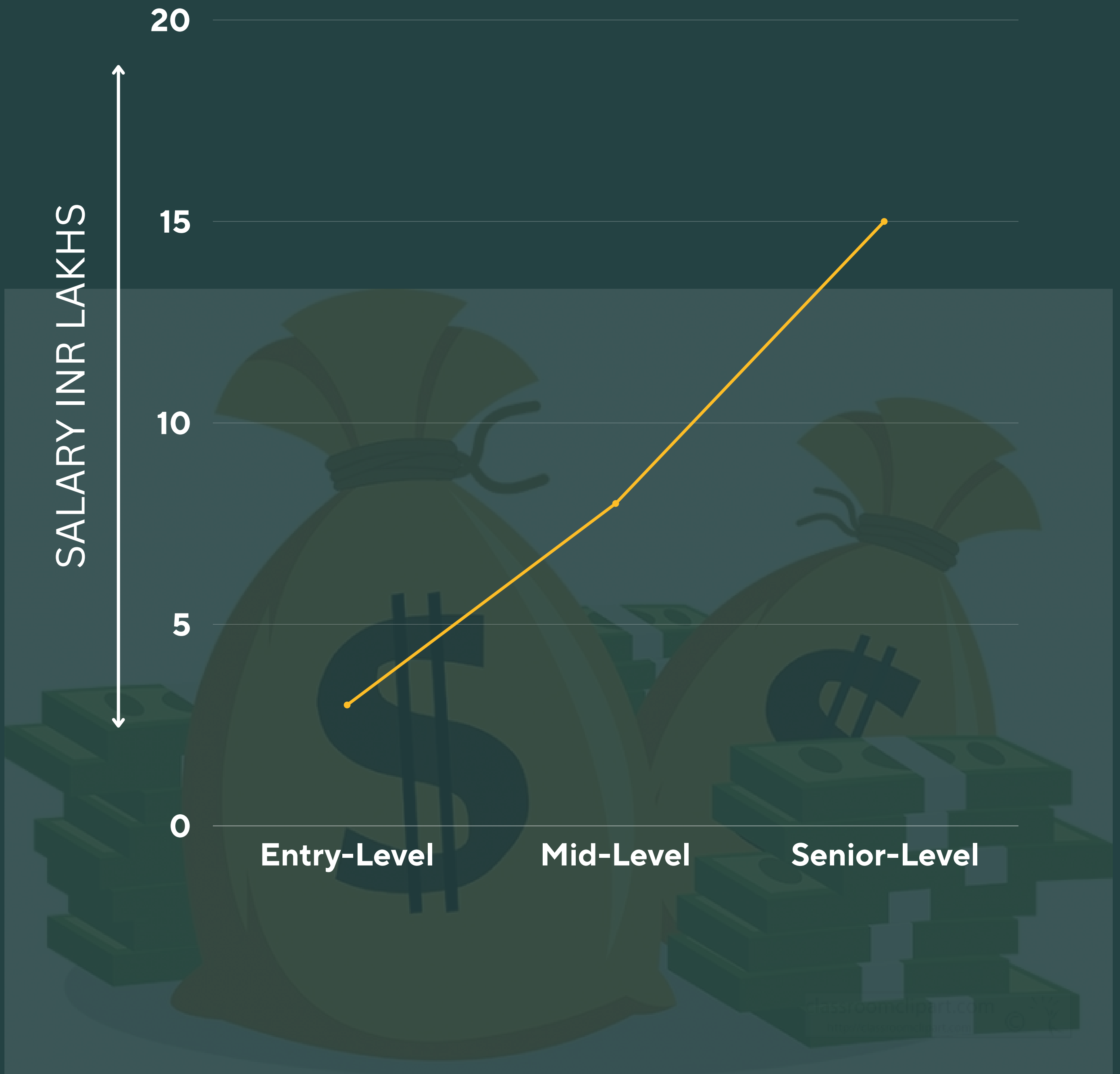
1. **Software Testers:** Professionals already working in software testing roles who want to specialize in mobile testing.
2. **Mobile Developers:** Developers who want to ensure the quality and functionality of their mobile applications through rigorous testing.
3. **Quality Assurance (QA) Engineers:** QA professionals who want to focus on testing mobile applications for usability, performance, and security.
4. **Mobile Application Testers:** Individuals specifically interested in testing mobile applications across different devices and platforms.
5. **Software Engineers:** Those with a general software engineering background who want to specialize in mobile application testing.
6. **Graduates and Students:** Those who are pursuing degrees or certifications in software engineering, computer science, or related fields and want to enter the mobile testing field.



DEMAND?

- 1. Growth in Mobile Usage:** The usage of smartphones and tablets continues to rise globally, with users relying on mobile apps for various purposes including communication, entertainment, productivity, and commerce.
- 2. Diverse Mobile Ecosystems:** There are multiple mobile operating systems (such as Android and iOS) along with numerous device models and screen sizes, requiring comprehensive testing to ensure compatibility and functionality across different platforms.
- 3. User Expectations:** Users expect mobile apps to be intuitive, responsive, and bug-free. To meet these expectations, mobile app developers and companies invest in robust testing processes to deliver high-quality experiences.
- 4. Market Competition:** With a highly competitive mobile app market, businesses understand the importance of delivering flawless user experiences to gain a competitive edge. Thorough testing helps in achieving this goal.
- 5. Security Concerns:** Mobile devices are susceptible to security threats, and mobile apps often handle sensitive user data. Testing for security vulnerabilities is crucial to protect user privacy and prevent data breaches.
- 6. Emerging Technologies:** Advancements in mobile technology, such as augmented reality (AR), virtual reality (VR), Internet of Things (IoT), and artificial intelligence (AI), introduce new complexities that require specialized testing approaches.
- 7. Remote Work Trends:** The shift towards remote work has accelerated the demand for mobile applications that support remote collaboration, communication, and productivity, further emphasizing the need for effective mobile testing.

SALARY EXPECTATIONS



Globally:

- Entry-Level Mobile Tester: **\$40,000 - \$60,000** per year
- Mid-Level Mobile Tester: **\$60,000 - \$100,000** per year
- Senior Mobile Tester: **\$100,000 - \$150,000+** per year

TOP COMPANIES HIRING

Infosys

CISCO

DELL

vmware

IBM

ORACLE

WELLS
FARGO

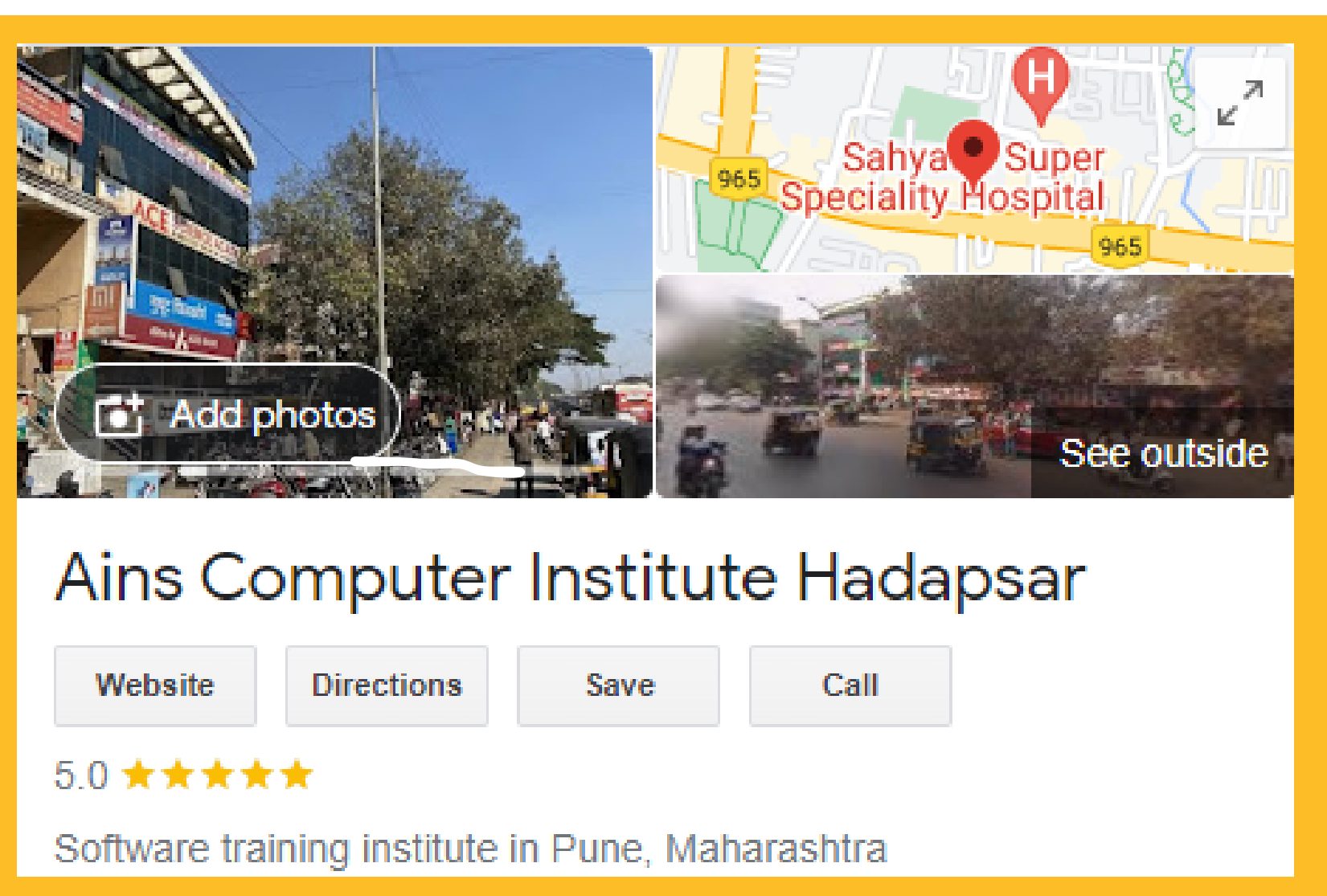
Honeywell



WHY AiNS?



"AiNS Computer Institute stands out as the premier destination for mobile testing courses due to its unmatched faculty expertise and comprehensive curriculum. With industry-leading instructors boasting extensive experience in mobile testing, students benefit from practical insights and real-world scenarios. The institute's commitment to staying abreast of the latest trends ensures that graduates are equipped with cutting-edge skills and techniques essential for success in the dynamic field of mobile testing. Choose AiNS Computer Institute for unparalleled quality and guidance in pursuing a career in mobile testing."



BENEFITS at AiNS



- 1 **Expert Faculty**
- 2 **Industry-Relevant Curriculum**
- 3 **Career Guidance & Opportunities**
- 4 **Recognized ISO Certification**
- 5 **Real-World Data Analysis Projects**
- 6 **Access to Premium Tools and Datasets**
- 7 **Get Interview Ready & Resume Building**
- 8 **100% Job Assistance**



Certificate of Completion

This Certificate is presented to SAMPLE for successfully completing

his/her course in SAMPLE by securing 99%

We wish him/her success in life.

**(This percentage is based on student's Practical
& Written examination)**

Digitally signed by

Nasir Hassan Nasir Hassan Khan

Khan
Date: 2024.03.16
16:08:40 +05'30'

AUTHORISED SIGNATORY
DIRECTOR



9001:2015



OUR CERTIFICATION:

ISO course certification offers several advantages:

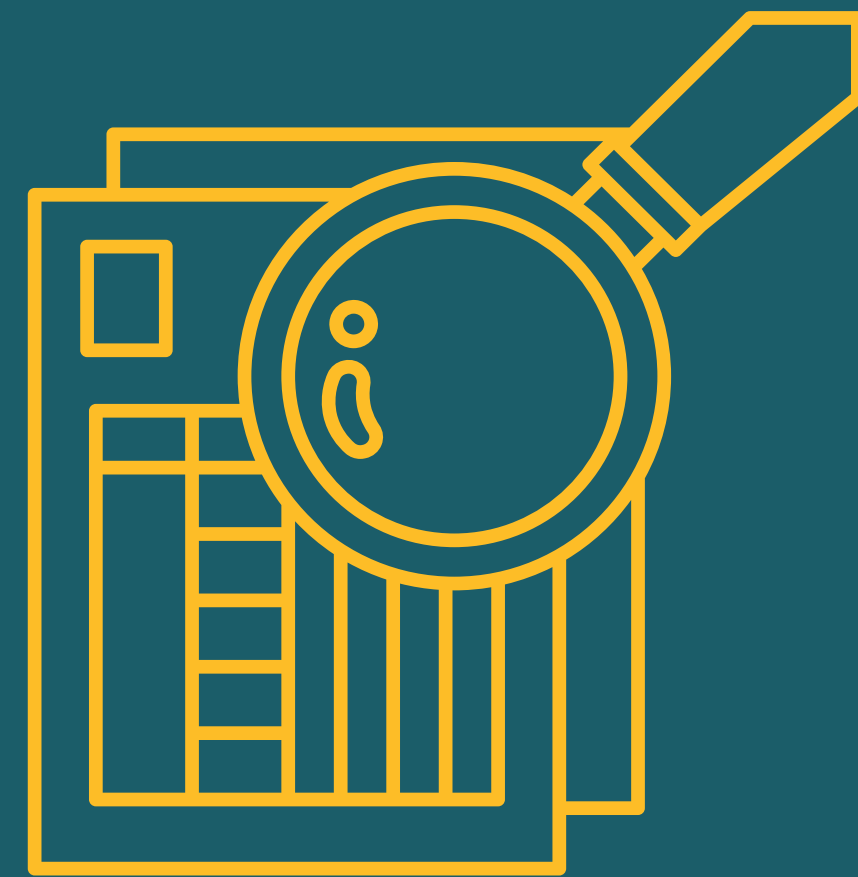
1. **International Recognition:** ISO certifications are globally recognized, demonstrating compliance with international standards and best practices.
2. **Enhanced Credibility:** Certification enhances the credibility and reputation of the organization, instilling confidence in customers, stakeholders, and partners.
3. **Improved Efficiency:** ISO standards often focus on improving processes, leading to increased efficiency, reduced waste, and cost savings.
4. **Market Access:** Certification can provide easier access to new markets, as many contracts and tenders require ISO certification as a prerequisite.
5. **Risk Management:** ISO standards help identify and mitigate risks, ensuring better management of potential threats to the organization.
6. **Customer Satisfaction:** Compliance with ISO standards often leads to higher customer satisfaction due to improved quality and consistency of products or services.
7. **Competitive Advantage:** Certification can give a competitive edge by demonstrating commitment to quality, safety, and environmental responsibility.
8. **Legal Compliance:** ISO standards often align with legal requirements, ensuring compliance and reducing the risk of penalties or legal issues.
9. **Continuous Improvement:** ISO certification encourages a culture of continuous improvement, leading to ongoing refinement of processes and performance.
10. **Employee Morale:** Employees often take pride in working for a certified organization, leading to increased morale and motivation.

value

adding

Manual Mobile Testing Syllabus

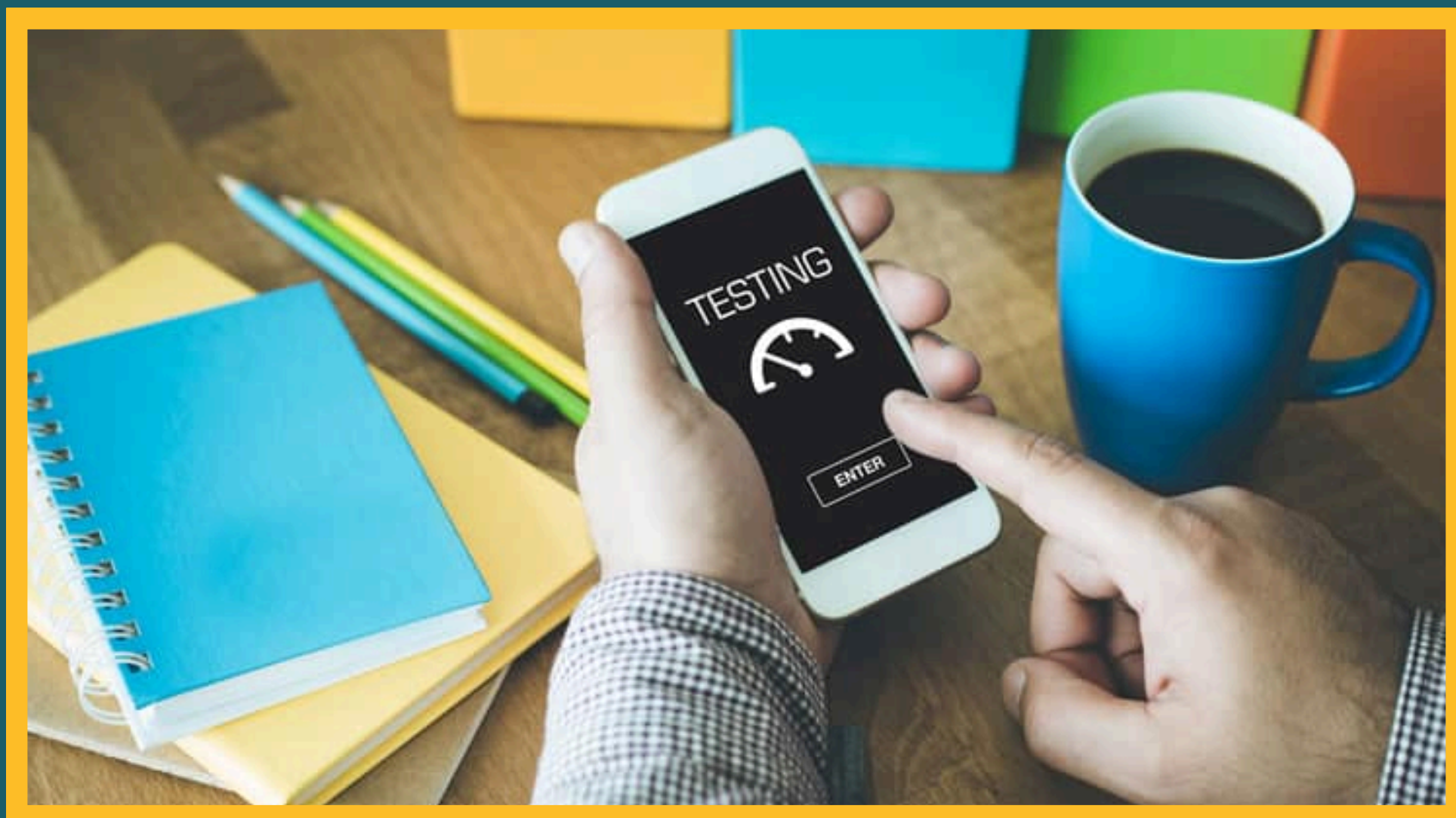
- Mobile Testing Introduction:
- Introduction to Mobile Testing
- iOS App Testing
- Android App Testing
- Mobile Testing Challenges and Solutions
- Why Mobile Testing is Tough?
- Mobile Device Testing:
- Test an Android Version When It Is Taken Out of Market
- How to Test Mobile Apps on Low-End Devices
- Field Testing for Mobile Applications
- Phone Model Vs OS Version: Which Should Be Tested First?
- Mobile UI Testing:
- UI Testing of Mobile Apps
- Mobile Responsive Test
- Mobile Testing Services:
- Cloud-Based Mobile Application Testing
- Mobile Testing Services
- Mobile App Beta Testing Services
- Mobile App Development Company
- Cloud-Based Mobile App Testing Service Providers
- Mobile App Performance and Security Testing:
- Mobile Applications Performance Testing Using BlazeMeter
- Mobile App Security Testing Guidelines



- **Mobile Testing Tools:**
- **Android App Testing Tools**
- **Best Mobile App Security Testing Tools**
- **58 Best Mobile Testing Tools**

Other(s):

- **Practicals**
- **Mini Projects**
- **Special handwritten Notes**



Mobile(Appium) Automation Testing

- An Overview of Automation Testing
- What do you know about Testing Process?
- Deep Dive on Automation Testing
- Different Types of Automation Testing tools
- An Overview of Appium and Mobile Automation Testing
- What do you know about Mobile Automation Testing?
- Selenium 3.0 and API
- Scope of Automation for iOS and Android Devices
- How to run the scripts on Emulators and Mobile Devices?
- Different Types of tools for Mobile Automation Testing
- Deep Dive on Appium and API
- Limits of Appium
- Why Appium?
- How Appium Works?
- How to install JDK, Maven and Android SDK?
- What is essential for Appium?
- How to install windows and set up?
- Install Java and set up Variables
- How to configure Maven and Android SDK?
- Do you know to configure Eclipse IDE?
- How to install Appium in Windows?
- How to Set up Appium?
- Download Appium GUI Tool
- Start Appium Server
- Run a Sample Test
- Kill Nodes
- What do you know about Appium Desired capabilities Class?
- Appium Inspector
- What is Appium Inspector?
- How and when to run it?
- Record and Play
- How to locate elements?

- **UI Automator Viewer**
- **How to Open UI Automator Viewer through SDK tools kit?**
- **Different locator devices**
- **Locator Tags**
- **Object Locators**
- **How to locate elements on App?**
- **Locate elements with elements**
- **How to locate multiple elements?**
- **Find Element by Class Name and Id's**
- **Find element by id and XPath**
- **How to use different functions inside UIAutomator Class?**
- **Basics of Android**
- **An Overview**
- **How to Share and Control Android Device Screen from PC**
- **Download Android Platforms using SDK Manager**
- **vHow to create Virtual Device and Emulators using SDK Manager?**
- **Install Apk file on Android Devices**
- **Run your first Test in Android Devices**
- **Set up Test Projects**
- **API References on Appium**
- **Desired Capabilities**
- **App Packages that launch activity of Android Apps**
- **How to Perform test in real devices?**
- **How to run test on emulators?**
- **Run your code for first test**
- **How to use UiSelector Class?**
- **Set Up Test Environment for Maven and JUnit**
- **Automate Facebook login contacts**
- **How to post status with project codes?**
- **How to delete post with user layout?**

- **Deep Dive on Mobile Testing Automation**
- **How to use Touch action class to perform drag and drop?**
- **How to Perform Click and Swipe?**
- **Do you know to perform Multi touch?**
- **Swipe Performance using screen coordinates**
- **Project Coding of Mobile gestures**
- **Mobile Web Automation**
- **How to get User agent?**
- **Identify Objects**
- **How to code for Mobile Web Automation Projects?**
- **Built in Apps by Android Automation**
- **Dial a Phone number**
- **Project code for Phone number**
- **Set up recurring**
- **Alarm in Android**
- **Mobile Testing – Platforms**
- **Mobile Operating Systems**
- **Mobile Testing - Device Types**
- **Native Vs Hybrid Vs Mobileweb**
- **Mobile Web**
- **Native App**
- **Hybrid App**
- **Mobile Testing - Device Vs Application**
- **Device Testing**
- **Unit Testing**
- **Factory Testing**
- **Certification Testing**
- **Application Testing**
- **Key Points**
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- **Mobile Testing - Emulator Vs Simulator**
- **Mobile Testing – Application**
- **Mobile Testing - UI**
- **Screen Orientation / Resolution**
- **Available Tools**
 - **Google chrome extension**
 - **Screenfly**
 - **BrowserStack**
- **Touch Screens**
 - **Multi-Touch vs. Single Touch Screens**
 - **Long Touch vs. Short Touch**
 - **Button Size and Position**
- **Soft & Hard Keys**
 - **Soft Keyboards**
 - **Hard Keys**
 - **Trackballs, Track wheels & Touchpads**

- **Mobile Testing - Planning & Tools**
- **Preparing to Perform Mobile Device Testing**
- **Device Management Tools**
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- **Mobile Testing - Hardware Perspective**
- **Hardware Components**
 - **Circuit Board**
 - **Touch screen display**
 - **Memory Card**
 - **SIM Card**
 - **Battery**
- **UDID for iOS**
 - **How to find you UUID?**
- **Provision Profile for iOS**
 - **How to create a provision profile for iOS?**
 - **How to add your provisioning profile in AppBuilder?**
 - **Device Options & Preferences**
- **Mobile Device Testing – Types**
- **Network Connections**
- **SD Card Interactions**
- **Bluetooth Testing**
- **Wi-Fi Testing**
 - **How to Run a Mobile Phone WiFi Speed Test on your Smartphone**
 - **Tools to Perform Speed Test**
- **Localization & Globalization**
- **Database Testing**
- **Recovery Testing**
- **Concurrency Testing**
- **Usability Testing**
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- **Mobile Testing - Frameworks Overview**
- **Framework Architecture**
- **Mobile Testing - Android Frameworks**
- **Mobile Testing - IOS Frameworks**
- **Comparison between different testing frameworks**
- **Mobile Testing - Robotium Framework**
- **Benefits of Robotium**
- **Drawbacks of Robotium**
- **How to Use Robotium**
- **Test an App with Robotium**

- **Mobile Testing - Selendroid Framework**
- **Benefits of Selendroid**
- **Drawbacks of Selendroid**
- **How to Use Selendroid**
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- **Mobile Testing - Appium Framework**
- **Advantages of Appium**
- **Drawbacks of Appium**
 - **How to Use Appium**
- **Test an App with Appium**
- **Mobile Testing - Zucchini Framework**
- **How to install Zucchini**
- **How to Use Zucchini**
- **Running on the device**
- **Result Display**