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APPIUM – AN APPLICATION AUTOMATION TOOL

UNDER THE GUIDANCE OF
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AUTOMATION



INNOVATION



PROCESS



TECHNOLOGY



SYSTEM



CONTROL

INTEGRATION

INTRODUCTION

APPIUM - AN APPLICATION AUTOMATION TOOL

INTRODUCTION



Appium was originally developed by Dan Cuellar in the C# programming language. Later Appium was rewritten and maintained in node.js by Sauce Labs. Appium is used as an application Automation Tool.

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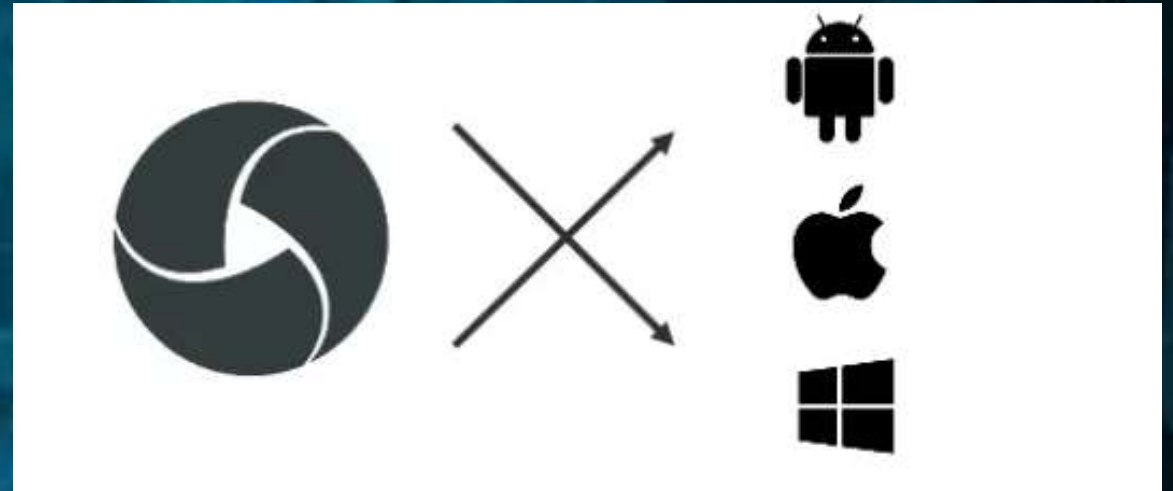
WHAT IS APPIUM?

APPIUM - AN APPLICATION AUTOMATION TOOL

INTEGRATION

WHAT IS APPIUM?

Appium is an open source, cross platform for automation testing of native, web and hybrid applications on iOS, Android, and Windows desktop platform. It is currently geared towards providing a seamless automation testing experience.



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INVENTION OF APPIUM

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INVENTION OF APPIUM

Appium was originally developed by Dan Cuellar in 2011 under the name of “iOSAuto”, written in the C# programming language.

- The Program was open-sourced in August 2012 using the Apache 2 license.
- In January 2013, Sauce Labs agreed to fund Appium’s development and motivated its code to be rewritten using Node.js.



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WHY CHOOSE APPIUM?

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WHY CHOOSE APPIUM?



Open Source



Cross-Platform

WHY CHOOSE APPIUM?



No Source Code



No Reinstallation

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TYPES OF APPLICATIONS

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NATIVE APPLICATION



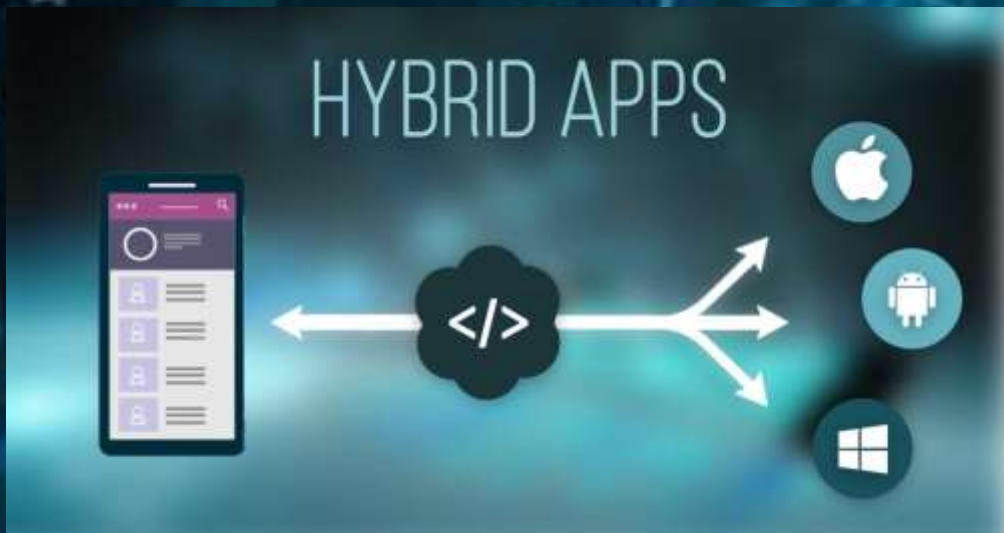
Native apps live on the device and are accessed through icons on the device home screen. Native apps are installed through an application store (such as Google Play or Apple's App Store).

WEB APPLICATION



- These kinds of applications used to be really famous until the concept of native applications came along. Web applications as the name suggests, run on a browser.

HYBRID APPLICATION



Hybrid apps are part of native apps, part of web apps. Like native apps, they live in an app store and can take advantage of the many device features available. Like web apps, they rely on HTML being rendered in a browser, with the caveat that the browser is embedded within the app.

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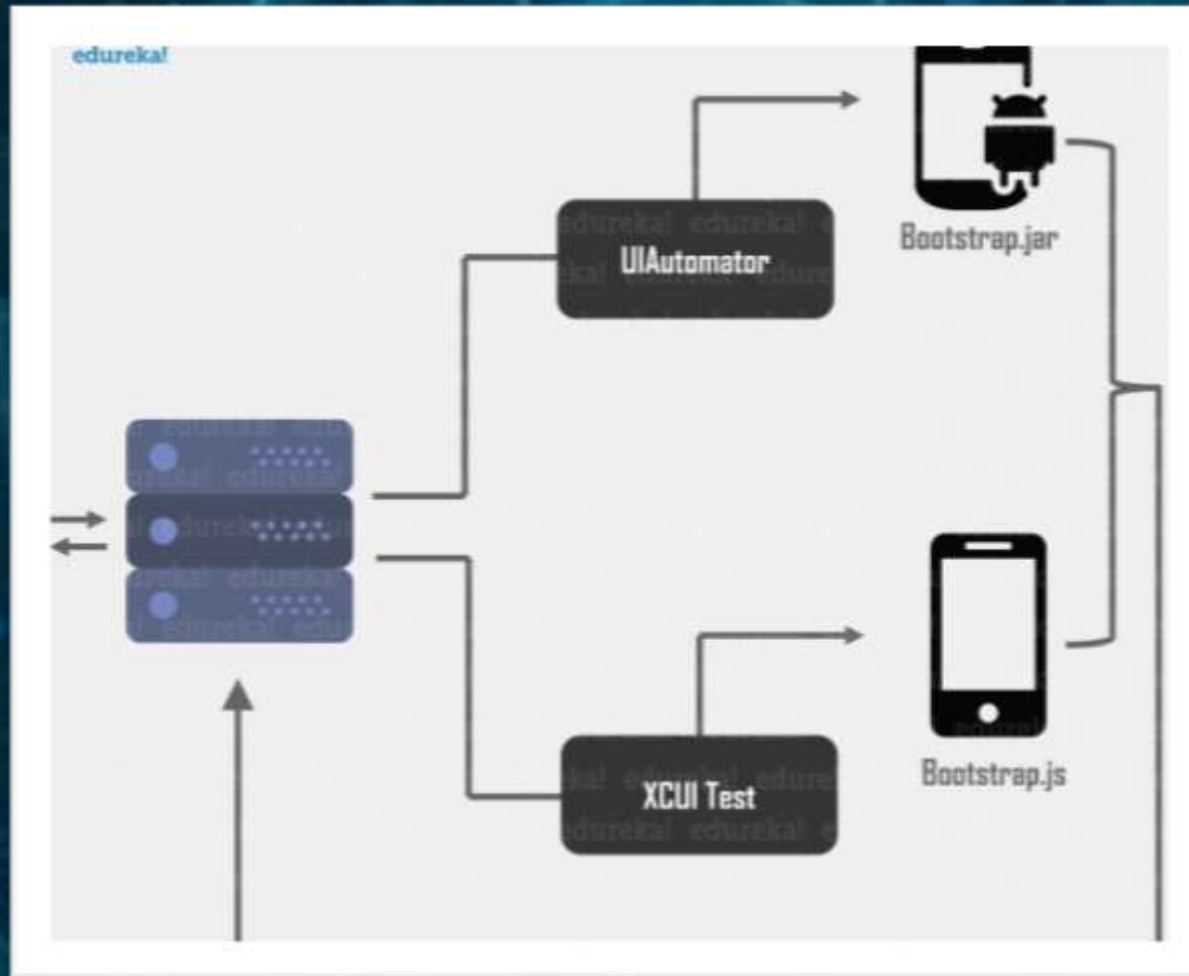


INTEGRATION

APPIUM ARCHITECTURE

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APPIUM ARCHITECTURE



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JSON WIRE PROTOCOL

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JSON WIRE PROTOCOL



`{Key} : {Value}`

JSON is a short form for JavaScript Object Notation, wherein complex data structures are represented.

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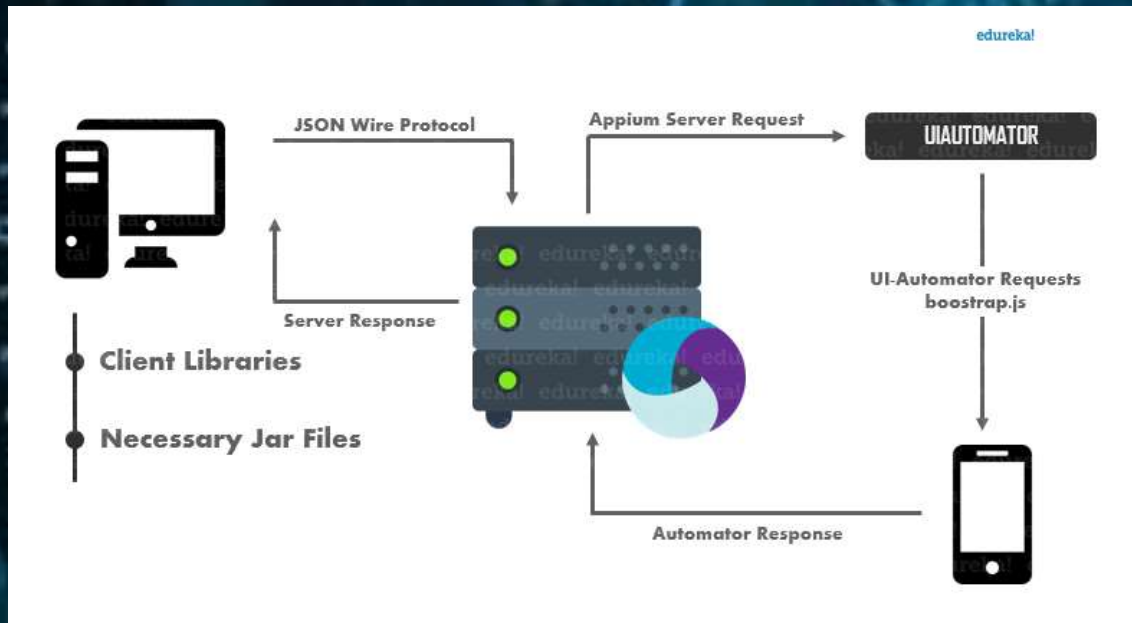


INTEGRATION

APPIUM ON ANDROID

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APPIUM ON ANDROID



Appium on Android uses the UIAutomator framework for automation. UIAutomator is a framework built by android for automation purposes. So, let's take a look at the exact way that Appium works on Android.

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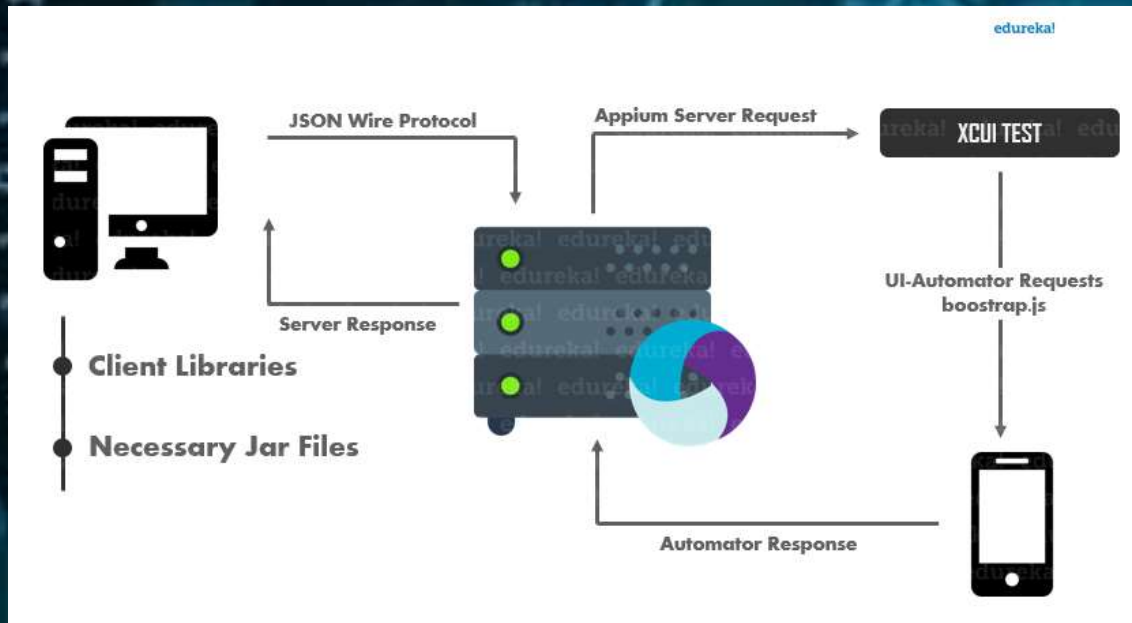
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APPIUM ON IOS

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APPIUM ON IOS



On an iOS device, Appium uses Apple's XCUI Test API to interact with the UI elements. XCUI Test is the automation framework that ships with Apple's XCode.

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CONCLUSION

- Indeed, by this seminar I came to know all the concepts of Appium, and I also understand that we use Appium in different ways for different types of Operating System (OS).
- There are multiple options available today when it comes to automation. All the tools available would have their own advantages and disadvantages too. There are lots of benefits offered by Appium for automation testing. A single Appium test can run on multiple devices and OS versions. Creating Appium tests is also easy. But looking at the vast benefits that Appium offers, it is currently the best choice for automation testing.
- I hereby also came to know that Manual Testing is so complicated & time consuming. It is very difficult to test the application against multiple users. So Appium is an automated testing tool to test the application in very short time.

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