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MOBILE AUTOMATION TESTING

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Mobile testing involves using tools or open-source frameworks to assess the functionality, usability, and performance of mobile applications. Whether it's smartphones, tablet PCs, or the latest iPhone version with minor updates, conducting mobile testing and automated testing becomes essential to identify regression bugs and ensure the delivery of high-quality applications[1].

First of all, it is very important to choose the right automation tools for mobile testing. We must pay attention to the following factors: speed, ease learning and using, level of coverage of the main tasks of mobile testing, possibility of integration with CI/CD systems or other native platforms. Today there are many mobile testing tools: Katalon, Appium, Espresso, XCUI Test, Robotium, Robot Framework, Selendroid, Xamarin.UITest etc. The choice depends on the factors mentioned above and the specific tasks that you want to solve with mobile automation. However, in general cases, Appium is the best option. It is fully open-source and free tool, which allows test and code reusability between iOS, Android, and Windows, and easy adoption for those experienced with Selenium. But the main advantage of Appium is a big set of supported languages. Thus, we can choose a programming language that will be convenient for us, write test scripts and do not pay attention to other factors.

Appium is primarily utilized in the realm of software test automation to ascertain whether a given application's functionality functions as intended. Unlike other forms of software testing, UI automation empowers testers to write code that simulates user

scenarios within the actual application interface, closely resembling real-world interactions. This approach harnesses the advantages of automation, including speed, scalability, and consistency.

Appium's objective is to furnish a comprehensive toolkit that supports this type of automation uniformly across multiple platforms. While most platforms offer tools for UI automation to some extent, these tools are often specific to each platform and demand specialized knowledge of particular programming languages and toolchains. Appium endeavors to consolidate all these automation technologies into a single, stable interface that can be accessed using popular programming languages[2].

Mobile farm is also an important element. It is a service that provides instant access to a wide range of iOS and Android real devices located in different locations. There are many advantages of testing with real devices: simulation of real conditions, simulation complex test scenarios, testing the product from different parts of our planet and getting complete information about the smartphone on which the application is running. The main advantage of the solution is that, with minimal effort, you can run a ready-made set of automated tests on any device from mobile farm.

The mobile device farm can be represented by physical computers located in offices. On the farm, you can find both real Android and iOS devices connected to the computer via a hub, as well as virtual ones (iOS simulators and Android emulators). As a rule, one computer is connected to 3-7 devices, which are grouped according to the principle of the operating system. This pipeline is quite flexible and configurable, so you can easily customize the launch to suit your needs.

Usually, the features of process releases are such that a large number of tests need to be run in parallel in a short period of time. So, parallelization is the key to fast results. The launched set of tests will run in parallel on all devices that are connected to the computer. The speed of passing the tests depends on the IOS/Android platform and the type of device (real-virtual). The number of tests in one run is practically unlimited, but the more tests, the longer the time to complete the entire set. The service automatically takes a screenshot and collects data upon passing the test set and thus you get detailed information about the problem quickly and conveniently.

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HOW THE UKRAINIAN IT SPHERE WITHSTANDS PRESSURE FROM RUSSIAN INVASION

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The Ukrainian IT sphere has emerged as a resilient and innovative industry, facing significant challenges in the wake of the ongoing Russian invasion. This article explores how Ukraine's IT sector has managed to withstand the pressure and continue to thrive despite the political and military turmoil. By examining the resilience, talent, and collaborative efforts within the Ukrainian IT community, we can gain insights into the strategies employed to overcome adversity.

The Ukrainian IT sector has demonstrated remarkable resilience and adaptability in the face of the Russian invasion. Despite the uncertainties and disruptions caused by the conflict, IT companies in Ukraine have showcased their ability to swiftly adapt to changing circumstances. Remote work arrangements, flexible project management strategies, and the ability to quickly switch between client projects have allowed the industry to maintain continuity.

Ukraine boasts a highly skilled and educated workforce, which has played a crucial role in the sector's ability to withstand pressure. The country's strong emphasis on technical education, particularly in computer science and engineering, has produced a pool of talented professionals sought after by both local and international companies. This skilled workforce has been instrumental in driving innovation, developing cutting-edge technologies, and attracting investment to the Ukrainian IT sector. In addition to technical skills, Ukrainian IT professionals have cultivated a strong work ethic and a