Challenge 3

Outline which testing technology, tool, or practice you think is the “next big thing” in Software Testing.

Internet of Things (IoT) testing strategy

The Internet of Things popularly known as IoT is the network that consists of devices, vehicles, buildings, or any other connected electronic devices. This interconnection facilitates the collection and exchange of data. The 4 common components of an IoT system are:

- Sensor
- Application
- Network
- Backend (Data Center)

Ten years ago connected devices seemed to be a mere concept only. However, the introduction of IoT enabled digital transformation. According to a statistic people use at least one IoT device, which can be anything from a thermostat to a refrigerator. Moreover, IoT technology, when paired with powerful 5G networks, has the potential to speed up operations and processes. It is predicted that the global population of IoT devices is likely to reach 125 billion by 2025.
With all these growing figures, testing IoT software is vital, especially when most consumer brands are offering IoT capabilities to innovate their business.
There is a lot of impact of IoT devices across different industry and for the successful working of all these highly interconnected IoT devices, effective IoT testing is critical to ensure their flawless functioning. Hence, in order to ensure that your IoT apps and devices truly deliver real-time information, it is essential to adopt and leverage end-to-end software testing of these IoT interconnected devices.
IoT testing and test strategies have become a must with the proliferation of connected devices rapidly. IoT testing uses leading-edge technologies as the software is in-built into the IoT devices. It is crucial to get the security of the IoT devices tested to manage risks and vulnerability management, hardware challenges, compliance requirements, access management. An effective IoT test strategy can lead to seamless performance and functionality of intelligent products.
IoT future-proofs testing by improving user engagement and offering superior User Experience across different channels. With the rate at which IoT is increasing, the quality assurance team needs to expand its knowledge concerning performance, usability, and security.