



GadgEon
Engineering Smartness



WebCardio

WebCardio is an end to end remote patient monitoring solution which can be used to scale up traditional ambulatory monitoring use cases or applied for novel scenarios.

Project Period : 2 years

Team Size : 4 members

Protocols Used: WiFi, HTTPS

Tools Used: Appium , Selenium ,Python , Robot Framework, Jenkins , AWS

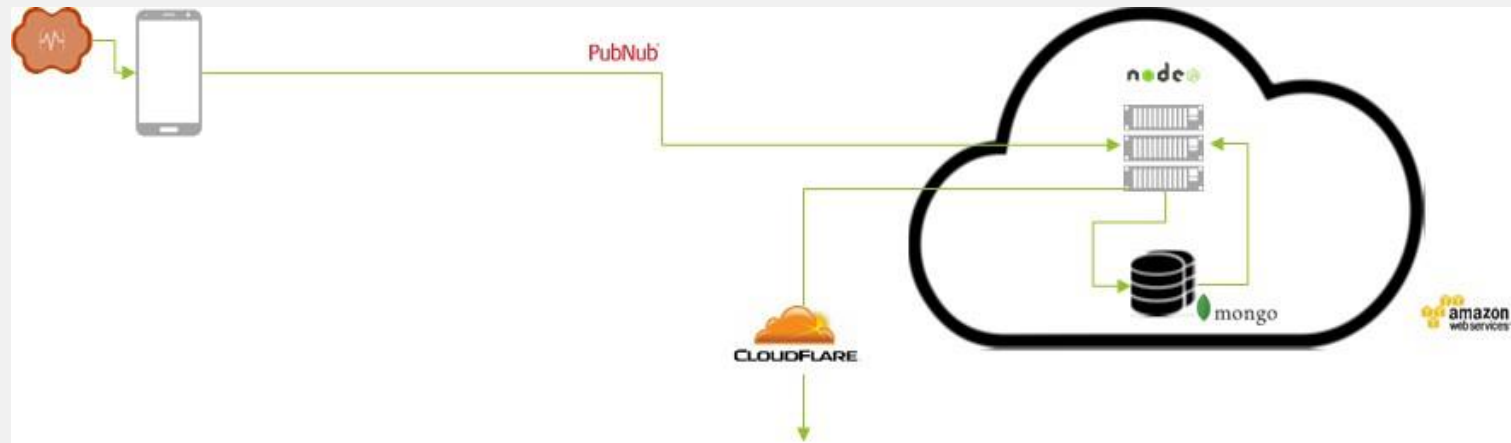
Challenges

- Implement CI/CD Framework for improving the development process
- Automate end-to-end use case level testing covering End Device (Wireless Disposable ECG Patch) , CloudApp and MobApp
- Long duration test cases execution and monitoring real time events during the test

Solutions

- Designed test automation framework which can take care of end to end use case validation integrated with standard CI/CD framework
- Automated long duration test cases and simulated the real time network events such as MobApp restart, End node network connection lost , Wireless Hotspot restart etc.
- Verified the solution with different Mobile OS versions and devices
- Automated test scripts for data verification

WebCardio – Data Flow Diagram



Tools / Technology Used

Cloud Service Automation

- Selenium
- Jmeter

Device Automation

- Python , Selenium, WiFi, HTTPS

MobApp Automation

- Appium

Continuous Integration

- Jenkins
- Git.

Test Management and Reports

- TestRail
- Robot Framework

WHAT DID GADGEON DO?	PLATFORMS/ TECHNOLOGIES USED
1) Defined Test Strategy for the complete system .	Requirements Gathering & Analysis, defined functional test cases and use case based on end to end test scenarios which includes ECG Patch , Mobile App and cloud App
2) Implemented CI /CD Framework for improving the development process	<ul style="list-style-type: none"> a) Jenkins with Master slave configuration running in Cloud AWS EC2 Instance and in a local network servers. b) Android SDK running in AWS EC2 instance c) GCC in AWS EC2 d) Amazon S3 Bucket for Storage e) Amazon Cloud WATCH for log verification
3) Simulated large network operations for performance bench marking and scalability testing .	Jmeter
4) Designed Automation framework which can validate Wireless ECG Patch , MobApp and Cloud App functionalities .	Robot Framework , Selenium , Appium , Python.
5) Automation framework supporting test evidence and detailed logs including screen shots for ease of debugging.	TestRail , Python, Appium , Selenium webdriver and Robot Framework





GADGEON SYSTEMS INC

881 Yosemite Way, Milpitas, CA 95035, USA

CONTACT - USA

Wes Schropp – VP Sales : +1-408-621-2570

CONTACTS - INDIA

Hari Nair : +91 9895 01 58 80 | Sreenandh : +91 9747 08 66 88

GADGEON SMART SYSTEMS PVT LTD

VI 405/E1, Fathima Tower, Malepally Road, Thrikkakara PO, Kochi, Kerala, INDIA, Pin: 682 021



sales@gadgeon.com