Sunil *Kumar Maharana*

AUTOMATION TEST ENGINEER

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Profile Summary

As an experienced Automation Test Lead with over 3.4 years in the software testing domain, I specialize in leading teams to deliver high-quality UI and API automation frameworks. Expertise in using Selenium, Request module, and Postman for building test automation strategies. Skilled in mentoring junior testers, defining best practices, and optimizing test execution workflows in Agile environments. Focused on test efficiency and ensuring robust and scalable automation solutions.

Technical Skill

Language	:	Python
UI Testing	:	Selenium, Playwright
Framework	:	Pytest, Robot Framework
Suits	:	Regression testing
API Testing	:	Postman, Rest API, API testing
Data Validation Testing	:	ETL Testing, DWH/ETL, OLAP/OLTP, ETL Schema, SQL (Mysql, SSIS), Unix (Linux karnel), Pandas, Numpy, Pyspark
Devops tools	:	Git, Jenkins, Docker
Agile	:	Jira, Agile method, Confluence Page, HPalm
Cloud	:	AWS (EC2, RDs, Lambda)

Technical Qualification

- Billing systems expertise in FTTH networks and Telecom BSS/OSS environments.
- CRM systems knowledge: Salesforce (SFDC), Siebel, and integration with payment gateways.
- Healthcare IT testing: EHR/EMR, LIS/RIS, and patient management platforms.
- Technical skills: Data Warehousing (DWH), ETL, SQL, Unix, XML, EDI, API/SOA/UI testing, and role-based access.
- Tools: HPALM, MTM, SOAP UI, JIRA (Agile), SQL Developer.
- Development Methodologies: Agile & Waterfall.

Technical Summary

Automation Test Engineer | 3.4 Years of Experience

- Specialized in **UI automation testing**, ensuring **functional, intuitive,** and **visually** consistent user interfaces across platforms and devices.
- Proficient in **Postman** for **manual API testing**, validating **REST APIs, JSON/XML schemas,** and **response codes** to ensure seamless integration with the **UI** and backend systems.
- Experienced with the **Python Requests module** for **automated API testing**, developing data-driven frameworks to improve test coverage and efficiency.
- Utilized **Pandas** for **ETL automation testing**, handling **data extraction, transformation,** and **loading** to ensure accurate data flow in automated test workflows.

- Expertise in automating tests for **Siebel CRM, Oracle BRM, Telecom OSS,** and **Card Payment systems**, ensuring high-performance applications.
- Strong **Python skills** and **SQL** knowledge for **backend testing** and **data validation**, ensuring consistency and accuracy across the system.
- Experienced with **CI/CD tools** like **Jenkins** and **Git**, automating **deployment** and **testing pipelines** for improved software delivery speed and reliability.
- Well-versed in **Agile methodologies** (**Scrum, Kanban**) and **SDLC/STLC**, ensuring high-quality automated tests and strong collaboration within teams.
- Capable of handling **end-to-end automation** tasks and providing reliable solutions through test **automation frameworks.**
- Apply a **logical approach** in **automating test cases**, ensuring comprehensive test coverage, identifying edge cases, and improving overall testing efficiency by reducing manual intervention and repetitive tasks.

Education Qualifications

- *Biju Patnaik University of Technology (CGPA- 7.60) Passout-2019*
  Bachelor of Technology - Electrical and Electronics Engineering

Work Experience

- *Currently I am working as an **Automation Test Engineer** with **Infosys,** Bengaluru since **Jan 2022** to **till now**.*

Projects

project: 1

Project Name : GPON with FTTH Access Networks (Mar 2024 - Present)
Client : TPG Telecom, Australia
Domain : OSS Networks –Provisioning and activation
Technology : Python, Robot, Selenium, Appium, AWS, Pytest, DevOps tools, Manual testing
Tool : SQL Developer, putty, Postman, Json

Project Technical Flow and Business Flow :

Components and Architecture of GPON FTTH Access Network. PON (Passive optical network) based FTTH access network is a point-to-multipoint, fiber to the premises network architecture in which unpowered optical splitters are used to enable a single optical fiber to serve 32-128 premises. GPON is widely deployed in FTTH networks. It can develop into two directions which is 10 GPON and WDM-PON. EPON (Ethernet Passive Optical Network) is the rival activity to GPON which uses Ethernet packets instead of ATM cells. GEPON uses 1 gigabit per second upstream and downstream rates.

Role and responsibility:

- Develop and maintain automation scripts using Python, Selenium, Robot Framework, and Pytest.
- Automate GPON FTTH provisioning, activation, and rating analytics workflows. Perform API testing using Postman and Python requests, validating provisioning and rating APIs.
- Execute database validations in SQL Developer and Amazon Redshift for data consistency.
- Implement automated functional and regression testing for stable software releases.
- Integrate automation scripts into CI/CD pipelines using Jenkins, GitHub Actions, and AWS EC2.
- Debug and analyze test failures using logs, Putty, and SQL Developer.
- Generate detailed test execution reports (Allure, HTML) and track defects in JIRA.
- Collaborate with developers, business teams, and DevOps engineers to improve testing efficiency.
- Maintain documentation for test cases, automation frameworks, and test execution results.

project: 2

Project Name **: Telemedicine Video Consultation Platform** **(June 2024-Till now)**
Role **:** API Testing, DWH/ETL Testing
Client **:** Magrabi Hospitals and Centers, Saudi Arabia

Project Description:

Allows patients to book and attend video consultations with doctors. Integrated calendar scheduling and appointment reminders. Doctors can write e-prescriptions during the session. Built-in payment gateway for appointment billing. Provides a secure and encrypted video conferencing solution. Real-time chat support for doctors and patients. Includes functionality for uploading and sharing reports during consultation. Integrated with third-party pharmacy APIs for prescription dispatch. Doctors have dashboards showing appointment history and analytics. Automated feedback collection after consultations. Built-in document verification for doctor licensing and patient ID. Uses WebRTC for video calls, ensuring minimal latency. Hosted using a Kubernetes cluster for scalability. Push notification system for mobile app alerts. Complies with GDPR and HIPAA for patient data protection.

Role and responsibility:

- Automate test cases for appointment booking and video session APIs.
- Validate response time, payload, and status codes for video call setup APIs.
- Ensure that the API adheres to healthcare-specific regulations like HIPAA (Health Insurance Portability and Accountability Act) in the USA, GDPR (General Data Protection Regulation) in Europe, and other local data protection laws.
- Ensure that APIs are correctly pulling and pushing data to/from various healthcare systems.
- Verify that the correct patient data is retrieved, stored, and updated. For example, testing for various types of patient records: medical history, prescription information, test results, etc.
- Test integration APIs for lab result ingestion using mock servers.
- Ensure that APIs have strong authentication (e.g., OAuth, JWT) to prevent unauthorized access.
- Perform end-to-end test of doctor prescription flow and DB update.
- Test payment gateway integration with mock data.
- Use SQL scripts to verify doctor-patient appointment logs in DB.

project: 3

Project Name **: Rating & Charging Analytics** **(Jan 2022 - Jan 2024)**
Domain **:** Telecom BSS
Client **:** Xfinity,USA
Technology **:** Python, Selenium, Appium, AWS, Pytest, DevOps tools, Manual testing
Tool **:** Amazon Redshift

Project Technical Flow and Business Flow :

Rating Engine will receive the events in the form of data records known as Call Detail Records (CDRs) or Usage Detail Records (UDRs) to describe the usage of a product/service. CDR is a string of data which consists of call information like call date and time, call length, calling party, called party, etc., which are used for rating the events.It will accept CDRs from the Mediation System or other service providers or roaming partners in case of roaming usage.It will validate the CDRs and eliminate any duplicate records. These duplicate events will be stored in a database table for later verification.It will determine the customer account to be charged for that event. At this point, rate process will pick up the event source (Mobile Number or IP Address, etc.) and it will check the database to verify if this event source is associated with any of the account.

Declaration

I hereby declare that all the information mentioned above is true to the best of my knowledge.