Comparative Analysis of Robot Framework and Karate Framework

Introduction

Karate and Robot Framework are both open source test automation frameworks that are used for automating web and API testing. This report will mainly focus on the ability of these frameworks to adapt to changing system architecture.

Feature Comparison

| Feature | Karate | Robot Framework |
| --- | --- | --- |
| Syntax | Gherkin like Syntax | Domain specific keyword-driven |
| Ease of Use | Custom libraries can be integrated easily, no plugins required to run tests | Custom libraries can be integrated easily, requires the robotframework-maven-plugin |
| Test Case Clarity | Readable and concise | Readable if keywords naming is clear |
| API Testing | Built-in feature for making HTTP requests with authorization (similar to rest assured) | Requires external libraries like RequestLibrary |
| Handling JSON, XML | Built-in support for JSON and XML | Requires external libraries for handling JSON and XML |
| Parallel execution of tests | A core feature and can be easily done | Isn’t available in the robotframework-maven-plugin |