Introduction

Our task was to research testing automation tools, design a proof of concept and document the tools. Our end goal was to provide a tool that was easy to use and used as little coding as possible.

Important Features:
- Works with cloud and on-prem operations.
- Tool that is not cloud based due to security requirements.
- Should be usable by users that have no or low coding experience.
- Should be able to create reports that are protected from user manipulation.
- Template/Process for automated test case creation.

Team Recommendation - Katalon

Katalon Studio

Web and Mobile Test Automation Tool with powerful recording utility. Offers both codeless/expert modes with built in support for source control (github, etc).

Language - Groovy

Price:
- Studio - Free (limited features)
- Studio Enterprise - $1,899 (per user/yr)

Pros:
- Easy Installation
- Offers built in project templates
- Self healing for test objects
- Inbuilt Git
- Good documentation
- Easy to understand

Cons:
- Not open source.
- Requires some technical knowledge
- No built in handler for lists/grids
- Some features require programming to implement

Behaviour Driven automated testing tool. Allows users to write test scenarios in plain text that get translated into code.

Languages - Gherkin (translated to:) Java, JavaScript, Ruby, or Kotlin

Sample Gherkin:
Given The user has navigated to the Noridian homepage.
When I click on “Medicare Part A” And I click on “Search” And I click on “Example”
Then items containing “Example” should be displayed

Price:
- Starter - $28 (per user/monthly)
- Cloud - $30.50 (per user/monthly)

Pros:
- Support for common languages.
- Gherkin simplifies the flow of test cases -> testing
- Premium options include online training and extra tutorials.

Cons:
- Selenium is required to function (extra maintenance).
- No individual studio: setup is complicated, and unique to each IDE.
- Many dependencies to manage (security concerns)
- Requires coding expertise