

COMPUTER SCIENCE

#### Capstone 2022



## Introduction

Our task was to research testing automation tools, design a proof of conce 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



# **Testing Automation Proof of Concept** Team Members: Stewart Savela, Simon Karst, Wyatt Thelen, Ife Odujole, Vishavjeet Sindhu Sponsor: Noridian



ept as d	recording utility. Offers both codele with built in support for source con
	<u>Language</u> - Groovy
	Price:
	Studio - Free (limited features)
	Studio Enterprise - \$1,899 (per user/yr)
2	<u>Pros</u> :
	<ul> <li>Easy Installation</li> </ul>
·	<ul> <li>Offers built in project templates</li> <li>Self healing for test objects</li> <li>Inbuilt Git</li> </ul>
	<ul> <li>Good documentation</li> <li>Easy to understand</li> </ul>
	<u>Cons</u> :
	<ul> <li>Not open source.</li> <li>Requires some technical knowle</li> </ul>
	<ul> <li>No built in handler for lists/arids</li> </ul>

• Some features require programming to implement

Web and Mobile Test Automation Tool with powerful ess/expert modes ntrol (github, etc).

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.
- tutorials.

Cons:

- to each IDE.
- Requires coding expertise

edge



• Gherkin simplifies the flow of test cases -> testing Premium options include online training and extra

• Selenium is required to function (extra maintenance). • No individual studio: setup is complicated, and unique

Many dependencies to manage (security concerns)