



School of Science,  
Engineering & Technology



Team SKBD

## WEB-APP AUTOMATION TEST USING PLAYWRIGHT FRAMEWORK

s3926080 - Nguyen Bao Minh  
s3927195 - Nguyen The Anh  
s3928141 - Tran Viet Hoang  
s3863973 - Tran Vinh Trong

**Industry Supervisor:**  
Mr. Long Ngo  
**Academic Supervisor:**  
Mr. Phong Ngo

### PROJECT BACKGROUND

- RMIT ITS develops and maintains IT services for students and staff members
- **Testing** for such services, which is currently **manual**, is **not scalable** as services grow  
=> Implementation of **Playwright** - an **automated testing** framework

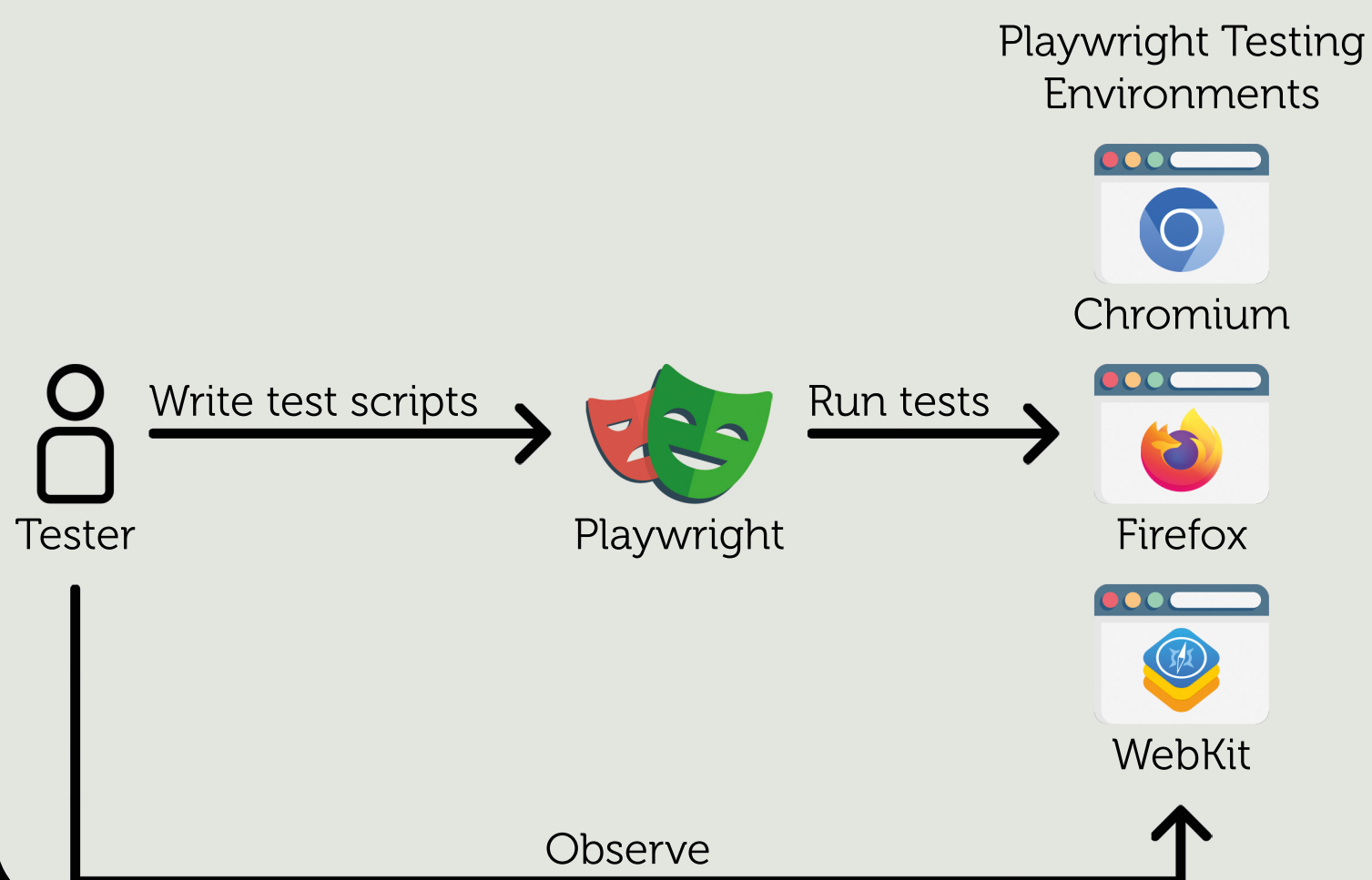


### OBJECTIVES

- Accelerate testing speed
  - Eliminate human errors & inconsistencies
  - Enhance test repeatability
- => Reduce strain on Quality Assurance team & maximize efficiency**



### SYSTEM WORKFLOW



- Using the existing manual test cases as reference, we reproduced the tests as **written test scripts**
- Playwright then runs the tests, behaving **exactly like a human tester**
- Tests are executed across **3 different testing environments**: Chromium, Firefox, and WebKit
- Testers then only need to observe test results

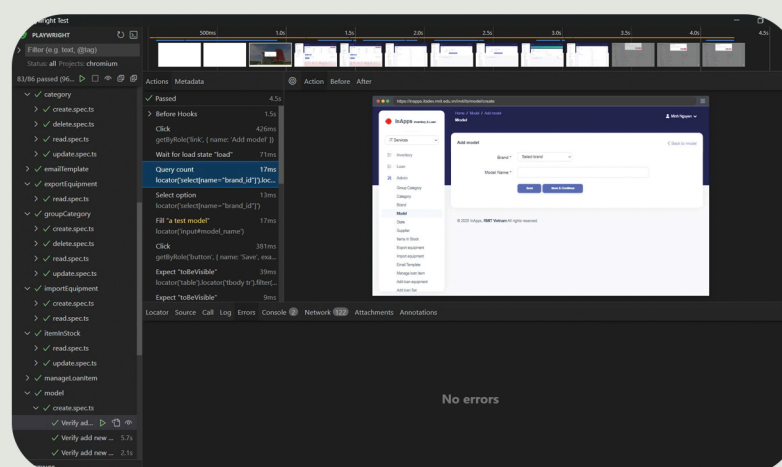
All actions are **automated**, along with **parallel test execution**, making this approach **more consistent** and **significantly faster** than manual testing.

### OUTCOMES & CONCLUSION

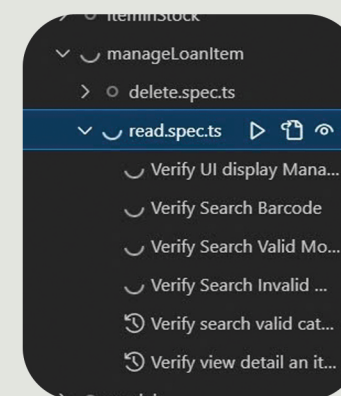
Over the course of the project, we delivered:

- **A functional automated test suite** for RMIT Inventory & Loan application
- **A code repository** with source code and test scripts for future scaling

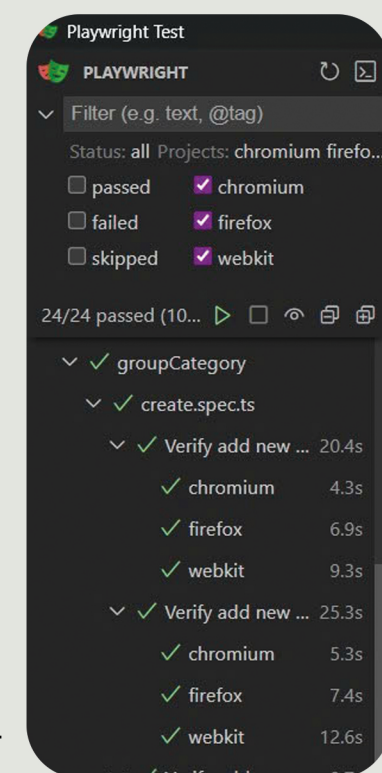
The project enabled **knowledge transfer** to RMIT ITS for similar applications and helped our team build **valuable skills** and **practical experience** in automated testing.



Test suite for RMIT  
Inventory & Loan application



Tests running  
in parallel



Cross-browser testing