

Future Test Improvements – Restful Booker Platform

To enhance the test suite the following test improvements could be added:

- Add in ability to run tests via Jenkins pipeline. This will remove the need for a local build of the test suite.
- When running tests locally they can be very slow. This is likely due to the URL being used heavily by other users. This will need investigating and likely solutions could include creating a specific test environment or avoiding running tests on a local machine and using Jenkins.
- Expand on accessibility testing – the accessibility scan using Playwright does capture some of the major issues but to ensure full accessibility using a combination of automated testing, manual testing and inclusive user testing will help ensure the website meets and exceeds all accessibility requirements.
- Arrange session-based testing of the website. This will allow the website to be tested under more 'real life' conditions and could capture more defects.
- Expand on non-functional testing of website – consider adding in performance and security testing after critical and major functional defects have been fixed.
- Add in test id elements – this will allow easier testing of website.
- Improve test case management – consider using tools such as Jira to allow traceability between Playwright test cases and tickets for example.
- Database is reset every 10 minutes – this can cause issues such as test flakiness for example when creating rooms that are then deleted before tests have finished.
- Test failures are also being caused by other users being able to book newly created rooms during the testing phase for example. This could be resolved by limiting access to test environments or by introducing time periods for testing.