

The Joy of Record and Playback with Test Automation



Dominic Kua @Testing_crafty · Oct 4

Got say @Louise_J_Gibbs did a fantastic job with that talk, I've been a vocal opponent of record and playback, maybe I was being too harsh... #TestBash



anu johar @johar_anu · Oct 4

@Louise_J_Gibbs helped me changed my outlook towards Record and Playback as an acceptable option #TestBash



Tom "Binman" Binns @fullstacktester · Oct 4

A very brave talk on record and playback automation by @Louise_J_Gibbs at #TestBash Manchester.

I accept that r&p can be a useful training aid but I'd be very wary about allowing it to be used for essential tests run during the build and deploy pipeline.

What is Record and Playback?





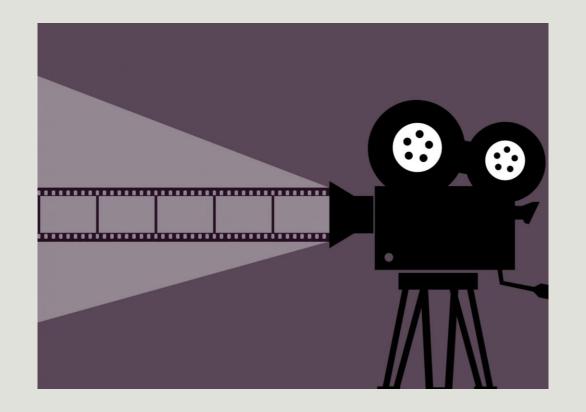
Pains of Record and Playback

Anyone can create an Automated Tests

Is this a good thing?

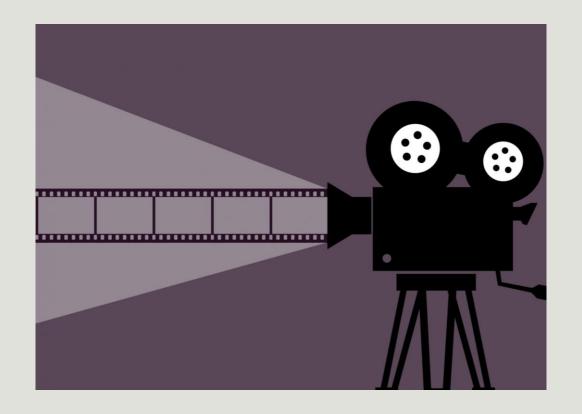
Benefits of Record and Playback

Suitable for skilled and unskilled developers



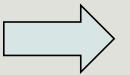
Benefits of Record and Playback

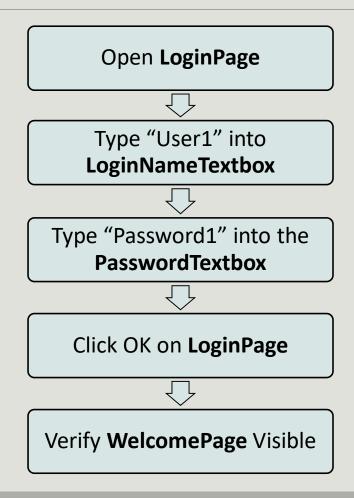
A method to speed up the creation of automated tests



Breaking Up the Recordings

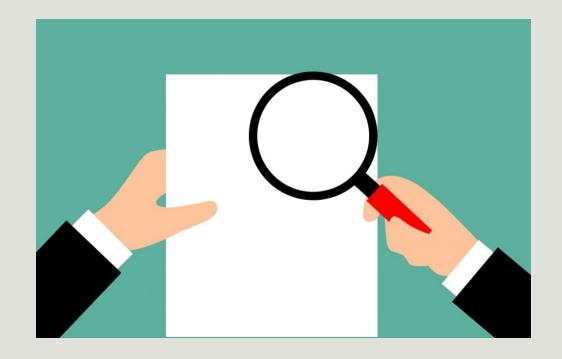
Open LoginPage
Type 'User1' into the
LoginNameTextbox
Type 'Password1' into the
PasswordTextbox
Click OK on LoginPage
Verify Welcome Page Visible



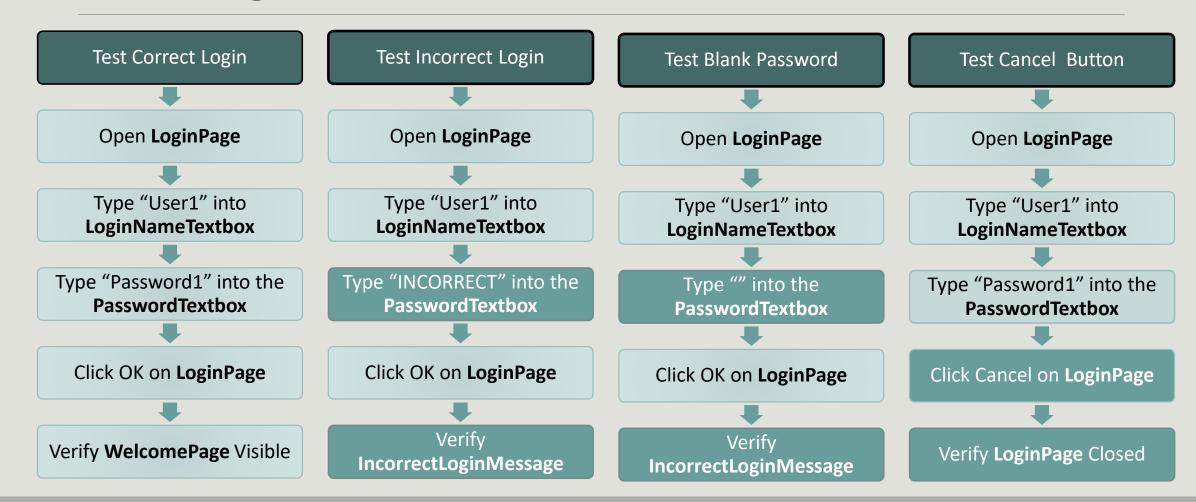


Locating Items on a Page

The locator may find the page item now, but will it still work the next time the test is run?



Reusing Recorded Code



Adapting the Code

Type "Password1" into the PasswordTextbox

Type "INCORRECT" into the **PasswordTextbox**

Type "" into the PasswordTextbox

```
Report.Log(ReportLevel.Info, "Mouse", "Mouse Left Click item 'LoginWindow.PasswordTextbox' at Center."); repo.LoginWindow.PasswordTextbox.Click(); Delay.Milliseconds(200);

Report.Log(ReportLevel.Info, "Keyboard", "Key sequence 'Password1'."); Keyboard.Press("Password1"); Delay.Milliseconds(200);
```

Adapting the Code

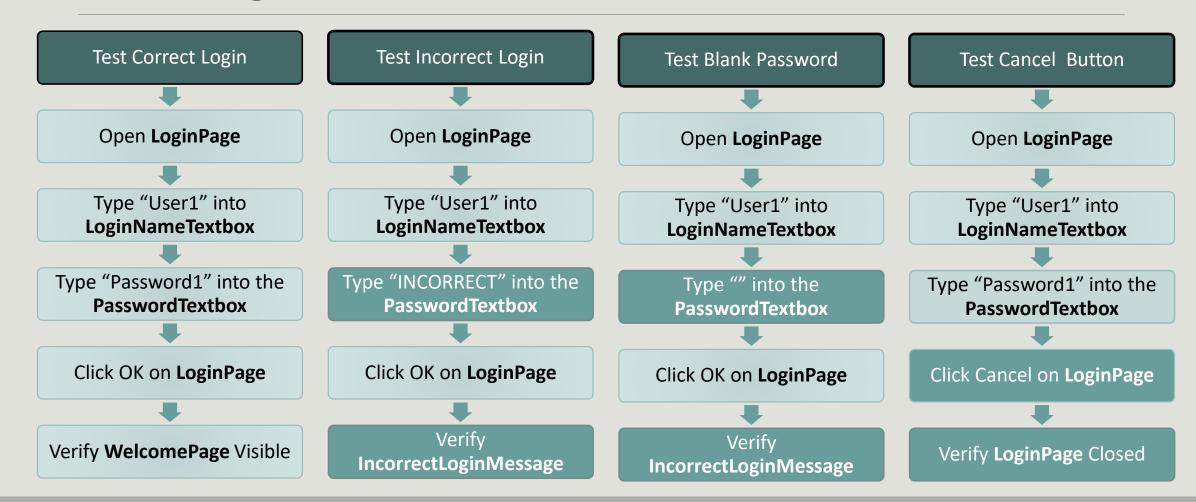
Type "Password1" into the PasswordTextbox

Type "INCORRECT" into the **PasswordTextbox**

Type "" into the **PasswordTextbox**

```
public void setPassword(string password)
{
    Report.Log(ReportLevel.Info, "Mouse", "Mouse Left Click item 'LoginWindow.PasswordTextbox' at Center.");
    repo.LoginWindow.PasswordTextbox.Click();
    Report.Log(ReportLevel.Info, "Keyboard", String.Format("Key sequence '{0}'", password));
    Keyboard.Press(password);
}
```

Reusing Recorded Code



Reusing Recorded Code

Test Correct Login
\$Username = "User1"
\$Password = "Password1"

Test Incorrect Login
\$Username = "User1"
\$Password = "INCORRECT"

Test Blank Password

\$Username = "User1"

\$Password = ""

\$Password = "Password1"

Open LoginPage

Open LoginPage

Open LoginPage

Open LoginPage

Type \$Username into LoginNameTextbox

Type \$Username into LoginNameTextbox

Type \$Username into LoginNameTextbox

Type \$Username into LoginNameTextbox

Type \$Password into the PasswordTextbox

Click OK on LoginPage

Click OK on LoginPage

Click OK on **LoginPage**

Click Cancel on LoginPage

Verify WelcomePage Visible

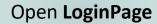
Verify IncorrectLoginMessage

Verify IncorrectLoginMessage

Verify **LoginPage** Closed

Data Driven Tests





Type \$Username into LoginNameTextbox

Type \$Password into the PasswordTextbox

Click OK on LoginPage

Verify WelcomePage Visible

Confirm Account Type

Account Type	Username	Password
Administrator	User1	AdminPassword
Standard	User2	StandardPassword
Premium	User3	PremiumPassword
Executive	User4	ExecutivePassword

Exception Handling

"Automation, on the other hand, simply says 'f*ck you' and exits with a failure or exception, leaving you with no feedback at all about the behavior to be verified in steps 11 through 50."

Bas Dijkstra, Stop Automating Your Regressions Tests (For Now), TestProject.io

Exception Handling

```
public void setPassword(string password)
{
    Report.Log(ReportLevel.Info, "Mouse", "Mouse Left Click item 'LoginWindow.PasswordTextbox' at Center.");
    repo.LoginWindow.PasswordTextbox.Click();
    Report.Log(ReportLevel.Info, "Keyboard", String.Format("Key sequence '{0}'", password));
    Keyboard.Press(password);
}
```

Exception Handling

```
public void setPassword(string password)
 try{
    Report.Log(ReportLevel.Info, "Mouse", "Mouse Left Click item 'LoginWindow.PasswordTextbox' at Center.");
    repo.LoginWindow.PasswordTextbox.Click();
  catch(ElementNotFoundException)
    //Add some code here
  Report.Log(ReportLevel.Info, "Keyboard", String.Format("Key sequence '{0}'", password));
  Keyboard.Press(password);
```

Improved Reporting

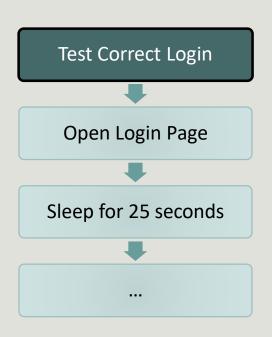
Control what appears in the report

Remove any unnecessary details

Add new important details (Screenshots)



Remove sleeps and delays



Environment 1 2 seconds to load

23 seconds wasted

Environment 2 8 seconds to load

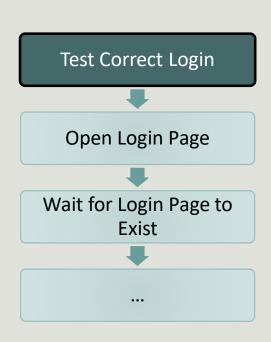
17 seconds wasted

Environment 3 **20 seconds** to load

5 seconds wasted

Sleeps and delays waste time. Replace with 'Wait for Condition' instead.

Remove sleeps and delays



Environment 1 2 seconds to load

0 seconds wasted

Environment 2 8 seconds to load

0 seconds wasted

Environment 3 **20 seconds** to load

0 seconds wasted

Summary

Record and Playback is not perfect so must not be relied upon.

•But with a little refactoring, recorded actions can still be used to develop high quality automated tests.



'What's That Smell? Tidying Up Our Test Code' Angie Jones – Talk on refactoring test code Search 'Angie Jones What's that Smell' on YouTube

Any Questions?
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