<table>
<thead>
<tr>
<th>Area</th>
<th>Test Condition</th>
<th>Detailed Test Description</th>
<th>Expected Result</th>
<th>Author</th>
<th>Review comments</th>
<th>Reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release 5 Minor Injuries Unit-Patient Attendance</td>
<td>MIU_PA_01</td>
<td>Create a new A &amp; E attendance. Patient is not currently registered at the unit (Double Barrel Name). Check a GP task has been sent. Verify the mandatory fields</td>
<td>Patient will not be registered at the MIU Unit, patient must be registered at a GP practice</td>
<td>Pre-reqs satisfied</td>
<td>gseth</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 Log onto Minor Injuries Unit as a receptionist</td>
<td>User logged on as a receptionist</td>
<td>gseth</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 From the home screen select create a new A&amp;E attendance and click ok</td>
<td>You must select patient window will appear</td>
<td>gseth</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 From the home screen select New A&amp;E attendance, enter the name David Bows-Lyon, the date of birth of 13/12/1999 and gender male click search</td>
<td>Patient details window will be shown</td>
<td>gseth</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 Click select, the patients details will be auto-populated into the fields, consent window will appear if patient is an old record sharing model click Consent given</td>
<td>Patient registration details window will be shown</td>
<td>gseth</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 Enter reference source and press OK button</td>
<td>error message closes</td>
<td>clrd2</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7 press OK button</td>
<td></td>
<td>clrd2</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 select an incident type from drop down box and press OK button</td>
<td>You must select a patient group</td>
<td>clrd2</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 select a patient group of domestic violence from drop down box and press OK button</td>
<td>attendance is created</td>
<td>clrd2</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10 From the drop down menu hospital overview select A&amp;E</td>
<td>Patient will appear in the list of all attendances</td>
<td>gseth</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11 From the drop down menu system select spine message viewer</td>
<td>Spine message viewer window shown</td>
<td>gseth</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12 Search on patient NHS number, select the message type as PDS Advanced Trace Query Started, Click Refresh</td>
<td>Query made at the earlier in this test will be shown in the list</td>
<td>gseth</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13 Log Out of the MIU Unit and log into the GP Unit</td>
<td>GP Home screen shown</td>
<td>gseth</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14 Click tasks from the home screen</td>
<td>Patient who has been registered at the MIU unit will appear within the GP unit tasks</td>
<td>gseth</td>
<td>CL</td>
</tr>
</tbody>
</table>

MANUAL TESTS
## Valid inputs

<table>
<thead>
<tr>
<th>Email Address</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:email@domain.com">email@domain.com</a></td>
<td>Valid email</td>
</tr>
<tr>
<td><a href="mailto:firstname.lastname@domain.com">firstname.lastname@domain.com</a></td>
<td>Email contains dot in the address field</td>
</tr>
<tr>
<td><a href="mailto:email@subdomain.domain.com">email@subdomain.domain.com</a></td>
<td>Email contains dot with subdomain</td>
</tr>
<tr>
<td><a href="mailto:firstname+lastname@domain.com">firstname+lastname@domain.com</a></td>
<td>Plus sign is considered valid character</td>
</tr>
<tr>
<td>email@123.123.123.123</td>
<td>Domain is valid IP address</td>
</tr>
<tr>
<td>email@[123.123.123.123]</td>
<td>Square bracket around IP address is considered valid</td>
</tr>
<tr>
<td>&quot;email&quot;@domain.com</td>
<td>Quotes around email is considered valid</td>
</tr>
<tr>
<td><a href="mailto:1234567890@domain.com">1234567890@domain.com</a></td>
<td>Digits in address are valid</td>
</tr>
<tr>
<td><a href="mailto:email@domain-one.com">email@domain-one.com</a></td>
<td>Dash in domain name is valid</td>
</tr>
<tr>
<td><a href="mailto:_________@domain.com">_________@domain.com</a></td>
<td>Underscore in the address field is valid</td>
</tr>
<tr>
<td><a href="mailto:email@domain.name">email@domain.name</a></td>
<td>.name is valid Top Level Domain name</td>
</tr>
<tr>
<td><a href="mailto:email@domain.co.jp">email@domain.co.jp</a></td>
<td>Dot in Top Level Domain name also considered valid</td>
</tr>
<tr>
<td><a href="mailto:firstname-lastname@domain.com">firstname-lastname@domain.com</a></td>
<td>Dash in address field is valid</td>
</tr>
</tbody>
</table>

[https://blogs.msdn.microsoft.com/testing123/2009/02/06/email-address-test-cases/](https://blogs.msdn.microsoft.com/testing123/2009/02/06/email-address-test-cases/)
# Invalid inputs

<table>
<thead>
<tr>
<th>plainaddress</th>
<th>Missing @ sign and domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>#@%^%#$@#$@#.com</td>
<td>Garbage</td>
</tr>
<tr>
<td>@domain.com</td>
<td>Missing username</td>
</tr>
<tr>
<td>Joe Smith <a href="mailto:email@domain.com">email@domain.com</a></td>
<td>Encoded html within email is invalid</td>
</tr>
<tr>
<td>email.domain.com</td>
<td>Missing @</td>
</tr>
<tr>
<td>email@<a href="mailto:domain@domain.com">domain@domain.com</a></td>
<td>Two @ sign</td>
</tr>
<tr>
<td><a href="mailto:.email@domain.com">.email@domain.com</a></td>
<td>Leading dot in address is not allowed</td>
</tr>
<tr>
<td><a href="mailto:email.@domain.com">email.@domain.com</a></td>
<td>Trailing dot in address is not allowed</td>
</tr>
<tr>
<td><a href="mailto:email..email@domain.com">email..email@domain.com</a></td>
<td>Multiple dots</td>
</tr>
<tr>
<td>email@domain</td>
<td>Missing top level domain (.com/.net/.org/etc)</td>
</tr>
<tr>
<td><a href="mailto:email@-domain.com">email@-domain.com</a></td>
<td>Leading dash in front of domain is invalid</td>
</tr>
<tr>
<td><a href="mailto:email@domain.web">email@domain.web</a></td>
<td>.web is not a valid top level domain</td>
</tr>
<tr>
<td>email@111.222.333.44444</td>
<td>Invalid IP format</td>
</tr>
<tr>
<td>email@domain..com</td>
<td>Multiple dot in the domain portion is invalid</td>
</tr>
</tbody>
</table>
Traditional QA

- Dev team
- QA lead
Traditional QA

- Dev team
- QA lead
- Offshore
Stuck in a repetitive workflow

Tester: tests feature, reports a defect

QA Lead: validates the defect

Developer: validates the defect, fixes

Repeat
The undead legion of JS testing tools
The undead legion of JS testing tools
Before Cypress

Choose a framework
- Mocha
- Jasmine
- QUnit
- Karma

Choose a Selenium wrapper
- Protractor
- Nightwatch
- Webdriver

Choose an assertion library
- Chai
- Expect.js

Install
- Selenium

Add additional libraries
- Sinon
- TestDouble

vs

End-to-end tests

With Cypress

All-in-one testing framework, assertion library, with mocking and stubbing, all without Selenium.
Install cypress

`npm install cypress --save-dev`

`npx cypress open`
Simple page load test

describe('Home Page', () => {
    before(() => {
    cy.visit('http://localhost:3000');
});

    it('should load without error', () => {
    cy.get('.App').should('exist');
});
});
Demo

http://localhost:3000/
Dead simple testing

- No servers, drivers, or any other dependencies to install or configure
- Readable errors and stack traces
- Automatic waiting - no more async hell
- Control, stub, and test network traffic without involving your server
- Auto reload on changes
- Test responsive layouts by changing your app's viewport size
- Active community & [documentation](#)
Let testers do what they do best

- Represent your site users
- Find unexpected functionality or errors
- Let machines handle the boring, repetitive stuff
MYSTERY TESTS
Traditional workflow
Traditional workflow
Traditional workflow (throwing it over the fence)

- What exactly is being tested?
- Where do those tests live?
- Can developers access and run tests?
- How long do test runs take?
- Context is lost by the time the defect reaches the developer
Shift testing left
Hold on...

Won’t this approach take longer?

How will we release on schedule?
Releases

https://blogs.technet.microsoft.com/devops/2016/06/21/a-git-workflow-for-continuous-delivery/
UNABLE TO REPRODUCE

(IT WORKS ON MY MACHINE)
How does this happen?

- Requirements were unclear/incorrect
How does this happen?

- Requirements were unclear/incorrect
- Was your work even in the testing environment to begin with?
How does this happen?

- Requirements were unclear/incorrect
- Was your work even in the testing environment to begin with?
- Environment disparity
  - Dependencies
  - User settings
  - Environment specific changes (production vs development)
How does this happen?

- Requirements were unclear/incorrect
- Was your work even in the testing environment to begin with?

👀 Environment disparity
  - Dependencies
  - User settings
  - Environment specific changes (production vs development)
Dive into containers

- Small & lightweight
- Easily configurable
- Open source

Docker
Demo

http://localhost:3000/
Necessary changes

- Tooling
- Workflow
- Infrastructure
See eye to eye with your team

- Write automated tests
- Make them available to everyone
- Keep testing close to development
- Use Docker for environment parity
- Do what works for your team
Thank you!

https://github.com/jennvoss/tales-from-the-qa-crypt

@vossjenn

https://www.elsevier.com/careers