

3.1. Test the user interface and technical aspects of the spreadsheet solution

Types of test data	
<b>Extreme</b>	
<b>Definition</b>	<ul style="list-style-type: none"> <li>Data that is on the boundary between valid and invalid data for a spreadsheet solution</li> <li>This type of data will not cause an error</li> </ul>
<b>Example</b>	<ul style="list-style-type: none"> <li>A passenger can take between 0-3 suitcases.</li> </ul> <p><b>Test data used:</b> 3</p>
<b>Invalid (erroneous) data</b>	
<b>Definition</b>	<ul style="list-style-type: none"> <li>Data that is unacceptable for the spreadsheet solution</li> <li>The data value that will cause an error</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li>A password has been set as having 8 characters including 1 capital letter and 1 number and 1 symbol</li> </ul> <p><b>Test data used:</b> pa55w0rd</p>
<b>Valid data</b>	
<b>Definition</b>	<ul style="list-style-type: none"> <li>Data that is acceptable, sensible and reasonable for the spreadsheet solution</li> <li>This type of data will not cause an error</li> </ul>
<b>Examples</b>	<ul style="list-style-type: none"> <li>A password has been set as having 8 characters including 1 capital letter and 1 number and 1 symbol</li> </ul> <p><b>Test data used:</b> P@55w0rd</p>

Testing during development	
<b>Technical testing</b>	
<b>Purpose:</b>	Checking the functionality of the solution
<b>Test in a spreadsheet solution:</b>	<ul style="list-style-type: none"> <li>Navigation features work</li> <li>Formulae and functions work and provide the correct answers</li> <li>Data and instructions on the screen can be read easily (colour contrast, size, positioning)</li> <li>Outputs such as print-outs or graphs:                             <ul style="list-style-type: none"> <li>– Display the correct data</li> <li>– Display all the data necessary (nothing is missing)</li> </ul> </li> </ul>
<b>Usability/User testing</b>	
<b>Purpose:</b>	Carried out by a range of users who are likely to use the solution
<b>Test in a spreadsheet solution:</b>	<ul style="list-style-type: none"> <li>Navigation is clear and easy to understand                             <ul style="list-style-type: none"> <li>– movement forward/back in system</li> <li>– can get to all parts</li> </ul> </li> <li>Content is readable                             <ul style="list-style-type: none"> <li>– colours</li> <li>– sizes</li> <li>– images are clear</li> </ul> </li> <li>Data entry is clear                             <ul style="list-style-type: none"> <li>– where to enter data</li> <li>– what data needs to be entered</li> <li>– helpful error messages</li> </ul> </li> <li>Output production is clear                             <ul style="list-style-type: none"> <li>– how to produce the outputs</li> <li>– how to change the data</li> </ul> </li> <li>Can be used by all types of users                             <ul style="list-style-type: none"> <li>– technical vs. non-technical users</li> <li>– visually/physically impaired users</li> </ul> </li> </ul>

Testing after development						
<b>Technical testing</b>						
<b>Purpose:</b>	Final check of the whole system to ensure everything works as it should.					
<b>Test in a spreadsheet solution:</b>	<ul style="list-style-type: none"> <li>Navigation of the system</li> <li>Data entry processes</li> <li>Data output processes:                             <ul style="list-style-type: none"> <li>– is the information correct?</li> <li>– is it well presented?</li> <li>– is it easy to understand?</li> <li>– is anything missing in the output?</li> </ul> </li> </ul>					
<b>Usability/User testing</b>						
<b>Purpose:</b>	Final check of the completed fully functioning system by the end users.					
<b>Test plan documentation</b>						
A test plan records what tests have taken place, what was tested, the result of the test and any improvements that are needed.						
Test ID	Test purpose	Type of test data	Test data	Expected result	Actual result	Remedial action needed
1	Check the data validation tool applied to column J	Extreme	0 and 8	Data will be accepted by the system	Data accepted	None
2	Check the data validation tool applied to column J	Invalid	9	Data will be rejected by the system	Data rejected	None
3						
4						
5						

