



# Software Testing Plan

Introduction For all software produced at KentSoft, we will be doing the following testing

## Black Box Testing

TestID	Test objective	Pre-condition	Steps	Expected outcome	Actual outcome	Status
1	Login	User is not logged in	<ol style="list-style-type: none"><li>1. User provides username, password and requested access rights.</li><li>2. System records authentication attempt.</li><li>3. System authenticates user.</li><li>4. System provides requested access rights.</li></ol>	User is authenticated and has the correct access rights	User is authenticated and has the correct access rights	Pass
2	Logout	User is logged in and has access rights	<ol style="list-style-type: none"><li>1. User logs out.</li><li>2. Server revokes access rights.</li><li>3. Server records end of authentication.</li></ol>	User is logged out and no longer has access rights	User is logged out and no longer has access rights	Pass
3	Authorisation Check	User is authenticated	<ol style="list-style-type: none"><li>1. An authorisation check record is made.</li><li>2. Check the user's authorisation to complete the requested action.</li><li>3. Grant requested access.</li></ol>	User's authorisations are checked, and access is either granted or denied depending on check.	User's authorisations are checked, and access is either granted or denied depending on check.	Pass

4	Read Personal Details	User is authenticated and personal details exists.	<ol style="list-style-type: none"> <li>1. Request personal details record.</li> <li>2. Authorization check</li> <li>3. HR Database delivers record to user.</li> <li>4. User finishes has access to record.</li> </ol>	User can access and read personal detail record.	User can access and read personal detail record.	Pass
5	Create Personal Details Record	HR Employee is authenticated	<ol style="list-style-type: none"> <li>1. HR Employee requests a new personal details record.</li> <li>2. Authorisation check.</li> <li>3. A new personal details record is created.</li> <li>4. New record is saved in the HR Database.</li> </ol>	HR Employee is able create new personal detail record in HR database.	HR Employee is able create new personal detail record in HR database.	Pass
6	Amend Personal Details Record	HR Employee is authenticated and personal details exists	<ol style="list-style-type: none"> <li>1. Authorisation check to obtain write access.</li> <li>2. Amend the record.</li> <li>3. Save amended record to HR Database.</li> </ol>	HR Employee is able to amend personal detail records.	HR Employee is able to amend personal detail records.	Pass
7	Create New Review Record	User is authenticated	<ol style="list-style-type: none"> <li>1. Employee requests a new review record.</li> <li>2. Authorisation check.</li> <li>3. A new review record is created.</li> <li>4. Employee completes the details in the record.</li> <li>5. New review record is saved in the HR Database.</li> </ol>	Employee creates new review record in the HR database.	Employee creates new review record in the HR database.	Pass

8	Read Review Record	User is authenticated and the review record exists	<ol style="list-style-type: none"> <li>1. Request review record.</li> <li>2. Authorization check</li> <li>3. HR Database delivers record to user.</li> <li>4. User finishes with access to the record.</li> </ol>	User is able to read review record.	User is able to read review record.	Pass
9	Amend Review Record	User is authenticated and the review record exists	<ol style="list-style-type: none"> <li>1. Authorisation check to obtain write access.</li> <li>2. Read review record.</li> <li>3. Amend the record.</li> <li>4. Save amended record to HR Database.</li> </ol>	User is able to amend review record.	User is able to amend review record.	Pass
10	Read Past Completed Review Records	User is authenticated and completed review record exists	<ol style="list-style-type: none"> <li>1. Request review records.</li> <li>2. Authorization check</li> <li>3. HR Database delivers records to user.</li> <li>4. User finishes with access to the records.</li> </ol>	User is able to read past completed record.	User is able to read past completed record.	Pass
11	Perform Review	Date is within 2 weeks of the reviewee's employment date	<ol style="list-style-type: none"> <li>1. Reviewers and Employee meet to perform annual performance review for the employee.</li> <li>2. Read past completed review records.</li> <li>3. Amend review record</li> <li>4. HR Employee is informed of the</li> </ol>	Review is completed and added to database.	Review is completed and added to database.	Pass

			completed review.			
12	Allocate Reviewer	HR Employee is authenticated	<ol style="list-style-type: none"> <li>1. HR Employee requests access to HR Database to record reviewer details.</li> <li>2. Authorisation check.</li> <li>3. Immediate Manager/Director of employee assigned to be a reviewer.</li> <li>4. HR Employee records details of 2nd Reviewer.</li> <li>5. HR Employee informs Employee and Manager/Director reviewers of the review details.</li> </ol>	A reviewer is added to carry out the review.	A reviewer is added to carry out the review.	Pass

## White Box Testing

We used JUnit tests along with automated Gradle tasks. We also used automated Pipeline JUnit tests.