SOFTWARE TEST PLAN

HR Tool InternePositionsvermittlung

Approvals:

Approved By:	Signature	Date
Ms Laura Schumm		28/07/2017
Alyona Morozova		28/07/2017

Document Control:

Name	P032_HR_Tool_Test_Plan
Document Status	Approved
Date of Issue	28/07/2017

Change History:

Document Name	Version No.	Author	Date	Description / Change
P032_HR_Tool_Test_Plan_1	1	Gopinath	23/06/2017	Test plan
P032_HR_Tool_Test_Plan	2	Gopinath	28/07/2017	Test plan

Distribution List:

Name	Role
Ms Laura Schumm	Client
Alyona Morozova	Team Tutor
Subhashini Jantwal	Team Leader
Mohammed Adnan Sirur	Team Member
Gopinath Mylapura Anjaneyareddy	Team Member
Muhammad Hamid	Team Member
Jayanth Jain Hassan Ajithkumar	Team Member

Reference Documents

Version	Date	Document Name
4	28/07/2017	HR-Tool-InternePositions_vermittlung - Final_Contract_Style_Requirements_Document_V4

Table of Contents

1. TEST PLAN IDENTIFIER AND DOCUMENT CHANGE CONTROL

Document Reference Name /Number	P032_HR_Tool_Test_Plan
Version number	2
Document Status	Approved
Date of Issue	28/07/2017

2. INTRODUCTION

Purpose

This test plan describes the testing approach and overall framework that will drive the testing of the HR-Tool-InternePositionsvermittlung –(HR Portal) site. The document introduces:

- Test Strategy: rules the test will be based on, including the givens of the project (objectives, assumptions); description of the process to set up a valid test (e.g.: creation of test cases, specific tasks to perform, scheduling, etc).
- Execution Strategy: describes how the test will be performed and process to identify and report defects, and to fix and implement fixes.
- Test Management: process to handle the logistics of the test and all the events that come up during execution (e.g.: communications, risk and mitigation, team roster)

Project Overview

The HR Tool Interne Positionsvermittlung, tool/portal will facilitate the movement of the employees of the University internally. In order to do get rid of the manual system of writing mails to the HR department for switching positions of employment within the university, the HR Tool Interne Positionsvermittlung, will be a web based portal (hereon referred to as portal) providing employees a platform to share their profiles with Professors and other potential Job Providers (referred to as Job Providers /recruiter hereon) within the university.

Employees looking for a switch (referred to as Job Seekers hereon) will be redirected from the "HR Internal Positioning Page" on the University website to the portal. They can register on the

portal as well as insert and update their basic employment profile information. Job Providers looking for the candidates of particular categories, after approval from the administrator, can search through the corresponding job category pool , look into the submitted profiles within that category and select and contact the best candidate who fit(s) the role.

The functionality of this module spans through the entire system. All information is subject to company's defined security policy, where he/she can only view the information he/she is authorized to. A Jobseeker User can only edit certain fields in the Module, maintaining the security and confidentiality of employee information

Audience

- Project team members perform tasks specified in this document, and provide input and recommendations on this document.
- Project Leader/Manager Plans for the testing activities in the overall project schedule, reviews the document, tracks the performance of the test according to the task herein specified, approves the document and is accountable for the results.
- The Tutor /Client representatives may take part in the UAT(User Acceptance Testing) test to ensure the Client Requirements is aligned with the results of the test.
- Technical Team ensures that the test plan and deliverables are in line with the design, provides the environment for testing and follows the procedures related to the fixes of defects.
- Developers ,Client will provide their inputs on functional changes.

3. TEST ITEMS LIST

Test Item Name	Test Item Version No.
Requirements specification - Contract_Style_Requirements_Document_V3	3
Following components,interfaces in HR Tool Website would be tested 1. Login 2. Admin_Add_Account 3. Admin_Profiles 4. Admin_Users_JobSeekers	1

5. Admin_Users_Recruiters 6. Forgot_Password 7. JobSeeker_Profile 8. JobSeeker_Profile_Disabled 9. JobSeeker_Profile-Setting 10. Recruiter_Profile 11. Signup_JobSeeker 12. Signup_Recruiter	
Manual execution of a set of test cases shall be performed on all aspects of the user interface to assure correct product operation. Test cases will more than cover all requirements .	2
We would create and execute JUnit Test Cases in Java, using Selenium for browser automation on all aspects of the user interface to assure correct product operation	2

4. FEATURES TO BE TESTED

- Login for Job seeker, Recruiter & Admin

- Sign up

- Hire

- Forgot Password

- Change Password

- Download CV by Recruiter and Admin

- Filtering (Language,Skills,Experience)

- Sorting

- Recruiter "Profiles" View

- Request for Access by Recruiter

- Add Account by Admin

- View Profiles of job seekers by Admin

- Enabling Account of Job seeker by Admin

- Disabling Account of Job seeker by Admin

- Grant & Evoke Access of Recruiter by admin

- Upload CV by Job seeker

- Profile Settings by Job seeker

- Delete Account by Job seeker

- Disable Profile/ Account by Job seeker

- Registration by Job seeker

- Terms & Conditions

- Edit profile by Job seeker

- Automated Email for the users (forgot password,Job seeker registration successful, Recruiter Request access mail to Admin)

5. FEATURES NOT TO BE TESTED

The following features will not be tested directly by Team prior to delivery of the final product.   The development team does not have the resources (hardware, software, and personnel) to verify these limits.

- Scalability limits

- Response time (to a limited extent)

- Dataset size

- All Security parameters

- Production Environment Testing as these facilities are not readily available to the development team.

6. APPROACH

Our Test approach will basically focus on testing of 'Must have, May have, Must not have' features (as mentioned in the requirement specification)in the application . Also following mentioned approaches will be followed

<u>Unit Testing</u>

- Individuals will test the components/units they are working on during development in an ad-hoc manner.

- Tests also would be performed by Automation generated   Unit tests (e.g. we will create a JUnit Test Case in Java, using Selenium for browser automation.)

<u>Integration Testing</u>

- A detailed set of test cases will be created and executed. These test cases will completely and at the very least cover all requirements detailed in the Contract Style Requirement Document

- The tests will be performed manually through the user interface against the fully integrated system containing all components.

- Tests also would be performed by Automation generated Unit & Integration tests e.g. we will create a JUnit Test Case in Java, using Selenium for browser automation.)

<u>Functional testing</u>

- During Functional testing, testing team will use preloaded data which is available on the system at the time of execution

- The Test Team will be perform Functional testing only on HR Tool Interne Positionsvermittlung

<u>Regression Testing</u>

- When a change is made to the system, all test cases for all components relating (directly or indirectly) to the modified component will be re-executed. The design is to execute all tests necessary to ensure no regression occurs but not to needlessly expend resources on unrelated tests.

7. ITEMS PASS/FAIL CRITERIA

Approval/Pass Criteria

The results of each test case will be considered "Pass/approved" if the results meet the expected results description in the test case

Fail Criteria

The results of each test case will be considered "Fail" if the results fail to meet the expected results description in the test case

8. SUSPENSION CRITERIA AND RESUMPTION REQUIREMENTS

Suspension Criteria

Test case execution will be suspended if a critical failure that impedes the ability or value in performing the associated test(s) is discovered.

Resumption Criteria

Test case execution will be resumed when a developer thinks the problem causing suspension has been fixed. All test cases that exercise the modified portions of the project will be re-executed.

9. TEST DELIVERABLES

A test report will be included in the project deliverables. This report will contain the set of test cases, a history of all formal test executions and a summary of the final state of the test suite.

S.No.	Deliverable Name
1.	Test Plan
2.	Test Cases - Manual & Automated
3.	Logging Defects(Bugs) in Gitlab
4.	Test Execution Report &results
4.	Test report

10. TESTING TASKS

- Develop Test Cases Manual and automated

- Execute test Cases

- Perform unit,integration,functionality,regression testing

- Report defects

- Complete test report

11. ENVIONMENTAL NEEDS

Hardware

- PC/ Laptop computers with a internet connection

Software

- Installations of Windows ,UNIX or any other OS

- Browser Ex: Chrome,Mozilla,etc

- Server to host the website and database

- Microsoft Office (Word, Excel) for reports and defect tracking

- Git lab for defect/Bug reporting

12.   RESPONSIBILITIES

Sl.No	Roles	Name	Contact Info
1.	Testing Team	Subhashini Jantwal (Group Leader), Mohammed Adnan Sirur, Gopinath Mylapura Anjaneyareddy , Muhammad Hamid , Jayanth Jain Hassan Ajithkumar	s8sujant@stud.uni-saarland.de s8mosiru@stud.uni-saarland.de s8gomyla@stud.uni-saarland.de s8muhami@stud.uni-saarland.de s8jahass@stud.uni-saarland.de
2.	Development Team	Subhashini Jantwal (Group Leader), Mohammed Adnan Sirur, Gopinath Mylapura Anjaneyareddy , Muhammad Hamid , Jayanth Jain Hassan Ajithkumar	s8sujant@stud.uni-saarland.de s8mosiru@stud.uni-saarland.de s8gomyla@stud.uni-saarland.de s8muhami@stud.uni-saarland.de s8jahass@stud.uni-saarland.de
3.	Client	Ms Laura Schumm	laura.schumm@univw.uni-saarland.de
4.	Team Tutor	Alyona Morozova	s8almoro@stud.uni-saarland.de

Development Team

- All developers are responsible for the completion of all component and integration testing tasks.
- Review testing deliverable (test plan, cases, expected results, etc.) and provide timely feedback.
- Assist in the validation of results (if requested).
- Support the development and testing processes being used to support the project.
- Certify correct components have been delivered to the test environment at the points specified in the testing schedule.
- Keep project team and leadership informed of potential software delivery date slips based on the current schedule.
- Define processes/tools to facilitate the initial and ongoing migration of components.
- Implement fixes to defects according to schedule.

Test Team

- Develop test plan and the guidelines to create test cases, expected results
- Perform Test Case Execution for all test cases
- Ensure all test cases are reviewed
- Ensure all testing defects are assigned, worked and resolved according to the project schedule
- Attend project status and issue meetings
- Identify, document and prioritize defects
- Re-test after software modifications have been made according to the schedule.
- Facilitate defect communications between testing team and technical / development team.

Client & Tutor

- Team Tutor,Client is responsible for approving the Test Plan , Test Cases and also responsible for critiquing the demonstrations and final acceptance of all work products.

13.   STAFFING AND TRAINING NEEDS

Number of Resources required for testing: At-least 1 Tester is required

Skills Required:

- Create Test Plans
- Thorough Understanding of Software Development Life Cycles
- Discover Bugs Within system
- Document Test Cases
- Experience With Web Based Testing Applications
- Review User Interfaces For Consistency and Functionality
- Work Closely With Development and Product Teams
- Identify, Isolate and Track Bugs Throughout Testing
- Identify Potential Problems Users May Encounter
- Test case generation,Test case execution,UI Testing,Functionality testing,Manual testing,Automation Testing, Reporting Defects
- Record Test Progress and Results

14.   SCHEDULE

Task	Deliverable	Milestone
Develop test cases	Test Cases document	Iteration 2 week 4,Iteration 3 week 1
Execute test Cases	Test Execution results	Iteration 3, week 1,week 2,week 3
Report defects	Defect Report	Iteration 3, week 1,week 2, week3
Complete test report	Final Test Report	Iteration 3, week 4(28 July2017)

15.   RISKS , CONTINGENCIES AND ASSUMPTIONS

The test environment for this project is extremely constrained in terms of resources. Personnel and time are hard to come by, and the hardware and software environment is quite different from the target production system.

A significant risk is that various configuration aspects of test systems will vary too greatly from the production system. An assumption the test team will make is that the production environment will be much more powerful than the test environment. As a result, very little performance and scalability testing will be performed in the test environment.

Few more Risks and Mitigation Plans are listed below

Risk	Prob.	Impact	Mitigation Plan
SCHEDULE Testing schedule is tight. If the start of the testing is delayed due to design tasks, the test cannot be extended beyond the UAT (User Acceptance Testing) scheduled start date.	High	High	• The testing team can control the preparation tasks (in advance) and the early communication with involved parties. • Some buffer has been added to the schedule for contingencies, although not as much as best practices advise.
RESOURCES Not enough resources, resources on boarding too late.	Medium	High	Holidays and vacation have been estimated and built into the schedule; deviations from the estimation could derive in delays in the testing.

16. CHANGE MANAGEMENT PROCEDURES

The procedure for changing the test plan is as follows:

Propose the change to the software development team. This can be done at a team meeting or via email.The team will discuss the proposal and either reject it, accept it, or accept it with modifications. If the team accepts the proposal, then it and any agreed upon modifications will be implemented.

17.   APPROVALS

The Names and Titles of all persons who must approve this plan

Signature:	
Name:	Ms Laura Schumm
Role:	Client
Date:	28/07/2017

Signature:	
Name:	Alyona Morozova
Role:	Team Tutor
Date:	28/07/2017

Signature:	
Name:	Subhashini Jantwal
Role:	Team Lead
Date:	28/07/2017