Testing

Test Handover

FAQ:

1. How much of automation test coverage done?
   Ans: *Complete applicant journey is covered, Portfolio journey is 80% done to implemented functionality*
2. Can I run automation headless locally
   Ans: Yes you can run tests locally headless to carry on your work whilst tests running in background.
3. Can I run acceptance test on Browser stack for cross browser testing?
   Ans: Yes you can run automation acceptance test on browser stack which is integrated into framework , just need to purchase license and pass these run time .
   Please see how to run tests on browser stack section.
4. Are there any performance Tests ?
   Ans: Yes there are jmeter performance test scripts , please see non functional testing section.
5. *How tests integrated in CD/CD pipeline?*
   Smoke tests runs on every commit and Acceptance test scheduled to run every two hrs in jenkins.

Test Artefacts Handover		
Acceptance Test BDD Feature files	https://github.com/UKGovernmentBEIS/rifs-test/tree/master/grantsFunding-web-test/src/test/resources/features.functional/Rifs	
End to End Tests	Applicant journey End to end tests https://github.com/UKGovernmentBEIS/rifs-test/tree/master/grantsFunding-web-test/src/test/resources/features.functional/Rifs/E s	
Automated Acceptance test and Smoke Test	https://github.com/UKGovernmentBEIS/rifs-test/tree/master/grantsFunding-web-test/src/test/java/uk/gov/bis/grants/acceptanceTe	
Automated Test		
Test tools Stack	Test tools stack	
Test framework repo	https://github.com/UKGovernmentBEIS/rifs-test/tree/master/grantsFunding-web-test	
Test Framework setup	How to setup and run test	How to run Automation tests
Types of Automated Test:	1. Smoke Test: Runs applicant journey end to end to ensure Application is loaded correctly Writing to db properly. 2. Acceptance Tests: A detailed level test across all functionality is covered. 3. Performance test	Smoke Test: A trimmed version of acceptan being run as part of smoke test. This to ensu journey works. Acceptance Test: Full regression testing is p part of regression testing.
Configure and Run Tests	• **To run tests on different env -**	1. Go to test framework folder src/test/resources/TestConfig-ci.proper 2. Change envurl variable to desired env u
	To run on different platforms **local Firefox/chrome**	1.Change the platform value to Desktop. 2. Change the browser value to firefox in ab file.
	To run Headless On phantomjs driver	Change platform value to headless in above

	To run test on browser stack		1.Follow browserstack instructions to setup 2. Change the busekey and busername in a properties file to your browserstack account only trial version keys in properties file , if yc subscription keys then try pass runtime thro variable) 3.Change platform value to browserstack
Non Functional Test			
Performance Test Applican t Journey	https://github.com/UKGovernmentBEIS/rifs-test/tree/master/grantsFunding-performance-test		
Compatibility Test: Cross browser test	It is approved to procure browser stack license for this project to cover cross browser testing. So far cross browser testing is perf trial subscription however its proved that acceptance test can run on browser stack. Please see steps how to run test on browser		

When off the shelve ,where to start from:

Test artefacts	Automated Test Coverage	Automation doesn't cover
Acceptance Test	1. Complete applicant Journey Portfolio manager journey - Amend Title - Amend about this opportunity - Amend Assessment criteria - Duplicate opportunity - Pick Draft opportunity from opp lib and amend sections - Validate PM opportunity detail page	In Portfolio manager Journey 1. Preview amended sections 2. Amend date deadline 3. Preview PM opportunity details 4. All sections preview 5. Validate opportunity statuses on opp lib page.
Performance Test	Jmeter scripts covers - Opportunity list page for applicant journey - Browse Opportunity overview page - FillinQuestions - Preview application	Jmeter scripts doesn't cover Portfolio manager journey. Need to pick this as immediate task as part of performance test.

Test DashBoard

Project in Flight	Grants Funding
Project scope	Service Map
Test Strategy	RIFS-Test Strategy
Sprints	Development in Sprints
Test Templates	<to create test templates and detail here>
Automation framework Architecture	Test Automation
How to setup Automation Tests	<to create new page and detail how to setup once automation project is defined>
Automation Best practices	Best practices- Automation testing
Automation Git Repo	https://github.com/BISDigital/grants-web-test

Test Envs	QA- http://rifs-frontend-play-rifs-qa.test.int.ukrifs.org/ CI -http://rifs-frontend-play-rifs-stable.test.int.ukrifs.org/ List of Openshift Environments
Test Data	<Need to gather test data required for end to end testing>
Useful links	<app git repo >
Acceptance Test	As in agile development, it is expected to focus on acceptance testing ensuring implemented stories meet business requirements. This will also ensure early visibility on issues if any and get them fixed during the sprint itself. Primary focus is to ensure happy paths working as expected and some amount of edge cases covered. This will help business achieve what is expected in given time and same time recording any known issues/improvements spotted.
Regression/System Test	This is most critical test deliverable which is to be created and maintained as test harness. At the end of each sprint, as part of test closure activity it is required to maintain above acceptance tests as regression pack in order to run these tests as part of the system tests. Primary goal to achieve with this system test is to ensure new features wont impact existing functionality. To reduce regressiont test time and perform continuous testing within the sprints, it is expected to automate regression pack.
Smoke Test	A subset of above regression tests will be run as smoke test ensuring end to end system health with new builds. This will be integrated in deployment pipeline so that on every new build deployment, smoke tests will run as post build action. If tests failed, it is expected that build will not be deployed to target environment. Devs/Test team may need to fix asap.
End to End Tests	As this web application will be interconnected to several other systems eg. portofolia manager system, grant organisation it is inevitable to perform end to end system test to ensure all services are interconnected and behave as expected.
Accessibility Testing	<Need to agree scope and responsibility>
Cross browser Compatibility Testing	As per the GDS guidlines https://www.gov.uk/service-manual/technology/designing-for-different-browsers-and-devices
Exploratory Testing	Apart from QA team doing exploratory testing on regular basis, it is encouraged to involve whole team in performing exploratory testing. This would be a short session guiding participants what to test and examples to use. This would help in getting some valuable feedback from other fresh pair or eyes. Also this would uncover any usability Issue.
Migration testing	- Migration testing will be an ongoing activity and cannot be said as completed until we support all users to considerable amount of time. - Migration testing will also include performance test to ensure with given volume of data, application still support with same level accuracy and speed. - This may also include infrastructure testing to support load balancing and fail over. - Testing is assume to happen iteratively focusing each functional element rather all in one go. - Database testing will be performed assuming that migration engineers provide testing team with source and destination database access - Full/module regression testing will be performed constantly to ensure that there is no impact on business functionality. - Testing team will expect to have support from legacy application users in terms narrating that activities/business functions they perform to ensure these functions are covered in test coverage.
Operational Acceptance Testing(OAT)	It is encouraged to perform operational acceptance testing post UAT testing. Real users may access fully integrated environment to perform some end to end business user journeys. This testing would ensure operational readiness of the service and interconnected services. It is expected to perform OAT on pre-prod Envs however depends upon on system infrastructure.

Test Resources	1. Nasir Khan - Test Lead 2. Adnan Khalid - Sr. Test Analyst