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| Test Plan |
| Report Portal - Launches |

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# Project specific impact to testing

***https://reportportal.io/launches****/*

***ReportPortal.io*** *is a tool for test management and reporting of test results. It is a web application that allows managing test projects, running and tracking tests, as well as analyzing test results.*

*Technology stack:*

* *WebdriverIO, Cypress, Docker, Jenkins, GitHub, ReportPortal, Allure Report, BrowserStack, Slack, Teams, Postman,* [*Knowledge Base*](https://stonly.com/product/knowledge-base-software)
* *GitHub: https://github.com/Son1cPower/AutomatedTestingMentoring\_Advanced*

# Scope of TESTINGs

## In scope

|  |  |
| --- | --- |
| Test Name | Steps |
| ***UI Tests*** | |
| *Test\_ID\_1. Gell all launches* | Feature: Test\_ID\_1. Gell all launches      Background: User generates token for Authorisation          Given I am an autorized user          And project 'project\_js' with Demo Data created      Scenario: [POSITIVE] View all launches for project          When I open "Main" page          And I click "projectSelector" link from the sidebar menu          And I select "project\_js" link from the projects-list          And I click "launches" link from the sidebar menu          And I select "All launches" link from the projects-list          Then Page url should "contain" "launches/all"          And launches list should has list of [] IDs |
| *Test\_ID\_2. Delete launches* | Feature: Test\_ID\_2. Delete launches      Background: User generates token for Authorisation          Given I am an autorized user          And project 'project\_js' with Demo Data created      Scenario: [POSITIVE] Delete launches for project          When I open "Main" page          And I click "projectSelector" link from the sidebar menu          And I select "project\_js" link from the projects-list          And I click "launches" link from the sidebar menu          And I select "All launches" link from the projects-list          Then Page url should "contain" "launches/all"          And launches list should has list of [] IDs          Then I select list [] of launches          And I click "Actions" menu          And I click MenuButton "Delete"          Then "Delete launch" modal-window is displayed          And I click button "Delete"          Then massage displayed and should "be equal to" "Launch was deleted"          And launches list should not has list of [] IDs |
| *Test\_ID\_3. Compare launches* | Feature: Test\_ID\_3. Compare launches      Background: User generates token for Authorisation          Given I am an autorized user          And project 'project\_js' with Demo Data created      Scenario: [POSITIVE] Compare launches for project          When I open "Main" page          And I click "projectSelector" link from the sidebar menu          And I select "project\_js" link from the projects-list          And I click "launches" link from the sidebar menu          And I select "All launches" link from the projects-list          Then Page url should "contain" "launches/all"          And launches list should has list of launches [] IDs          Then I select list [] of launches          And I click "Actions" menu          And I click MenuButton "Compare"          Then "COMPARE LAUNCHES" modal-window is displayed          And I click button "Cancel"          Then "COMPARE LAUNCHES" modal-window is not displayed          And Page url should "contain" "launches/all"          And launches list should has list of launches [] IDs |
| *Test\_ID\_4. Update launches* | Feature: Test\_ID\_4. Update launches      Background: User generates token for Authorisation          Given I am an autorized user          And project 'project\_js' with Demo Data created      Scenario: [POSITIVE] Update attributes and description for launches          When I open "Main" page          And I click "projectSelector" link from the sidebar menu          And I select "project\_js" link from the projects-list          And I click "launches" link from the sidebar menu          And I select "All launches" link from the projects-list          Then Page url should "contain" "launches/all"          And launches list should has list of launches [] IDs          Then I select list [] of launches          And I click "Actions" menu          And I click MenuButton "Edit"          Then "Edit launch" modal-window is displayed          And I input the form with data              | name        | type  | value                |              | Description | input | New Edit Description |          And sets the following attributes              | Attribut Key | Attribut Value |              | System       | Windows        |          And I click button "Save"          Then massage displayed and should "be equal to" "Launch has been updated"          And launches list should has updated launch with data              | name                                                      | type     | value                |              | Linear merge                                              | checkbox | Yes                  |              | Launch name                                               | input    | New Merge            |              | Description                                               | input    | New Edit Description |              | Time start                                                | input    | 2023-04-01 20:54:49  |              | Time end                                                  | input    | 2023-04-01 20:55:12  |              | Extend child suites description with original launch name | checkbox | Yes                  |          And should has following attributes              | Attribut Key | Attribut Value |              | System       | Windows        | |
| *Test\_ID\_5. Move launch to debag* | Feature: Test\_ID\_5. Move launch to debag      Background: User generates token for Authorisation          Given I am an autorized user          And project 'project\_js' with Demo Data created      Scenario: [POSITIVE] Move launch to debag for project          When I open "Main" page          And I click "projectSelector" link from the sidebar menu          And I select "project\_js" link from the projects-list          And I click "launches" link from the sidebar menu          And I select "All launches" link from the projects-list          Then Page url should "contain" "launches/all"          And launches list should has list of launches [] IDs          Then I select list [] of launches          And I click "Actions" menu          And I click MenuButton "Move to debug"          Then "MOVE TO DEBUG" modal-window is displayed          And I click button "Move"          Then massage displayed and should "be equal to" " Launch has been successfully shifted to debug"          Then "MOVE TO DEBUG" modal-window is not displayed          And Page url should "contain" "launches/all"          And launches list should has list of launches [] IDs          And I click "DEBUG" link from the sidebar menu          Then Page url should "contain" "userdebug/all"          And launches list should has list of launches [] IDs |
| *Test\_ID\_6. Merge launches* | Feature: Test\_ID\_6. Merge launches      Background: User generates token for Authorisation          Given I am an autorized user          And project 'project\_js' with Demo Data created      Scenario: [POSITIVE] Linear merge of launches for project          When I open "Main" page          And I click "projectSelector" link from the sidebar menu          And I select "project\_js" link from the projects-list          And I click "launches" link from the sidebar menu          And I select "All launches" link from the projects-list          Then Page url should "contain" "launches/all"          And launches list should has list of launches [] IDs          Then I select list [] of launches          And I click "Actions" menu          And I click MenuButton "Merge"          Then "MERGE LAUNCHES" modal-window is displayed          And I input the form with data              | name                            | type     | value           |              | Linear merge                    | checkbox | Yes             |              | Launch name                     | input    | New Merge       |              | Description                     | input    | New Description |              | Time start                      | input    | 2023-04-01      |              | Time end                        | input    | 2023-04-01      |              | Extend child suites description | checkbox | Yes             |          And sets the following attributes              | Attribut Key | Attribut Value |              | System       | Windows        |          And I click button "Merge"          Then launches list should has new launch with data              | name                            | type     | value           |              | Linear merge                    | checkbox | Yes             |              | Launch name                     | input    | New Merge       |              | Description                     | input    | New Description |              | Time start                      | input    | 2023-04-01      |              | Time end                        | input    | 2023-04-01      |              | Extend child suites description | checkbox | Yes             |          And should has following attributes              | Attribut Key | Attribut Value |              | System       | Windows        | |
| *Test\_ID\_7. Merge one launch* | Feature: Test\_ID\_7. Merge one launch      Background: User generates token for Authorisation          Given I am an autorized user          And project 'project\_js' with Demo Data created      Scenario: [NEGATIVE] Linear merge of one launch for project          When I open "Main" page          And I click "projectSelector" link from the sidebar menu          And I select "project\_js" link from the projects-list          And I click "launches" link from the sidebar menu          And I select "All launches" link from the projects-list          Then Page url should "contain" "launches/all"          And launches list should has list of launches [] IDs          Then I select list [] of launches          And I click "Actions" menu          And I click MenuButton "Merge"          Then massage displayed and should "be equal to" "You cannot perform operation to invalid items"          And event massage should "be equal to" "You must select more than one item" for selected launch |
| *Test\_ID\_8. Add filter by name* | Feature: Test\_ID\_8. Add filter by name      Background: User generates token for Authorisation          Given I am an autorized user          And project 'project\_js' with Demo Data created      Scenario: [POSITIVE] Add filter by name for launches          When I open "Main" page          And I click "projectSelector" link from the sidebar menu          And I select "project\_js" link from the projects-list          And I click "launches" link from the sidebar menu          And I select "All launches" link from the projects-list          Then Page url should "contain" "launches/all"          And launches list should has list of launches [] IDs          And I click button "Add filter"          Then "launchFiltersToolbar" is displayed          And I input the form with data              | name             | type   | value    |              | inputConditional | select | Contains |              | Enter name       | input  | s 2      |          Then launches list should has list of launches [] IDs      Scenario: [POSITIVE] Delete filter from Filters          When I open "Main" page          And I click "projectSelector" link from the sidebar menu          And I select "project\_js" link from the projects-list          And I click "filters" link from the sidebar menu          Then Page url should "contain" "filters"          And filter list should has filter "Filter\_1"          And I click button "Delete filter"          Then "DELETE FILTER" modal-window is displayed          And I click button "Delete"          Then massage displayed and should "be equal to" "Filter has been deleted!"          And filter list should not has filter "Filter\_1" |
| *Test\_ID\_9. Save filter* | Feature: Test\_ID\_9. Save filter      Background: User generates token for Authorisation          Given I am an autorized user          And project 'project\_js' with Demo Data created      Scenario: [POSITIVE] Save filter for launches          When I open "Main" page          And I click "projectSelector" link from the sidebar menu          And I select "project\_js" link from the projects-list          And I click "launches" link from the sidebar menu          And I select "All launches" link from the projects-list          Then Page url should "contain" "launches/all"          And launches list should has list of launches [] IDs          And I click button "Add filter"          Then "launchFiltersToolbar" is displayed          And I input the form with data              | name             | type   | value    |              | inputConditional | select | Contains |              | Enter name       | input  | s 2      |          Then launches list should has list of launches [] IDs          And I click button "Save"          Then "ADD FILTER" modal-window is displayed          And I input the form with data              | name        | type     | value             |              | Name        | input    | Filter\_1          |              | Description | input    | Filter escription |              | Share       | checkbox | Yes               |          And I click button "Add"          Then massage displayed and should "be equal to" "Filter has been saved"          And filter "Filter\_1" is present on "launches" page          And Page url should "contain" "launches/all"          And launches list should has list of launches [] IDs      Scenario: [POSITIVE] Remove filter for launches from launchFiltersToolbar          When I click "launches" link from the sidebar menu          And I select "All launches" link from the projects-list          Then Page url should "contain" "launches/all"          And launches list should has list of launches [] IDs          And I click button "Filter\_1"          Then launches list should has list of launches [] IDs          And I click button "Remove Filter"          Then filter "Filter\_1" is not present on "launches" page          And launches list should has list of launches [] IDs      Scenario: [POSITIVE] Delete filter from Filters          When I open "Main" page          And I click "projectSelector" link from the sidebar menu          And I select "project\_js" link from the projects-list          And I click "filters" link from the sidebar menu          Then Page url should "contain" "filters"          And filter list should has filter "Filter\_1"          And I click button "Delete filter"          Then "DELETE FILTER" modal-window is displayed          And I click button "Delete"          Then massage displayed and should "be equal to" "Filter has been deleted!"          And filter list should not has filter "Filter\_1" |
| *Test\_ID\_10. Add the same filter name for launches* | Feature: Test\_ID\_10. Add the same filter name for launches      Background: User generates token for Authorisation          Given I am an autorized user          And project 'project\_js' with Demo Data created      Scenario: [POSITIVE] Save filter for launches          When I open "Main" page          And I click "projectSelector" link from the sidebar menu          And I select "project\_js" link from the projects-list          And I click "launches" link from the sidebar menu          And I select "All launches" link from the projects-list          Then Page url should "contain" "launches/all"          And launches list should has list of launches [] IDs          And I click button "Add filter"          Then "launchFiltersToolbar" is displayed          And I input the form with data              | name             | type   | value    |              | inputConditional | select | Contains |              | Enter name       | input  | s 2      |          Then launches list should has list of launches [] IDs          And I click button "Save"          Then "ADD FILTER" modal-window is displayed          And I input the form with data              | name        | type     | value             |              | Name        | input    | Filter\_1          |              | Description | input    | Filter escription |              | Share       | checkbox | Yes               |          And I click button "Add"          Then massage displayed and should "be equal to" "Filter has been saved"          And filter "Filter\_1" is present on "launches" page          And Page url should "contain" "launches/all"          And launches list should has list of launches [] IDs      Scenario: [POSITIVE] Remove filter for launches from launchFiltersToolbar          When I click "launches" link from the sidebar menu          And I select "All launches" link from the projects-list          Then Page url should "contain" "launches/all"          And launches list should has list of launches [] IDs          And I click button "Filter\_1"          Then launches list should has list of launches [] IDs          And I click button "Remove Filter"          Then filter "Filter\_1" is not present on "launches" page          And launches list should has list of launches [] IDs      Scenario: [NEGATIVE] Add the same filter for launches          When I click "launches" link from the sidebar menu          And I select "All launches" link from the projects-list          Then Page url should "contain" "launches/all"          And launches list should has list of launches [] IDs          And I click button "Add filter"          Then "launchFiltersToolbar" is displayed          And I input the form with data              | name             | type   | value    |              | inputConditional | select | Contains |              | Enter name       | input  | s 2      |          Then launches list should has list of launches [] IDs          And I click button "Save"          Then "ADD FILTER" modal-window is displayed          And I input the form with data              | name        | type     | value             |              | Name        | input    | Filter\_1          |              | Description | input    | Filter escription |              | Share       | checkbox | Yes               |          And I click button "Add"          Then "ADD FILTER" modal-window is displayed          Then massage displayed and should "be equal to" "Filter with the same name already exist"          And I click button "Cancel"      Scenario: [POSITIVE] Delete filter from Filters          When I open "Main" page          And I click "projectSelector" link from the sidebar menu          And I select "project\_js" link from the projects-list          And I click "filters" link from the sidebar menu          Then Page url should "contain" "filters"          And filter list should has filter "Filter\_1"          And I click button "Delete filter"          Then "DELETE FILTER" modal-window is displayed          And I click button "Delete"          Then massage displayed and should "be equal to" "Filter has been deleted!"          And filter list should not has filter "Filter\_1" |
| ***API Tests*** | |
| ***Get list of project launches by filter*** | ***[POSITIVE] Get list of project launches by filter***  ***[GET] localhost:8080/api/v1/project\_js/launch***  ***1 Send a GET request to the endpoint /v1/{projectName}/launch, where {projectName} is the projectName for which information needs to be retrieved.***  ***2 Check the response status code. It should be equal to 200.***  ***3 Check the response format. It should match the following structure:***  ***{ "content": [{***  ***"owner": "superadmin",***  ***"share": false,***  ***"description": "### \*\*Demonstration launch.\*\*\nA typical \*Launch structure\* comprises the following elements: Suite > Test > Step > Log.\nLaunch contains \*randomly\* generated `suites`, `tests`, `steps` with:\n\* random issues and statuses,\n\* logs,\n\* attachments with different formats.",***  ***"id": 28,***  ***"uuid": "efb51967-a5fc-467e-b308-7b1623fbd27e",***  ***"name": "Demo Api Tests",***  ***"number": 22,***  ***"startTime": 1680542348549,***  ***"endTime": 1680542355104,***  ***"lastModified": 1680542355119,***  ***"status": "FAILED",***  ***"statistics": {***  ***"executions": {***  ***"total": 10,***  ***"failed": 9,***  ***"passed": 1 },***  ***"defects": {***  ***"system\_issue": {***  ***"total": 8,***  ***"si001": 8 },***  ***"to\_investigate": {***  ***"total": 5,***  ***"ti001": 5},***  ***"automation\_bug": {***  ***"total": 1,***  ***"ab001": 1}}},***  ***"attributes": [{***  ***"key": "build",***  ***"value": "3.3.17.19.8"},***  ***{"key": "platform",***  ***"value": "windows 7"},***  ***{"key": null,***  ***"value": "demo"}],***  ***"mode": "DEFAULT",***  ***"analysing": [],***  ***"approximateDuration": 0.0,***  ***"hasRetries": true,***  ***"rerun": false}],***  ***"page": {***  ***"number": 1,***  ***"size": 20,***  ***"totalElements": 5,***  ***"totalPages": 1}}***  ***4 Check that the value of the "id" field matches according to precondtition Launch IDs [1,2,3,4,5]***  ***5 Check that the value of UUID, status, name matches according to precondtition Launch*** |
| ***[NEGATIVE] Get list of project launches by filter for incorect project name***  ***[GET] localhost:8080/api/v1/NEWproject\_js/launch***  ***1 Send a GET request to the endpoint /v1/{projectName}/launch, with incorect {projectName}***  ***2 Check the response status code. It should be equal to 403.***  ***3 Check the response format. It should match the following structure:***  ***{***  ***"errorCode": 4003,***  ***"message": "You do not have enough permissions. Please check the list of your available projects."***  ***}***  ***4 Check that the value of the "errorCode" field matches '4003'***  ***5 Check that the value of the "message" field matches 'You do not have enough permissions. Please check the list of your available projects.'*** |
| ***Delete specified launches by ids*** | ***[POSITIVE] Delete specified launches by id***  ***[DELETE] localhost:8080/api/v1/project\_js/launch***  ***1 Send a DELETE request to the endpoint with body***  ***{***  ***"ids": [5]***  ***}***  ***2 Check the response status code. It should be equal to 200.***  ***3 Check the response format. It should match the following structure:***  ***{***  ***"successfullyDeleted": [5],***  ***"notFound": [],***  ***"errors": []***  ***}***  ***4 Check that list of project launches does not have removed "id" and equal IDs [1,2,3,4]*** |
| ***[NEGATIVE] Delete incorect specified launches by ids***  ***[DELETE] localhost:8080/api/v1/project\_js/launch***  ***1 Send a DELETE request to the endpoint with body***  ***{***  ***"ids": [10]***  ***}***  ***2 Check the response status code. It should be equal to 200.***  ***3 Check the response format. It should match the following structure:***  ***{***  ***"successfullyDeleted": [],***  ***"notFound": [***  ***10***  ***],***  ***"errors": []***  ***}***  ***4 Check that list of project launches does not have removed "id"*** |
| ***Merge set of specified launches in common one*** | ***[POSITIVE\_1] Deep Merge set of specified launches in common one***  ***[POST] localhost:8080/api/v1/project\_js/launch/merge***  ***1 Send a POST request with body to the endpoint with body.***  ***{***  ***"launches": [1,2],***  ***"mergeType": "DEEP",***  ***"name": "New Merge"***  ***}***  ***2 Check the response status code. It should be equal to 200.***  ***3 Check the response format. It should match the following structure:***  ***{"owner": "superadmin",***  ***"share": false,***  ***"description": "### \*\*Demonstration launch.\*\*\nA typical \*Launch structure\* comprises the following elements: Suite > Test > Step > Log.\nLaunch contains \*randomly\* generated `suites`, `tests`, `steps` with:\n\* random issues and statuses,\n\* logs,\n\* attachments with different formats.\n\n### \*\*Demonstration launch.\*\*\nA typical \*Launch structure\* comprises the following elements: Suite > Test > Step > Log.\nLaunch contains \*randomly\* generated `suites`, `tests`, `steps` with:\n\* random issues and statuses,\n\* logs,\n\* attachments with different formats.",***  ***"id": 33,***  ***"uuid": "ee5fa3ea-a9cf-46ae-b36f-8f8a9dfc50cf",***  ***"name": "New Merge",***  ***"number": 5,***  ***"startTime": 1680542369834,***  ***"endTime": 1680542385147,***  ***"lastModified": 1680543924840,***  ***"status": "FAILED",***  ***"statistics": {***  ***"executions": {***  ***"total": 55,***  ***"failed": 5,***  ***"passed": 50},***  ***"defects": {***  ***"product\_bug": {***  ***"total": 4,***  ***"pb001": 4***  ***},"to\_investigate": {***  ***"total": 2,***  ***"ti001": 2***  ***},"automation\_bug": {***  ***"total": 1,***  ***"ab001": 1}}},***  ***"attributes": [***  ***{"key": "platform",***  ***"value": "ios"},***  ***{"key": "platform",***  ***"value": "android"},***  ***{"key": "build",***  ***"value": "3.3.17.19.36"},***  ***{"key": null,***  ***"value": "demo"},***  ***{"key": "build",***  ***"value": "3.3.17.19.29" }],***  ***"mode": "DEFAULT",***  ***"analysing": [],***  ***"approximateDuration": 0.0,***  ***"hasRetries": true,***  ***"rerun": false}***  ***4 Check that request IDs for merjed does not present in list of project launches***  ***5 Check that new launch with name "New Merge" is exist in list of project launches***  ***6 Check that value of description, attributes, statistics matches according to precondtition Launch of selected launches*** |
| ***[POSITIVE\_2] Linear Merge set of specified launches in common one***  ***[POST] localhost:8080/api/v1/project\_js/launch/merge***  ***1 Send a POST request with body to the endpoint with body***  ***{***  ***"launches": [10,11],***  ***"mergeType": "BASIC",***  ***"name": "New Merge 2"***  ***}***  ***2 Check the response status code. It should be equal to 200.***  ***3 Check the response format. It should match the following structure:***  ***{"owner": "superadmin",***  ***"share": false,***  ***"description": "### \*\*Demonstration launch.\*\*\nA typical \*Launch structure\* comprises the following elements: Suite > Test > Step > Log.\nLaunch contains \*randomly\* generated `suites`, `tests`, `steps` with:\n\* random issues and statuses,\n\* logs,\n\* attachments with different formats.\n\n### \*\*Demonstration launch.\*\*\nA typical \*Launch structure\* comprises the following elements: Suite > Test > Step > Log.\nLaunch contains \*randomly\* generated `suites`, `tests`, `steps` with:\n\* random issues and statuses,\n\* logs,\n\* attachments with different formats.",***  ***"id": 34,***  ***"uuid": "39bf30c8-cd12-4403-ba6e-fbde7525407e",***  ***"name": "New Merge 2",***  ***"number": 1,***  ***"startTime": 1680542355286,***  ***"endTime": 1680542369632,***  ***"lastModified": 1680544481611,***  ***"status": "FAILED",***  ***"statistics": {***  ***"executions": {***  ***"total": 35,***  ***"passed": 15,***  ***"failed": 17,***  ***"skipped": 3},***  ***"defects": {***  ***"system\_issue": {***  ***"total": 4,***  ***"si001": 4},***  ***"product\_bug": {***  ***"total": 5,***  ***"pb001": 5},***  ***"to\_investigate": {***  ***"total": 18,***  ***"ti001": 18},***  ***"automation\_bug": {***  ***"total": 9,***  ***"ab001": 9}}},***  ***"attributes": [***  ***{"key": "build",***  ***"value": "3.3.17.19.21"},***  ***{"key": "build",***  ***"value": "3.3.17.19.15"},***  ***{"key": "platform",***  ***"value": "windows 10"},***  ***{"key": null,***  ***"value": "demo"},***  ***{ "key": "platform",***  ***"value": "macos"}],***  ***"mode": "DEFAULT",***  ***"analysing": [],***  ***"approximateDuration": 0.0,***  ***"hasRetries": true,***  ***"rerun": false}***  ***4 Check that request IDs for merjed does not present in list of project launches***  ***5 Check that new launch with name "New Merge" is exist in list of project launches***  ***6 Check that value of description, attributes, statistics matches according to precondtition Launch of selected launches*** |
| ***[NEGATIVE] Merge set of incorect launches in common one***  ***[POST] localhost:8080/api/v1/project\_js/launch/merge***  ***1 Send a POST request with body to the endpoint v1/project\_js/launch/merge , where {projectName} is the projectName and launch IDs which we need merge.***  ***{***  ***"launches": [10,11],***  ***"mergeType": "DEEP",***  ***"name": "New Merge"***  ***}***  ***2 Check the response status code. It should be equal to 400.***  ***3 Check the response format. It should match the following structure:***  ***{***  ***"errorCode": 40016,***  ***"message": "Error in handled Request. Please, check specified parameters: 'Not all launches with provided ids were found'"***  ***}***  ***4 Check that request IDs for merjed does not present in list of project launches***  ***5 Check that the value of the "errorCode" field matches '40016'***  ***6 Check that the value of the "Error in handled Request. Please, check specified parameters: 'Not all launches with provided ids were found'"*** |
| ***Bulk delete attributes*** | ***[POSITIVE\_1] Bulk delete attributes***  ***[PUT] localhost:8080/api/v1/project\_js/launch/info***  ***1 Send a PUT request with body to the endpoint with body***  ***{"attributes": [***  ***{"action": "DELETE",***  ***"from": {***  ***"key": "build",***  ***"value": "3.3.17.54.59"},***  ***"to": {***  ***"key": "build",***  ***"value": "5.8.1.0.423"}} ],***  ***"ids": [1]}***  ***2 Check the response status code. It should be equal to 200.***  ***3 Check the response format. It should match the following structure:***  ***{***  ***"message": "Attributes successfully updated"***  ***}***  ***4 Check that request launch was updated***  ***5 Check that the value of the "message" field matches 'Attributes successfully updated'*** |
| ***[POSITIVE\_2] Bulk added attributes***  ***[PUT] localhost:8080/api/v1/project\_js/launch/info***  ***1 Send a PUT request with body to the endpoint with body***  ***{"attributes": [***  ***{ "action": "CREATE",***  ***"from": {***  ***"key": "os",***  ***"value": "Android"},***  ***"to": {***  ***"key": "demo",***  ***"value": "MacOS" }}],***  ***"ids": [1]}***  ***2 Check the response status code. It should be equal to 200.***  ***3 Check the response format. It should match the following structure:***  ***{***  ***"message": "Attributes successfully updated"***  ***}***  ***4 Check that request launch was updated***  ***5 Check that the value of the "message" field matches 'Attributes successfully updated'*** |
| ***[NEGATIVE] Bulk added attributes***  ***[PUT] localhost:8080/api/v1/project\_js/launch/info***  ***1 Send a PUT request with body to the endpoint with body***  ***{ "attributes": [***  ***{ "to": {***  ***"key": "demo",***  ***"value": "demo"}}],***  ***"ids": [1]}***  ***2 Check the response status code. It should be equal to 500.***  ***3 Check the response format. It should match the following structure:***  ***{***  ***"errorCode": 5000,***  ***"message": "Unclassified error [null]"***  ***}***  ***4 Check that request launch was not updated***  ***5 Check that the value of the "message" field matches 'Unclassified error [null]'*** |

## Out of scope

|  |  |  |
| --- | --- | --- |
| System/component/interface under test | Description | Reference |
| *Crate tests for Launches, Dashboards, Widgets, Filters* | *Customer want to start with Launches.* | *Do not create tests for Dashboards, Widgets, Filters* |

# Quality and Acceptance Criteria

*HW1-2:*

* *The product should work according to the requirements and functional specification listed at*

*sections Scope of work.*

*HW3:*

* *test project is created and contains all required layers and components.*
* *PRs trigger for TAF solution is build.*

*HW4:*

* *project contains references to test runners.*
* *test layer contains DDT tests. Test Data stored according to chosen strategy. DDT implemented for BOTH test runners.*
* *tests can run in parallel for both test runners.*

*HW5:*

* *BDD framework dedicated test runner for BDD tests.*
* *steps are organized according to BDD best practices and project contains Hooks.*
* *BDD tests can run in parallel.*

*HW6:*

* *have user\_data\_handler.js fully covered with unit tests, NYC code coverage report shows 100% coverage.*

*HW7:*

* *project contains API Client with all required infrastructure and configured Fiddler to observe traffic between Browser and RP*
* *project contains base test infrastructure implemented with test runner.*
* *test project able to work with 2 different API clients.*

*HW8:*

* *project contains alternative Web-Testing framework with configured waiters and logging.*
* *project contains screenshot taker utility*
* *project contains required tests. All tests work and passing.*
* *Evaluate both used frameworks and create a table containing advantages/disadvantages.*

*HW9:*

* *CI is configured for project.*
* *Quality gate configured.*
* *CI/CD pipeline functioning using Docker Containers and run API tests.*
* *CI/CD pipeline use config file from repository for execution.*
* *Appropriate classes are created for TAF integration with Jira and Slack*
* *Test cases in Jira are getting updated from TAF according to automated test’s run*
* *Start/Finish run messages reported to the Slack from TAF*
* *Appropriate classes are created for TAF integration with Sauce Labs*
* *Test are being run in Sauce Labs*
* *Tests output is available in RP, see logs and filter according to level.*

# Test process description

## Test planning phase

***The*** *test plan is created and approved by mentor. The plan includes the scope of testing, testing objectives, test levels, test types, testing techniques, test environment, and testing resources. Test cases are designed for each level of testing, including unit, API, and UI tests. Entry and exit criteria are established for each phase of testing.*

### Entry/exit criteria for each phase

*Entry Criteria:*

* *Test plan is approved by mentor.*
* *Test cases for each level of testing are designed.*
* *Test environment is set up and configured.*

*Exit Criteria:*

* *Core framework layer is implemented.*
* *API tests are created, integrated with API client, and executed.*
* *Unit tests for user\_data\_handler.js are created and executed.*
* *UI tests are created, integrated with Selenoid, and executed.*
* *CI/CD pipeline is set up and tested.*
* *Integrations with 3rd party tools are implemented and tested.*

## Test design phase

### Test cases creation rules

*Test**cases are designed for each level of testing. For unit testing, user\_data\_handler.js with unit tests and configures NYC to check unit test coverage just for user\_data\_handler.js file. For API testing, creates API tests, including DTOs, using Axios and Chakram libraries. For UI testing, creates UI tests using WebdriverIO. Each test case is designed to cover a specific functionality or feature of the system.*

## Test reporting phase

### Test report containment

*Analyzes the test results and prepares a test summary report. The report includes the test objectives, scope, test cases, test results, defects, and recommendations for improvement.*

### List of the metrics to track on a project

***Automation coverage****. Number of automated test cases in relation to all test cases.*

*Automation Test Cases / All Test Cases \* 100%*

*Automation coverage Progress refers to the number of tests that have been automated as a percentage of all automatable test cases*

***Automation progress*** *(%) = Number of test cases automated / Number of test cases automatable.*

# Risk management

|  |  |  |  |
| --- | --- | --- | --- |
| Risk name | Severity | Symptom | Mitigation plan |
| Ills or vacations | High | Planned Functionality won’t be delivered properly due to lack of resources. | In the case of a vacation, take this into account when planning a sprint.  Take on higher priority tasks. |

# test Team

## Roles and Responsibilities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | Project Role | Name | Location | Responsibilities |
| 1 | QA | Nehrii Stas | Kyiv | Performance Analytic |

## Test tools

*Postman is used for API testing.*

*Jenkins enables to implement CI/CD, which improves the quality of software and speeds up the release process.*

*WebdriverIO is a test automation framework that allows to automate web applications' testing.*

*JIRA is used for bug tracking, checklists storage.*

*KB is used for requirements storage and test documentation: Test Plan, environments utilization, processes description, guides.*

*Slack/Teams is a messaging platform that provides a centralized location for teams to communicate and collaborate.*

*Report Portal is a tool that provides a centralized location to store and view test reports generated by automated tests.*

*Browserstack is a cloud-based testing platform that provides developers with access to a wide range of browsers, operating systems, and devices for testing web and mobile applications.*

*Github is a web-based platform that is widely used for version control and collaborative software development.*

## STAKEHOLDERS

|  |  |  |
| --- | --- | --- |
| # | Project Role | Name, e-mail, location |
| Internal (inside EPAM) | | |
|  | Mentor | Viktoryia Maksimava |
|  | Test Leader | Stas Negriy |
|  | Coordinators | Yury Karpinski |
| Artsiom Baradzin |
| Andrey Kozlov |

# Test schedule

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Activity | Begin Time | End Time | Assignment | Work content |
| Test Plan | Test plan creation | Mar 22, 2023 | Apr 4, 2023 | Stas Negriy | 16h |
| TAF creation | Creation of git repository | Apr 5, 2023 | Apr 18, 2023 | Stas Negriy | 1h |
| Creation of core framework layer (Configuration, test data, logger) | Stas Negriy | 25h |
| Test Runner creation | Added Jasmine to test layer | Apr 19, 2023 | Apr 25, 2023 | Stas Negriy | 4h |
| DDT implemented for Jasmine/Mocha | Stas Negriy | 4h |
| Tests run in parallel for both test runners | Stas Negriy | 2h |
| BDD test creation | Cucumber-js dedicated test runner for BDD tests | Apr 26, 2023 | May 9, 2023 | Stas Negriy | 5h |
| Steps are organized according to BDD best practices. Project contains Hooks. | Stas Negriy | 5h |
| Unit testing creation | user\_data\_handler.js fully covered with unit tests, NYC, NOCK code coverage reports show 100% coverage | May 10, 2023 | May 12, 2023 | Stas Negriy | 5h |
| API tests creation | API part of business layer | May 13, 2023 | May 26, 2023 | Stas Negriy | 2h |
| API client integration | Stas Negriy | 2h |
| DTOs | Stas Negriy | 3h |
| Tests (consider total number of test cases as 10) | Stas Negriy | 32h |
| UI tests creation | UI part of business layer | May 27, 2023 | Jun 9, 2023 | Stas Negriy | 2h |
| Elements | Stas Negriy | 16h |
| Page objects | Stas Negriy | 24h |
| Tests (consider total number of test cases as 10) -26h | Stas Negriy | 26h |
| CI/CD setup | Build pipeline | Jun 10, 2023 | Jun 23, 2023 | Stas Negriy | 25h |
| Test execution pipeline | Stas Negriy | 5h |
| Integration with 3-d party tools | Integration with project management tool (e.g. Jira, Azure DevOps, Trello) | Stas Negriy | 5h |
| Integration with reporting tool (Allure, RP) | Stas Negriy | 2h |
| Integration with communication tool (Slack, Teams) | Stas Negriy | 2h |
| Integration with test execution tool (Sauce Labs, BrowserStack) | Stas Negriy | 3h |
| **Total** |  |  |  |  | 198h |

# Test Strategy

## **Definition of Ready**

* *Availability of access to the local testing environment Report Portal container with Docker*
* *Availability of documentation for Report Portal*
* *Availability of access to the API for Report Portal*
* *Availability of developed test cases that need to be automated*
* *Availability of Test Plan*

## **Definition of Done**

|  |  |
| --- | --- |
| Component | Description |
| *-Test plan created* |  |
| *-Created of core framework layer* | *Core layer:*  *- Logger (log4JS, ptkdev/logger)*  *- Reporter (Allure)*  *- Test runner (Mocha, cucumber)*  *-Configuration*  *-Utilities*  *Business layer:*  *-Page Object*  *-UI controller (Non-webdriver based – Cypress*  *Webdriver based –WebdriverIO)*  *-API controller (Axios, Chakram)*  *-BDD features*  *Test layer:*  *-Test data*  *-Tests Unit, API, UI* |
| *-API tests created* | *API part of business layer*  *API client integration*  *DTOs*  *Tests (consider total number of test cases as 10* |
| *-Unit tests created* | *Unit test part of business layer*  *Create Unit Test*  *- Cover user\_data\_handler.js with unit tests*  *- Configure NYC to check unit test coverage just for user\_data\_handler.js file*  *-Setup husky to run unit tests before "git push"* |
| *-UI tests created* | *UI part of business layer- (Selenoid)*  *Elements*  *Page objects*  *Tests (consider total number of test cases as 10)* |
| *-CI/CD setup created* | *Set up CI tool Jenkins.*  *Set up a pipeline:*  *-Build project and execute tests - after each commit to Master branch*  *-Build project and execute tests - once per day using the latest source files*  *-Publish test results (display pass/fail numbers in pipeline)* |
| *-Integrations with 3-d party created (reporting, test execution)* | *Integration with project management tool (Jira)*  *Integration with reporting tool (Allure, RP)*  *Integration with communication tool (Slack, Teams)*  *Integration with test execution tool (BrowserStack)* |

## **Test types**

### Requirements testing

*The goal of requirements testing is to eliminate defects in requirements: omissions, contradictions, gaps, ambiguity, etc. This static testing type is conducted using review techniques like walkthroughs.*

### E2E testing

*This layer of testing validates that the system is working together correctly and any dependencies between services.*

### API testing

*Application programming interface operates according to technical specification, properly handles invalid input, delivers meaningful responses. Test manually first as soon as manual testing completed, automate API tests. Run automation after each commit to identify issues as soon as possible.*

### Unit testing

*The main functions of the system will be automated and tested through the user interface, such as registration, authorization, adding and editing data, searching for information, displaying results, sending messages, and more.  
Tools such as WebDriverIO, Cypress, Jest, and others will be used to automate UI testing.*

## **Test levels**

### Smoke test

*Smoke test. Automated scripts are to be updated to establish a quality gate on CI/CD pipeline. Smoke test should be executed after new feature implementation, after each deployment to QA.*

### Critical Path test

*Critical Path test is performed in order to find bugs affecting major functionality most important for application users.*

| REVISION HISTORY | | | | | |
| --- | --- | --- | --- | --- | --- |
| Ver. | Description of Change | Author | Date | Approved | |
| Name | Date |
| n.n |  |  | dd-Mmm-yyyy |  |  |
|  |  |  |  |  |  |