Software Engineering Group Project

Testing Specification

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| Author: | David Fairbrother, Maurice Corriette, Oliver Earl |
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Department of Computer Science

Aberystwyth University

Aberystwyth

Ceredigion

SY23 3DB

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# Introduction

## Purpose of this Document

This document contains a testing specification for this project. The software engineering team will use this document to ensure the working system is functionally correct, robust and matches the client’s specification. Tests ensure designs are adhered to and implemented correctly and can identify more bugs within software earlier in development.

## Scope

This document covers the testing specification used during development. The intended readers are the Quality Assurance Manager, Project Manager Leader and all software engineers. The testing plan and procedures are specified in SE.QA.06 [1]

## Objectives

By the end of this document the reader should be informed of the nature of the tests and the methodology of testing. They should also be able to clearly identify the functional requirement [2] being tested, the purpose of that test and the expected outcome.

# Taskersrv / taskerman testing

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| Test Ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS1 | FR7 | Logging into system | Do not enter email address and click on login button | User is told to enter an email address | User access is prohibited |
| TS2 | FR7 | Logging into system | Enter email address “antibones123” and click on login button | User is told to enter a valid email address | User access is prohibited |
| TS3 | FR7 | Logging into system | Enter email address “abcde123@example.co.uk” and click on login button | User is told that the email is not recognised | User access is prohibited |
| TS4 | FR7 | Logging into system | Enter email address “mac81@example.co.uk”  And click on login button | User directed to main menu | User access is granted |
| TS5 | FR3 | Add new team member | On the main menu click on add button Do not enter a name or email and click on Add button | User is told that to enter a name and email | Name and email is rejected |
| TS6 | FR3 | Add new team member | Enter name “S”  Enter email ““S123@example.co.uk” | User is told that name is invalid | Name is rejected |
| TS7 | FR3 | Add new team member  (Relevant for later test) | Enter name “Maurice Corriette”  Enter email “abc123@example.co.uk” | Input accepted | New member is added to the system |
| TS8 | FR3 | Add new team member (Relevant for later test) | Enter name “Qi”  Enter email “Qi123@example.co.uk” | Input accepted | New member is added to the system |
| TS9 | FR3 | Add new team member(Relevant for later test) | Enter name “Josh Doyle”  Enter email “Doyle123@example.co.uk” | Input accepted | New member added to the system |
| TS10 |  | Add new team member (Relevant for later test | Enter name “Oliver Earl”  Enter email “ole123@example.co.uk” | Input accepted | New member added to the system |

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| Test Ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS11 | FR3 | Add new team member | Enter name “M”  Enter email “abc123@example.ac.uk” | User is told that name is invalid | Name is rejected |
| TS12 | FR3 | Add new team member | Enter name “Maurice$£%^”  Enter email “Maurice@example.co.uk” | User is told that name is invalid | Name is rejected |
| TS13 | FR3 | Add new team member | Enter name “abc” Enter email “abc123” | User is told that email is invalid | Email is rejected |
| TS14 | FR3 | Add new team member | Enter name “Josh Doyle”  Enter email “Josh123@example.co.uk” | User is told that a member with that name already exists | Name is rejected |
| TS15 | FR3 | Add new team member | Enter name “Mark Doyle”  Enter email “Doyle123@example.co.uk” | User is told that a member with that email already exists | Email is rejected |
| TS16 | FR3 | Edit team member | Edit existing member “Maurice Corriette”  Change name to blank | User is told to enter a name | Change is rejected |
| TS17 | FR3 | Edit team member | Edit existing member “Maurice Corriette”  Change name to “M” | User is told that name is invalid | Change is rejected |
| TS18 | FR3 | Edit team member | Edit existing member “Maurice Corriette”  Change name to “Maurice£$%” | User is told that name is invalid | Change is rejected |
| TS19 | FR3 | Edit team member | Edit existing member “Maurice Corriette”  Change name to “Josh Doyle” | User is told that a member with that name already exists | Change is rejected |
| TS20 | FR3 | Edit team member | Edit Existing member “Maurice Corriette”  Change name to “Maurice Jordan Corriette” | Input accepted | Change is successful |

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| Test Ref | Req being tested | Test content | Input | | Output | | Pass criteria | | |
| TS21 | FR3 | Edit team member | | Edit existing member “Maurice Jordan Corriette”  Change email to “abc123” | | User is told that email is invalid | | Change is rejected |
| TS22 | FR3 | Edit team member | | Edit existing member “Maurice Jordan Corriette”  Change email to “Doyle123@example.co.uk” | | User is told that that a member with that email already exists | | Change is rejected |
| TS23 | FR3 | Edit team member | | Edit existing member “Maurice Jordan Corriette”  Change email to “mac81@aber.ac.uk” | | Input accepted | | Change Is successful |
| TS24 | FR3 | Delete team member | | Delete Existing member “Qi” | | Dialogue box appears asking user to confirm deletion | | Deletion is successful |
| TS25 | FR3 | Delete team member | | Delete existing member “John” | | User is told that member does not exist | | Deletion un-successful |
| TS26 | FR4 | Add new task | | Do not enter task name  Enter assigned task member “Josh Doyle”  Enter start date “10/11/15  Enter end date “20/11/15”  Leave status as default ‘allocated’ | | User told to enter a name, | | Creation of task is rejected |
| TS27 | FR4 | Add new task | | Enter task name “java spike work”  Do not enter assigned task member  Enter start date “10/11/15  Enter end date “20/11/15”  Leave status as default ‘allocated’ | | User is told to enter assigned task member | | Creation of task is rejected |

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| Test Ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS28 | FR4 | Add new task | Enter task name “java spike work  Enter assigned task member “Josh Doyle”  Do not enter a start date  Enter end date “20/11/15”  Leave status as default ‘allocated’ | User is told to enter a start date | Creation of task is rejected |
| TS29 | FR4 | Add new task | Enter task name “java spike work”  Enter assigned task member “Josh Doyle”  Enter start date “10/11/15  Do not enter an end date  Leave status as default ‘allocated’ | User is told to enter an end date | Creation of task is rejected |

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| Test Ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS30 | FR4 | Add new task | Enter task name “Q”  Enter assigned task member “Oliver Earl”  Select start date “26/10/15”  Select end date “13/11/15”  Enter description “Creation of testing specification”  Leave status as default ‘allocated’ | User told that Task name is invalid | Creation of task is rejected |
| TS31 | FR4 | Add new task | Enter task name “QA”  Enter assigned task member “Oliver Earl”  Select start date “26/10/15”  Select end date “13/11/15”  Enter description “Creation of testing specification”  Leave status as default ‘allocated’ | User is told that task name is invalid | Creation of task is rejected |
| TS32 | FR4 | Add new task | Enter task name “Testing specification”  Enter assigned task member “Maurice Jordan Corriette”  Select start date “13/11/15”  Select end date “23/10/15”  Enter description “Creation of testing specification”  Leave status as default ‘allocated’ | User is told that end date must be after the start date | Creation of task is rejected |
| TS33 | FR4 | Add new task | Enter task name “QAS”  Enter assigned task member “Oliver Earl”  Select start date “26/10/15”  Select end date “13/11/15”  Enter description “Creation of Quality assurance documents”  Leave status as default ‘allocated’ | Input accepted | Task is successfully added |
| TS34 | FR4 | Add new task  (relevant for later test) | Enter task name “Testing specification”  Enter assigned task member “Maurice Jordan Corriette”  Select start date “26/10/15”  Select end date “13/11/15”  Enter description “Creation of testing specification”  Leave status as default ‘allocated’ | Input accepted | Task is successfully added |

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| Test Ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS35 | FR4 | Add new task (relevant for later test) | Enter task name “PostgreSQL spike work”  Enter assigned task member “David Fairbrother”  Select start date “12/10/15”  Select end date “19/10/15”  Enter description “Research into the PostgreSQL software”  Leave status as default ‘allocated’ | Input accepted | Task is successfully  added |
| TS36 | FR4 | Add new task (relevant for later test) | Enter task name “Expendable test”  Enter assigned task member “Maurice Jordan Corriette”  Select start date “15/10/15”  Select end date “25/10/15”  Enter description “Task to be deleted”  Leave status as default “allocated” | Input accepted | Task is successfully added |
| TS37 | FR4 | Add new task | Enter task name “Testing specification”  Enter assigned task member “Maurice Jordan Corriette”  Select start date “266/101/125”  Select end date “13/11/15”  Enter description “Creation of testing specification”  Leave status as default ‘allocated’ | User told that start date is invalid | Creation of task is rejected |

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| Test Ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS39 | FR4 | Add new task | Enter task name “Testing specification”  Enter assigned task member “Maurice Jordan Corriette”  Select start date “26/10/15”  Select end date “133/111/155”  Enter description “Creation of testing specification”  Leave status as default ‘allocated’ | User is told that end date is invalid | Creation of task is rejected |
| TS40 | FR4 | Add new task | Enter task name “Testing specification”  Enter assigned task member “Maurice Jordan Corriette”  Select start date “10/26/15”  Select end date “13/11/15”  Enter description “Creation of testing specification”  Leave status as default ‘allocated’ | User is told that start date is invalid | Creation of task is rejected |
| TS41 | FR4 | Add new task | Enter task name “Testing specification”  Enter assigned task member “Maurice Jordan Corriette”  Select start date “26/10/15”  Select end date “11/13/15”  Enter description “Creation of testing specification”  Leave status as default ‘allocated’ | User is told that end date is invalid | Creation of task Is rejected |
| TS42 | FR4 | Add new task | Enter task name “Testing specification”  Enter assigned task member “Maurice Jordan Corriette”  Select start date “26/10/15”  Select end date “13/11/15”  Enter description “Creation of testing specification”  Leave status as default ‘allocated’ | User told that task name already exists | Creation of task is rejected |

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| Test Ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS43 | FR5 | Edit existing task | Edit existing task “Testing specification”  Change task name to blank  Change assigned task member to blank  Change description to blank | User told to enter a task name, enter a assigned task member and enter a description | Change is rejected |
| TS44 | FR5 | Edit existing task | Edit existing task “Testing specification”  Change task name to “T”  Change assigned task member to “B”  Change description to “F” | User is told that task name is invalid, assigned task member does not exist, and description is invalid | Change is rejected |
| TS45 | FR5 | Edit existing task | Edit existing task “Testing specification”  Change task name to “A” | User told that task name is invalid | Change is rejected |
| TS46 | FR5 | Edit existing task | Edit existing task “QAS”  Change task name to “QA” | User told that task name is invalid | Change is rejected |

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| --- | --- | --- | --- | --- | --- |
| Test Ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS47 | FR5 | Edit existing task | Edit existing task “Testing specification”  Change assigned task member to “John” | User told that assigned task member does not exist | Change is rejected |
| TS48 | FR5 | Edit existing task | Edit existing task “Testing specification”  Change start date to “266/100/155” | User is told to enter a valid start date | Change is rejected |
| TS49 | FR5 | Edit existing task | Edit existing task “Testing specification”  Change end date “133/111/155” | User is told to enter a valid start date | Change is rejected |
| TS50 | FR5 | Edit existing task | Edit existing task “Testing specification”  Change Description to “A” | User is told to description must be more than two character | Change rejected |
| TS51 | FR5 | Edit existing task | Edit existing task “Testing specification”  Change description to “AB” | User is told the description much be more than two characters | Change rejected |
| TS52 | FR5 | Edit existing task | Edit existing task “Testing specification”  Change description to “ABC” | Input accepted | Change Successful |
| TS53 | FR5 | Edit existing task | Edit existing task “Testing specification”  Change task name to “Design specification” | Input accepted | Change is successful |
| TS54 | FR5 | Edit existing task | Edit existing task “Design specification”  Change assigned task member to “Josh Doyle” | Input accepted | Change is successful |

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| Test Ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS55 | FR5 | Edit existing task | Edit existing task “Design specification”  Change start date to “9/11/15” | Input accepted | Change is successful |
| TS56 | FR5 | Edit existing task | Edit existing task “Design specification”  Change end date to “30/11/15” | Input accepted | Change is successful |
| TS57 | FR5 | Edit existing task | Edit existing task “Design specification”  Change description to “Creation of design specification” | Input accepted | Change successful |
| TS58 | FR5 | Edit existing task | Edit existing task “Design specification”  Change task name to “PostgreSQL spike work” | User told that task name already exists | Change is rejected |
| TS59 | FR3 | Delete existing member | Delete member “Oliver Earl” | User is told that Member cannot be deleted as he still has task(s) assigned | Delete is unsuccessful |
| TS60 | FR6 / FR3 | Abandon task | Select existing task “QAS” and click on abandon button | In the status columns for the task “Abandoned” should be present” | Task is abandoned |
| TS61 | FR3 | Delete existing member | Delete member “Oliver Earl” | Input accepted | Deletion is successfull |
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| Test Ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS62 | FR6 | Abandoning task | Select existing task “PostgreSQL spike work”  Then click on the abandon button | In the Status column for the task, “Abandoned” should be present | Task is abandoned |
| TS63 | FR6 | Edit an abandoned task | Select abandoned task “PostgreSQL spike work”  Click on Edit button | User is told task cannot be edited as it has been abandoned | Ability to edit is denied |
| TS64 | FR6 | Delete task | Select allocated task “Expendable task”  And click on the delete button | User told that task cannot be deleted as it is still allocated and has not yet been abandoned | Deletion of task is unsuccessful |
| TS65 | FR6 | Abandon task | Select allocated task “Expendable task” and click on the abandon button | In the Status column for the task, “Abandoned” should be present | Task is abandoned |
| TS67 | FR6 | Abandon task | Select abandoned task “Expendable task” and click on delete button | Dialogue box appears asking user to confirm deletion | Task is deleted |
| TS68 | FR7 | View list of tasks | Gain access to main menu | Task “PostgreSQL Spike work” and “Design specification” are present in the list. | Tasks are visible and correct in the list |

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| Test ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS69 | FR7 | Add task and view list | Add task  Enter name “Tasktest”  Enter assigned task member “Maurice Jordan Corriette” Enter start date “10/10/15”  Enter end date “12/10/15” | Input accepted  Task appears in list in main menu | Task is correctly shown in list in main menu |
| TS70 | FR7 | Check list order | Gain access to menu | “Design specification” is on the top of the list, followed by “PostgreSQL spike work”, followed by “Tasktest” | List is in correct order filtered by end date |
| TS71 | FR7 | Check list order | Gain access to menu  Filter order via clicking on status column | “Design specification”  Is first in the list, followed by “Tasktest”, followed by “PostgreSQL spike work” | List in correct order sorted by status  Allocated ranked higher than abandoned |

# Taskercli testing

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| --- | --- | --- | --- | --- | --- |
| Test ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS72 | FR8 | Logging into system | Open desktop application TaskerCLI Do not enter email address and click on login button | User is told to enter an email address | User access is prohibited |
| TS73 | FR8 | Logging into system | Enter email address “antibones123” and click on login button | User is told to enter a valid email address | User access is prohibited |
| TS74 | FR8 | Logging into system | Enter email address jjj123@aber.ac.uk and click on login button | User is told that the email is not recognised | User access is prohibited |
| TS75 | FR8 | Logging into system | Enter email address “Mac81@aber.ac.uk”  And click on login button | User directed to main menu | User access is granted |
| TS76 | FR11 | Checking for start-up synchronisation | Gain access to main menu and then click on the Connection setting button.  Enter Database URL “…”  Enter Port number “…”  Then press on the connect button | Coloured Circle should remain Red  and error message should appear saying ”Error: Invalid Database URL entered” | TaskerCLI  Synchronisation with TaskerSRV Unsuccessful |
| TS77 | FR11 | Checking for start-up synchronisation | Gain access to main menu and then click on the Connection setting button.  Enter Database URL “…”  Enter Port number “…”  Then press on the connect button | Coloured Circle should remain Red and error message should appear saying ”Error: Invalid port number entered” | TaskerCLI  Synchronisation with TaskerSRV Unsuccessful |

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| --- | --- | --- | --- | --- | --- |
| Test ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS78 | FR11 | Checking for start-up synchronisation | Gain access to main menu and then click on the Connection setting button.  Enter Database URL “…”  Enter Port number “…”  Then press on the connect button | Coloured Circle should remain Red  and error message should appear saying ”Error: Connection to database failed – Check your connection setting” | TaskerCLI  Synchronisation with TaskerSRV Unsuccessful |
| TS79 | FR11 | Checking for start-up synchronisation | Gain access to main menu and then click on the Connection setting button.  Enter Database URL “…”  Enter Port number “…”  Then press on the connect button | Coloured circle should Turn green | TaskerCLI successfully syncs with TaskerSRV |
| TS80 | FR11 | Checking for periodic synchronisation | Following previous test, close connection setting page and leave TaskerCLI running for 5 minutes  Then reopen the connection settings page. | On the connection setting page last synced should be “5 minutes ago” | TaskercLI successfully syncs with database after 5 minutes |
| TS81 | FR8a | Checking for local storage of tasks | Go to “TaskerCLI program directory” and then access subdirectory “data”  Open “Design specification” txt file | User should be able to view data of Design specification | Local storage of Design specification data confirmed |

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| --- | --- | --- | --- | --- | --- |
| Test ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS82 | FR10 | Select task to view | Gain access to main menu and select the task ‘Design specification’ | In quick view section of main menu, ‘Design specification’  details including task name, status , assigned task member, start/end date and task elements should be shown | Tasks are selectable and can be viewed in quick view |
| TS83 | FR10 | Select multiple tasks to view | Gain access to main menu and select the tasks ‘Design specification’ and ‘PostgreSQL spike work’ | In quick view section of main menu, ‘Design specification’  Details should be shown.  Click on the > icon and the second selected task ‘PostgreSQL spike work’ should be now viewable | Selected tasks can both be viewed in quick view using the  < > buttons |
| TS84 | FR10 | Edit task status | Edit task ‘Design specification’  Change task status to ‘Completed’  Then click save | Input accepted | Edit is successful |
| TS85 | FR10 | Edit task status | Edit task ‘Design specification’  Change task status to ‘Abandoned’  Then click save | User is told that he/she cannot set task to abandoned | Edit is rejected |

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| --- | --- | --- | --- | --- | --- |
| Test ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS86 | FR10 | Edit task step comments | Edit task ‘Design specification’  Change task elements to Blank  Then click save | User told to give a description for the task | Edit is rejected |
| TS87 | FR10 | Edit task step comments | Edit task ‘Design specification’  Change task elements to ‘Task has now been completed’  Then click save | Input accepted | Edit is successful |
| TS88 | FR9 | Checking synchronisation of local storage of data and that of TaskerSRV | Following changes made to Design specification  Access TaskerMAN  And view Design specification | Status should now be “Completed”  And task elements should be “Task has now been completed” | Confirmation of synchronisation between local storage of data and TaskerSRV through TaskerMAN |
| TS89 | FR10 | Edit task status | Edit task “Design specification” change task status to “abandoned”  Then click save | Input accepted | Edit is successful |
| TS90 | FR11 | Checking synchronisation timing  (Test to be carried out immediately after TS…) | Access main menu and click on Connection setting button | On connection setting page, “Last synced <1 minutes ago” should be present | TaskerCLI synced immediately after task update |

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| --- | --- | --- | --- | --- | --- |
| Test ref | Req being tested | Test content | Input | Output | Pass criteria |
| TS91 | FR9 | Checking synchronisation of local storage of data and that of TaskerSRV | Following changes made to Design specification  Access TaskerMAN  And view Design specification | Status should now be “abandoned” | TaskerCLI Successfully synced with TaskerSRV following edit of Design specification |

REFERENCES

|  |  |
| --- | --- |
| [1] | N. W. Hardy, C. J. Price and B. P. Tiddeman, *SE.QA.06 - Test Procedure Standards,* Aberystwyth University: Software Engineering Group Project, 2015. |
| [2] | N. W. Hardy, *Tasker Team Tasking System - Requirement Specification,* Aberystwyth University: Software Engineering Group Project, 2015. |

DOCUMENT HISTORY

| *Version* | *CCF No.* | *Date* | *Changes made to document* | *Changed by* |
| --- | --- | --- | --- | --- |
| 0.1 | N/A | 2015-11-5 | Original Version | MAC81 |
| 0.2 | N/A | 2015-11-8 | Document up for review | MAC81 |
| 0.3 | N/A | 2015-11-11 | Corrected Template | DAF5 |
| 1.0 | N/A | 2015-10-12 | {Maurice’s changes} – Document Release | MAC81 |