

# **TODO List Manager on Steroids**

## **Test Cases Document**

### **Team 3.09**

## **1. Introduction**

The goal of the project is to extend the existent TODO List Application on Android to a Web application and to provide sync functionalities between the Android and the Web application, thereby enhancing the user-experience.

## **2. Quality Control**

### **2.1 Test Plan Quality**

The application will be rigorously tested by all 4 members of the team. During the testing process the team will follow a comprehensive test plan, which will aim to cover all aspects of the application both on the Android platform, Web platform and the sync feature between both, that is prone to have errors. The test plan will also ensure that all the functional requirements specified by the customer are met. The quality of the test plan will be measured by the coverage and the number of defects it helps isolate.

### **2.2 Adequacy Criterion**

The adequacy criterion depends on the extent to which the test cases made are successful in debugging the program code. The test plan coverage is complete satisfying all requirements. All defects should be addressed and must be successful in the successive iterations.

## 2.3 Bug Tracking

The bug tracking will be carried out by using a shared Google spreadsheet so that it could be easily collaborated. The bugs need to be documented and fixed properly.

## 3. Test Cases

The Test cases that we formulate to test the program form the basis of the whole testing phase. These parameters are the ones against which the code can be verified. The code should be able to withstand any arbitrary inputs without failing or crashing. The test cases we plan to test are as follows:

| Sl. No | Category                | Test Case  | Expected Result  | Actual Result                                | Pass/Fail | Severity |
|--------|-------------------------|--|--|--|-----------|----------|
| 1      | User Creation - Android | Creating a new valid user                              | New user is created  | New user is created                          | Pass      | High     |
| 2      |                         | Creating a new user with same name as an existing user | Error should be reported and new user is not created. Should prompt the user to use a different username | Error: "User already exists"                 | Pass      | Medium   |
| 3      |                         | Creating 100 distinct usernames                        | 100 users should be created without any issues   | 100 usernames should be created successfully | Pass      | Medium   |

|   |                     |  |   |  |      |        |
|---|---------------------|--|---|--|------|--------|
| 4 |                     | Creating user with empty username and password         | Appropriate error message to be displayed saying invalid username or password accordingly                 | Error: "Please enter Username and password"      | Pass | High   |
| 5 |                     | Logging in the application with correct credentials    | User should be logged in and user-specific task list needs to be displayed                                |  | Pass | Medium |
| 6 |                     | Logging in the application with incorrect credentials  | User should not be logged in and error should be reported saying incorrect password/ username accordingly | Error: "Incorrect credentials, please try again" | Pass | Medium |
| 7 | User Creation - Web | Creating a new valid user                              | New user is created   |  | Pass | Medium |
| 8 |                     | Creating a new user with same name as an existing user | Error should be reported and new user is not created. Should prompt the user to use a different username  | Username doesn't exist                           | Pass | Medium |
| 9 |                     | Creating 100 distinct usernames                        | 100 users should be created   |  | Pass | Low    |

|    |                         |   |  |   |      |        |
|----|-------------------------|---|--|---|------|--------|
|    |                         |   | without any issues   |   |      |        |
| 10 |                         | Creating user with empty username and password        | Appropriate error message to be displayed saying invalid username or password accordingly                | Error:<br>"Please enter username and password"      | Pass | High   |
| 11 |                         | Logging in the application with correct credentials   | User should be logged in and user-specific task list needs to be displayed                               |   | Pass | Medium |
| 12 |                         | Logging in the application with incorrect credentials | User should not be logged in and error should be reported saying incorrect password/username accordingly | Error:<br>"Incorrect credentials, please try again" | Pass | Medium |
| 13 | User Deletion - Android | Deleting a user account                               | User account should be deleted including the user specific task lists.                                   |   | Pass | High   |
| 14 |                         | Trying to Login with the deleted user credentials     | User should not be logged in and error should be reported saying incorrect                               | Error:<br>"Username doesn't exist"                  | Pass | High   |

|    |                         |   |   |                                   |      |        |
|----|-------------------------|---|---|-----------------------------------|------|--------|
|    |                         |   | username accordingly  |                                   |      |        |
| 15 | User Deletion - Web     | Deleting a user account   | User account should be deleted including the user specific task lists.                          |                                   | Pass | High   |
| 16 |                         | Trying to Login with the deleted user credentials                   | User should not be logged in and error should be reported saying incorrect username accordingly | Error: "Username doesn't exist"   | Pass | High   |
| 17 | Task Creation - Android | User tries to add a task using the task name, priority and due date | Task should be created and displayed  |                                   | Pass | Medium |
| 18 |                         | User tries to add a task only by using the task name                | Task should be created with default priority, due date and displayed                            |                                   | Pass | Medium |
| 19 |                         | User tries to add a new task with the same task name,               | Task should not be created and should report an error saying duplicate task                     | Error: "Task name already exists" | Pass | High   |

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|    |                          | priority and due date  |   |                                   |      |        |
| 20 |                          | User tries to add a new task with the same task name but different priority and due date | Task should not be created and displayed  | Error: "Task name already exists" | Pass | Medium |
| 21 | Task Check-off - Android | User checks off a task   | Task should be removed from the pending task list and sent to the completed list. However the task should be still present on the all task list |                                   | Pass | Low    |
| 22 | Task Edit - Android      | User edits a task  | The edited parameters should be reflected overriding the pre-edited version   |                                   | Pass | Medium |
| 23 |                          | User edits a completed task to pending task  | The task should be removed from the completed task list and sent to the pending task list   |                                   | Fail | Low    |

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| 24 | Task Delete - Android    | User tries to delete a task   | The task is deleted and should be removed from all, pending and completed task lists   |  | Pass | Medium |
| 25 |                          | User tries to mark a list of tasks and delete them  | All the marked tasks should be deleted and should be removed from all, pending and completed task lists  |  | Pass | Medium |
| 26 | Task Auto-save - Android | User edits/add a task. Fills in the task name and in the process, presses the back button | The task should be saved with default priority and due date in case of new task and with the existing parameters along with the edited portions in cases of an existing task |  | Fail | Low    |
| 27 | Task Creation - Web      | User tries to add a task using the task name, priority and due date                       | Task should be created and displayed   |  | Pass | Medium |

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| 28 |                     | User tries to add a task only by using the task name                                     | Task should be created with default priority, due date and displayed  |                                   | Pass | Medium |
| 29 |                     | User tries to add a new task with the same task name, priority and due date              | Task should not be created and should report an error saying duplicate task   | Error: "Task name already exists" | Pass | Medium |
| 30 |                     | User tries to add a new task with the same task name but different priority and due date | Task should be created and displayed  |                                   | Pass | Low    |
| 31 | Task Checkoff - Web | User checks off a task   | Task should be removed from the pending task list and sent to the completed list. However the task should be still present on the all task list |                                   | Pass | Low    |
| 32 | Task Edit - Web     | User edits a task  | The edited parameters should be   |                                   | Pass | Medium |



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|----|----------------------|---|---|--|------|--------|
|    |                      |   | reflected overriding the pre-edited version   |  |      |        |
| 33 |                      | User edits a completed task to pending task   | The task should be removed from the completed task list and sent to the pending task list               |  | Pass | Medium |
| 34 | Task Delete - Web    | User tries to delete a task   | The task is deleted and should be removed from all, pending and completed task lists                    |  | Pass | Medium |
| 35 |                      | User tries to mark a list of tasks and delete them  | All the marked tasks should be deleted and should be removed from all, pending and completed task lists |  | Pass | Medium |
| 36 | Task Creation - Sync | User creates a new task in the mobile application and presses the sync button on mobile application | The task is added to both the mobile and the web application  |  | Pass | Medium |
| 37 |                      | User creates a  | The task is added only to   |  | Pass | Medium |

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|    |  | new task in the mobile application and opens the web application  | the mobile application. The task is not added on the web application                        |  |      |        |
| 38 |  | User creates a new task in the web application and presses sync on the already started mobile application | The task is added to both the mobile and the web application                                |  | Pass | Medium |
| 39 |  | User creates a new task in the web application and restarts the application                               | The task is added to both the mobile and the web application                                |  | Pass | Low    |
| 40 |  | User creates a new task in the web application and the mobile application is already started              | The task is added only to web application. The task is not added on the mobile application. |  | Pass | Medium |

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| 41 | Task Edit - Sync | User creates a new task on mobile application, presses sync on mobile, edits the task on the web application  | The task is added to both the mobile and the web application. The edited task is seen only on the web application. The mobile shows the stale version. |  | Pass | Medium |
| 42 |                  | User creates a new task on mobile application, presses sync on mobile, edits the task on the web application and presses sync on the mobile application | The task is added to both the mobile and the web application. The edited task is updated on both the mobile and web applications.                      |  | Pass | Medium |
| 43 |                  | User creates a new task on mobile application, presses sync on mobile, edits the task on the  | The task is added to both the mobile and the web application. The edited task is updated on both the mobile and  |  | Pass | Medium |

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|    |  | web application and restarts the application on the mobile  | web applications.  |  |      |        |
| 44 |  | User creates a new task on web application, presses sync on mobile, edits the task on mobile application  | The task is added to both the mobile and the web application. The edited task is seen only on the mobile application. The web application shows the stale version. |  | Pass | Medium |
| 45 |  | User creates a new task on web application, presses sync on mobile, edits the task on mobile application and presses sync on the mobile application | The task is added to both the mobile and the web application. The edited task is updated on both the mobile and web applications.                                  |  | Pass | Medium |

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| 46 |  | User creates a new task on web application, presses sync on mobile, edits the task on mobile application and restarts the mobile application     | The task is added to both the mobile and the web application. The edited task is updated on both the mobile and web applications. |  | Pass | Medium |
| 47 |  | User creates a new task on web application, presses sync on mobile, edits the task on web application and presses sync on the mobile application | The task is added to both the mobile and the web application. The edited task is updated on both the mobile and web applications. |  | Pass | Medium |
| 48 |  | User creates a new task on web application, presses sync on mobile,  | The task is added to both the mobile and the web application. The edited task is updated on                                       |  | Pass | Medium |

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|    |                      | edits the task on web application and restarts the mobile application  | both the mobile and web applications.  |  |      |        |
| 49 |                      | User creates a new task on web application, presses sync on mobile, edits the task on web application and restarts the web application | The task is added to both the mobile and the web application. The edited task is seen only on the web application. The mobile shows the stale version. |  | Pass | Medium |
| 50 | Task Deletion - Sync | User creates a new task on mobile application, presses sync on mobile application, deletes it on the web application                   | The task is created on both the applications. The task is deleted on the web application, but still present on the mobile application.                 |  | Pass | Medium |
| 51 |                      | User creates a new task on mobile application,   | The task is created on both the applications. The task is  |  | Pass | Medium |

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|    |  | presses sync on mobile application, deletes it on the web application and presses sync on the mobile application   | deleted on both the applications.  |  |      |        |
| 52 |  | User creates a new task on mobile application, presses sync on mobile application, deletes it on the web application and restarts the mobile application | The task is created on both the applications. The task is deleted on both the applications.  |  | Fail | Medium |
| 53 |  | User creates a new task on mobile application, presses sync on mobile application, deletes it on mobile application                                      | The task is created on both the applications. The task is deleted on the mobile application but still present on the web application |  | Pass | Medium |

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| 54 |  | User creates a new task on mobile application, presses sync on mobile application, deletes it on mobile application, presses sync on mobile application | The task is created on both the applications. The task is deleted on both the applications. |  | Pass | Medium |
| 55 |  | User creates a new task on mobile application, presses sync on mobile application, deletes it on mobile application, restarts the mobile application    | The task is created on both the applications. The task is deleted on both the applications. |  | Pass | Medium |
| 56 |  | User creates a new task on web application, presses sync on mobile  | The task is created on both the applications. The task is deleted on the mobile application |  | Pass | Medium |



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|    |  | application, deletes the task on mobile application   | but still present on the web application.   |  |      |        |
| 57 |  | User creates a new task on web application, presses sync on mobile application, deletes the task on mobile application presses sync on the mobile application | The task is created on both the applications. The task is deleted on both the applications. |  | Pass | Medium |
| 58 |  | User creates a new task on web application, presses sync on mobile application, deletes the task on mobile application and restarts the mobile                | The task is created on both the applications. The task is deleted on both the applications. |  | Fail | Medium |

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|----|--|--|--|--|------|--------|
|    |  | application  |  |  |      |        |
| 59 |  | User creates a new task on web application, presses sync on mobile application, deletes the task on web application  | The task is created on both the applications. The task is deleted on the web application, but still present on the mobile application. |  | Pass | Medium |
| 60 |  | User creates a new task on web application, presses sync on mobile application, deletes the task on web application presses sync on the mobile application | The task is created on both the applications. The task is deleted on both the applications.  |  | Pass | High   |
| 61 |  | User creates a new task on web application, presses sync on mobile   | The task is created on both the applications. The task is deleted on both the applications.  |  | Pass | High   |

|    |                             |  |   |  |      |        |
|----|-----------------------------|--|---|--|------|--------|
|    |                             | application, deletes the task on web application presses sync on the mobile application                                |   |  |      |        |
| 62 |                             | User creates a new task on mobile application and deletes the task on mobile application                               | The task is created and deleted on the mobile application. No changes on the web application  |  | Pass | Medium |
| 63 |                             | User creates a new task on web application and deletes the task on web application                                     | The task is created and deleted on the web application. No changes on the mobile application  |  | Pass | Medium |
| 64 | Task editing deleted - Sync | When existing task is present on both the synced databases, a task is deleted on the web application and edited on the | The task is deleted on the web application and edited task shows up on the mobile application |  | Pass | Medium |

|    |  |   |   |  |      |        |
|----|--|---|---|--|------|--------|
|    |  | mobile application  |   |  |      |        |
| 65 |  | When existing task is present on both the synced databases, a task is deleted on the mobile application and edited on the web application   | The task is deleted on the mobile application and edited task shows up on the web application   |  | Pass | Medium |
| 66 |  | When existing task is present on both the synced databases, a task is deleted on the web application and edited on the mobile application and sync is pressed on the mobile application | Mobile application shows the edited task. Web application recovers the deleted task and notifies the user saying that the deleted task on the web application has been restored |  | Fail | Low    |

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|----|--|---|--|--|------|--------|
| 67 |  | When existing task is present on both the synced databases, a task is deleted on the mobile application and edited on the web application and sync is pressed on the mobile application | Web application shows the edited task. Mobile application recovers the deleted task and notifies the user saying that the deleted task on the mobile application has been restored |  | Fail | Low    |
| 68 |  | When existing task is present on both the synced databases, a task is deleted on both the mobile and web application  | The task is deleted on both the mobile and web applications.   |  | Pass | High   |
| 69 |  | When existing task is present on both the synced databases, a task is   | The task is deleted on both the mobile and web applications.   |  | Pass | Medium |

|    |                                 |   |  |  |      |        |
|----|---------------------------------|---|--|--|------|--------|
|    |                                 | deleted on both the mobile and web application and sync is pressed on the mobile application  |  |  |      |        |
| 70 | Task editing edited tasks -Sync | When existing task is present on both the synced databases, edit a task on web application and edit a task on mobile application                    | Edit the version(web) present on the web application and edit the version (mobile) present on the mobile application |  | Pass | Medium |
| 71 |                                 | When existing task is present on both the synced databases, edit a task on web application and edit a task on mobile application (latest timestamp) | Edited version (mobile) is present on both the applications  |  | Pass | Medium |

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|    |  | and press sync on the mobile   |  |  |      |        |
| 72 |  | When existing task is present on both the synced databases, edit a task on mobile application and edit a task on web application (latest timestamp) and press sync on the mobile | Edited version (web) is present on both the applications   |  | Pass | Medium |
| 73 |  | When existing task is present on both the synced databases, edit a task on mobile application and edit a task on web application at the same time (same timestamp)               | Edit the version(web) present on the web application and edit the version (mobile) present on the mobile application |  | Fail | Low    |

|    |                      |   |   |  |      |      |
|----|----------------------|---|---|--|------|------|
| 74 |                      | When existing task is present on both the synced databases, edit a task on mobile application and edit a task on web application at the same time (same timestamp) and presses sync on the mobile application | Edited version (web) is present on both the applications. In case of same timestamp, web version takes precedence |  | Fail | Low  |
| 75 | User creation - Sync | Create a user on the mobile application   | User created on the mobile application alone and not on the web application                                       |  | Pass | High |
| 76 |                      | Create a user on the web application  | User created on the web application alone and not on the mobile application                                       |  | Pass | High |
| 77 |                      | Create a user on the mobile application and press sync on the mobile  | User created on both the applications   |  | Pass | High |



|    |                      |  |                                       |  |      |        |
|----|----------------------|--|---------------------------------------|--|------|--------|
|    |                      | application  |                                       |  |      |        |
| 78 |                      | Create a user on the web application and press sync on the web application | User created on both the applications |  | Pass | High   |
| 79 |                      | Create a user on the mobile application and restart the mobile application | User created on both the applications |  | Pass | Medium |
| 80 |                      | Create a user on the web application and restart the mobile application    | User created on both the applications |  | Pass | Medium |
| 81 | User deletion - Sync | When user is in sync on both the apps, delete user on mobile application   | User deleted on mobile application    |  | Pass | Medium |
| 82 |                      | When user is in sync on both the apps, delete user on web application      | User deleted on the web application   |  | Pass | Medium |

|    |                                |   |   |  |      |        |
|----|--------------------------------|---|---|--|------|--------|
| 83 | Task Hide/Show<br>from Web App | The user<br>checks off a<br>task for<br>hide and<br>show. | User is able to<br>hide a task<br>and make it<br>visible again<br>by clicking<br>show |  | Pass | Medium |
|----|--------------------------------|---|---|--|------|--------|