# Unit Test Documentation Template

**Project Name:**

*Dragon Boat Racing*

Author(s):

*MASultan and others from Elite software.*

## Test Case Overview

**Test Case ID:**

*Timer*

**Purpose:**

*Ensure that the gamer timer is functioning correctly, i.e the time is recorded accurately during active gameplay and pauses when the game is paused.*

**Test Case Description:**

*This test case evaluates that the Timer functionality in active game is functioning perfectly without any sort of problems. The timer should record the time during the race so the player has an idea of how long he has been in a particular race. Furthermore, the timer should be paused when the player has paused the game or in case of any other interruptions.*

### Pre-Conditions

**Prerequisites:**

*Game has been installed succesfully on the user’s computer.*

*The user can start, run and pause the game.*

**Test Data:**

*N.A*

### Test Steps

**Step Description:**

***1) Start the Game:***

*Launch the Dragon Boat Racing Game.*

*Make sure you are at the main menu.*

***2) Initiate a New Race:***

*From the main menu, select the corresponding options to start a new race.*

*Verify that the timer starts from 0:00 when the race begins.*

***3) Verify Timer During Active Race:***

*Observe the timer for a specific duration (e.g., 1 minute).*

*Ensure that the timer increments correctly (e.g., seconds and minutes count up correctly).*

***4) Pause the Game:***

*During the race, press the pause button to bring up the pause menu.*

*Verify that the timer stops incrementing immediately upon pausing.*

***5) Resume the Game:***

*Resume the game from the pause menu.*

*Confirm that the timer resumes from the exact time it was paused at and continues incrementing correctly.*

***6) Access In-Game Menu:***

*During the race, open any in-game menu (e.g., settings).*

*Verify that the timer stops incrementing when the menu is opened.*

***7) Close In-Game Menu and Resume Race:***

*Close the in-game menu and return to the race.*

*Confirm that the timer resumes from the exact time it was paused at and continues incrementing correctly.*

***8) Finish the Race:***

*Complete the race.*

*Note the final time displayed on the timer when the race ends.*

***9) Verify Timer Does Not Increment Post-Race:***

*After the race finishes, stay on the results screen.*

*Ensure that the timer does not increment further.*

***10) Repeat Test for Different Scenarios:***

*Start a new race, pause it at different intervals, and resume to check the timer's accuracy.*

*Open various in-game menus during different parts of the race to ensure consistency in timer pausing and resuming.*

### Post-Conditions

**Expected Outcome:**

*The game accurately tracks and displays race time, pausing and resuming correctly in all tested scenarios.*

**Cleanup:**

*Exit to the main menu and quit the game.*

### Notes

*None*

## Test Case Overview

**Test Case ID:**

*Pause screen*

**Purpose:**

*Ensure that the pause screen activates and functions correctly*

**Test Case Description:**

*This test case checks that the pause screen activates and functions correctly when the player pauses the game, stopping the race and providing options to resume, exit to main menu, and view basic race statistics.*

### Pre-Conditions

**Prerequisites:**

*Game has been installed succesfully on the user’s computer.*

*The user can start and run the game.*

**Test Data:**

*N.A*

### Test Steps

**Step Description:**

***1) Start the Game:***

*Launch the Dragon Boat Racing game.*

*Make sure that you’re on the main menu.*

***2) Initiate a New Race:***

*From the main menu, select the option to start a new race.*

*Verify that the race begins and the timer starts from 0:00.*

***3) Pause the Game Using Pause Button:***

*During the race, press the designated pause button on the screen.*

*Verify that the game immediately pauses, halting all race actions.*

*Confirm that the pause screen appears with options to resume the game, exit to the main menu, and view basic race statistics.*

***4) Verify Pause Screen Options:***

*Resume Button:*

* *Ensure there is a "Resume" button on the pause screen.*
* *Click the "Resume" button.*
* *Verify that the game resumes from the exact point it was paused, and the timer continues incrementing correctly.*
* *Pause the game again to proceed with further steps.*

*Exit to Main Menu:*

* *Pause the game again and select the "Exit to Main Menu" option.*
* *Verify that the game exits the current race and returns to the main menu.*
* *Confirm that no unintended behaviors occur, such as the game freezing or crashing.*
* *Start a new race to ensure functionality after returning to the main menu.*

***5) Pause the Game Using Hotkey:***

*During the race, press the designated hotkey for pausing the game.*

*Verify that the game immediately pauses and the pause screen appears with the same options as when using the pause button.*

***6) View Race Statistics:***

*Pause the game and check the pause screen for basic race statistics (e.g., current lap time, total race time, position in the race).*

*Ensure that the statistics are displayed correctly and update as expected.*

***7) Verify Timer Pausing:***

*Pause the game and ensure that the timer stops incrementing immediately.*

*Resume the game and confirm that the timer resumes accurately from the paused time.*

***8) Test Multiple Pauses:***

*During the race, pause and resume the game multiple times using both the pause button and the hotkey.*

*Verify that each pause and resume operation works correctly without any issues.*

***9) Post-Race Pause:***

*After completing a race, verify that the pause functionality is disabled, ensuring that the player cannot pause the game post-race.*

### Post-Conditions

**Expected Outcome:**

*The pause screen functionality works as intended, providing a seamless and accurate pausing experience for the player.*

**Cleanup:**

*Exit to the main menu and quit the game.*

### Notes

*None.*