**Jed Hawkins – Save the Village**

**Speed penalty – System level test**

**In this test we determine if the speed penalty function is returning the correct values or an error code if the values are outside expected parameters**

**The test was run with sample data including valid and invalid numbers and each boundary case**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Step | Pre requisite | Description | Steps | Expected Result | Actual Result | Test Result |
| 1 | Speed 50  Weight 50  Strength 50 | This calculates the speed penalty of the player based on the current speed, strength, and weight | Verify that inputs are valid then calculate penalty based on formula, if penalty > speed return 0 | 0 | 0 | Pass |
| 2 | Speed -1  Weight 50  Strength 50 | This calculates the speed penalty of the player based on the current speed, strength, and weight | Verify that inputs are valid then calculate penalty based on formula, if penalty > speed return 0 | -1 | -1 | Pass |
| 3 | Speed 50  Weight 50  Strength 0 | This calculates the speed penalty of the player based on the current speed, strength, and weight | Verify that inputs are valid then calculate penalty based on formula, if penalty > speed return 0 | -1 | -1 | Pass |
| 4 | Speed 0  Weight 150  Strength 50 | This calculates the speed penalty of the player based on the current speed, strength, and weight | Verify that inputs are valid then calculate penalty based on formula, if penalty > speed return 0 | 0 | 0 | Pass |
| 5 | Speed 50  Weight 150  Strength 1 | This calculates the speed penalty of the player based on the current speed, strength, and weight | Verify that inputs are valid then calculate penalty based on formula, if penalty > speed return 0 | 50 | 50 | Pass |
| 6 | Speed 100  Weight 0  Strength 100 | This calculates the speed penalty of the player based on the current speed, strength, and weight | Verify that inputs are valid then calculate penalty based on formula, if penalty > speed return 0 | 0 | 0 | Pass |
| 7 | Speed 100  Weight 100  Strength 100 | This calculates the speed penalty of the player based on the current speed, strength, and weight | Verify that inputs are valid then calculate penalty based on formula, if penalty > speed return 0 | 0 | 0 | Pass |