**Test Case Report for Stable Marriage Software**

*Authors: Date: 30-03-17*

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| **Project Name: Stable matching software** | | | | | | | |
| **Test Case 1** | | | | | | | |
| **Test Case ID: SMS01** | | | | **Test Designed By:Team** | | | |
| **Test Priority(Low/Medium/High): High** | | | | **Test Designed Date:27-03-17** | | | |
| **Module Name: MaxFuntionTest** | | | | **Test Executed By:Team** | | | |
| **Test Title: Getting the larger of two numbers** | | | | **Test Execution Date:28-03-17** | | | |
| **Description: The function returns the bigger of the two variables** | | | |  | | | |
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| **Preconditions: none** | | | | | | | |
| **Dependencies: none** | | | | | | | |
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| **Step** | **Test Steps** | **Test Data** | **Expected Result** | | **Actual Result** | **Status(Pass/Fail)** | **Notes** |
| **1** | **Two positive integers are entered** | **4, 3** | **4** | | **4** | **Pass** | **Returns the maximum of 4 and 3.** |
| **2** | **One positive and one negative integers are entered** | **12, -5** | **12** | | **12** | **Pass** | **Returns the maximum of 12 and -5.** |
| **3** | **Two negative integers are entered** | **-5 ,-10** | **-5** | | **-5** | **Pass** | **Returns the maximum of -5 and -10** |
| **Post conditions:** | | | | | | | |

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| **Project Name: Stable matching software** | | | | | | | |
| **Test Case 2** | | | | | | | |
| **Test Case ID: SMS03** | | | | **Test Designed By: Team** | | | |
| **Test Priority(Low/Medium/High): High** | | | | **Test Designed Date: 28-03-17** | | | |
| **Module Name: giveResult()** | | | | **Test Executed By: Team** | | | |
| **Test Title: Outputting a stable match** | | | | **Test Execution Date: 30 -03-17** | | | |
| **Description: This function takes a preference matrix as input and outputs the stable matching by applying Gale-Shapely algorithm.** | | | |  | | | |
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| **Preconditions: The user must select give result option only when no. of brides is same as no. of bridegrooms.** | | | | | | | |
| **Dependencies: It depends on the stableMarriageTest to provide it with the preference matrix.** | | | | | | | |
|  | | | | | | | |
| **Step** | **Test Steps** | **Test Data** | **Expected Result** | | **Actual Result** | **Status(Pass/Fail)** | **Notes** |
| **1** | **Sample preference matrix 4 by 2 is inputted** | **2 3**  **2 3**  **0 1**  **0 1** | **0 1** | | **0 1** | **Pass** | **The 4 by 2 matrix is inputted and an array wPartner is outputted.** |
| **2** | **Sample preference matrix 8 by 4 is inputted** | **6 5 7 4**  **5 6 7 4**  **7 5 6 4**  **7 5 4 6**  **2 3 0 1**  **0 2 3 1**  **2 1 0 3**  **2 1 3 0** | **3 0 1 2** | | **3 0 1 2** | **Pass** | **The 8 by 4 matrix is inputted and an array wPartner is outputted.** |
| **3** | **Sample preference matrix 6 by 3 is inputted** | **3 4 5**  **5 4 3**  **3 4 5**  **1 0 2**  **0 2 1**  **1 0 2** | **0 2 1** | | **0 2 1** | **Pass** | **The 6 by 3 matrix is inputted and an array wPartner is outputted.** |
| **Post conditions:** | | | | | | | |

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| **Project Name: Stable matching software** | | | | | | | |
| **Test Case 3** | | | | | | | |
| **Test Case ID: SMS03** | | | | **Test Designed By: Team** | | | |
| **Test Priority(Low/Medium/High): High** | | | | **Test Designed Date: 28-03-17** | | | |
| **Module Name: stableMarriage()** | | | | **Test Executed By: Team** | | | |
| **Test Title: Outputting a preference matrix of size n by n/2** | | | | **Test Execution Date: 30 -03-17** | | | |
| **Description: This function takes as input 4 text files and returns a 2 dimensional array called preference matrix.** | | | |  | | | |
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| **Preconditions: The text files must be ready with valid data and same no. of users of each sex.** | | | | | | | |
| **Dependencies:** | | | | | | | |
|  | | | | | | | |
| **Step** | **Test Steps** | **Test Data** | **Expected Result** | | **Actual Result** | **Status(Pass/Fail)** | **Notes** |
| **1** | **Read the test case 1 files to assign priority** | **mProfile.txt**  **mPProfile.txt**  **wProfile.txt**  **wPProfile.txt** | **2 3**  **3 2**  **0 1**  **1 0** | | **2 3**  **3 2**  **0 1**  **1 0** | **Pass** | **Once the files are read, the function generates the 4 by 2 matrix** |
| **2** | **Read the test case 2 files to assign priority** | **mProfile1.txt**  **mPProfile1.txt**  **wProfile1.txt**  **wPProfile1.txt** | **6 5 7 4**  **5 6 7 4**  **7 5 6 4**  **7 5 4 6**  **2 3 0 1**  **0 2 3 1**  **2 1 0 3**  **2 1 3 0** | | **6 5 7 4**  **5 6 7 4**  **7 5 6 4**  **7 5 4 6**  **2 3 0 1**  **0 2 3 1**  **2 1 0 3**  **2 1 3 0** | **Pass** | **Once the files are read, the function generates the 8 by 4 matrix** |
| **3** | **Read the test case 3 files to assign priority** | **mProfile2.txt**  **mPProfile2.txt**  **wProfile2.txt**  **wPProfile2.txt** | **3 4 5**  **5 4 3**  **3 4 5**  **1 0 2**  **0 2 1**  **1 0 2** | | **3 4 5**  **5 4 3**  **3 4 5**  **1 0 2**  **0 2 1**  **1 0 2** | **Pass** | **Once the files are read, the function generates the 6 by 3 matrix** |
| **Post conditions:** | | | | | | | |