# Chapter 12

Step 6: Acceptance and Operational Testing

### WORK PAPER 12-1 Acceptance Criteria

##### Field Requirements

FIELD INSTRUCTIONS FOR ENTERING DATA

Hardware/Software The name of the project being acceptance-tested. This is the name the user/customer Project calls the project.

Number A sequential number identifying acceptance criteria.

Acceptance A user requirement that will be used to determine whether the corrected Requirement hardware/software is acceptable.

Critical Indicate whether the acceptance requirement is critical, meaning that it must be met, or noncritical, meaning that it is desirable but not essential.

Test Result Indicates after acceptance testing whether the requirement is acceptable or not acceptable, meaning that the project is rejected because it does not meet the requirement.

Comments Clarify the criticality of the requirement; or indicate the meaning of test result rejection. For example, the software cannot be run; or management will make a judgment after acceptance testing as to whether the project can be run.

**Hardware/Software Project: BattleShip**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Number** | **Acceptance Requirement** | **Critical Test Result** | | | | **Comments** |
| **Yes** | **No** | **Accept** | **Reject** |
| 1  2.  3. | The user shall have ability to start the application via standard terminal or development interfaces. The game user interface shall appear once the application is started.  The user shall be able start a new game of Battleship via the user interface.  The user shall be able to place their own game pieces wholly within their own Allied grid via the user interface.   * 1. The user shall be able to place their game pieces in either a horizontal or vertical position. No diagonal placement is allowed.   2. The user shall not be able to place ships in overlapping positions.   3. The user shall not be able to place their ships outside their own grid or on or within the opponent’s grid.   4. For version 1, the second user shall consist of the CPU of the computer. Placement of the second users game pieces shall be automated and follow the same rules listed above. | X  X  X  X  X  X |  |  |  | All criteria are critical for normal running of the game unless otherwise noted |
| 4.  5. | The user shall have the ability to guess the location of the opponent’s game pieces via the user interface.   1. The user shall have one guess per turn. All other guesses in a single turn shall be ignored by the user interface. 2. The user shall only be able to guess locations within the opponent’s or Target grid via the user interface or via a textual interface tied to the opponent’s grid. All other actions outside the opponent’s grid or the alternative interface shall be ignored. 3. For version 1, the second user shall consist of the CPU of the computer. “Guesses” from this player shall be automated and follow the same rules and indications as for the first user.   The user shall have the ability to determine whether their guess of the location of an opponent’s game piece was correct or incorrect. The indication shall be textual, graphical or both. | X  X  X  X |  |  |  |  |
| 6.  7.  8.  9.  10.  11. | The user shall have the ability to determine the number of both correct and incorrect guesses via the user interface.  The user shall have the ability to determine if they have guessed all of the locations covered by a game piece and have thus “sunk” or removed the game piece from the game via the user interface.  The user shall have ability to determine if they have “sunk” all of the game pieces of their opponents and thus have won the game via the user interface.  The user shall have the ability to reset the game board, removing all indications of the previous game including game pieces and any indications of game play via the user interface.  The user shall have the ability to exit or terminate the game at any time via the user interface. The user interface shall disappear at this time.  The user shall have a way to separately guess a location via the user interface without “firing” at that location. | X  X  X  X  X | X |  |  | Game Design Choice |
| 12.  13.  14.  15.  16.  17. | The application shall run on Windows 7+ standard desktop computer available on the marketplace as of December 2016.  For version 1, the user shall have a minimum of 5 game pieces of various sizes corresponding to the physical board game pieces. The Sizes include 2, 3 ,3, 4,and 5 grid locations.  For Version 1, the game board from an individual user shall have a minimum size of 10 squares by 10 squares.  For version 1, the system shall indicate via the user interface, the result of the human player’s ‘guess’ in less than 0.5 seconds.  For version 1, the system shall indicate via the user interface the choice of the CPU player’s ‘guess’ within 2 seconds but not less than 0.5 seconds. (This is to allow the human user to process and understand where the guess has occurred.)  Indication (either valid or invalid) via the user interface of a player’s placement of a single ship shall be completed within 1 second. | X  X  X | X  X  X |  |  | Performance issue which can be negotiated.  Performance issue which can be negotiated  Performance issue which can be negotiated |
| 18. | Indication of reset of the board via the user interface after the completion of a game shall be completed within 1 second. |  | X |  |  | Performance issue which can be negotiated |