Team Project Sprint #2

Instructions

Please read the instructions carefully. All members of your team should discuss the instructions together to ensure that everyone is on the same page.

Objectives

1. Update and complete the user stories and acceptance criteria of the target software that allows a human player to play against either a human or a computer opponent.
2. Implement all the user stories for a human player to play complete Mill games against a human opponent (including all improvements on the previous sprint).
3. Conduct a full retrospective meeting (refer to the lecture notes) and report the meeting minutes.

Deliverables and Grading Policy

1. Project Report **(28 points)**

The project report should include the following sections. Please use the attached template.

I. Updated complete user stories using the template discussed in class. **(1 points)**
Provide a complete list of user stories and estimated efforts for the target software that allows a human player to play against either a human or a computer opponent.

II. Updated complete acceptance criteria using the template discussed in class. **(8 points)**
Provide complete acceptance criteria for all the user stories.

III. Implementation tasks **(17 points)**
Describe the production code, automated test code or manual test cases for all the user stories for a human player to play complete Mill games against a human opponent. For each acceptance criterion of every user story, you need to implement at least one test (either test code or manual test case). Some automated tests using xUnit or a similar tool are required.

IV. Minutes of ALL meetings, including, but not limited to: project/sprint planning meeting, stand-up meeting, backlog grooming, retrospective meeting, and pair programming (or development) session. **(2 points)**

V. A table of buddy ratings. Individual members may email their buddy ratings to the instructor or teaching assistant.

Each team only needs to submit one report. For an individual member to receive the credit for this part of the project, the team's project report must include explicit evidence of his/her contribution (e.g., his/her name is listed as a developer).

2. Demonstration **(5 points)**

Submit a 5-minute video, clearly demonstrating that:

a) your project has implemented the working software for a human player to play complete Mill games against a human opponent.
b) for each acceptance criterion of an implemented user story, your project has implemented either an automated test method or performed an acceptance test manually.
c) your project has some unique features or enhancements (optional).

Grading of the demonstration is based on completion of the required functions (**2 points**), and overall presentation (**3 points**) using the following evaluation rubric:

	Poor	Fair	Good	Very Good	Excellent
Was the demonstration logically organized					
Were points made clearly and concisely					
Were the grader or instructor's questions answered satisfactorily					

3. Source Code

Submit all source code. Make sure your project report is consistent with the source code.

Team Project Sprint #2

Report Template

Team Name: Forgetful Wanderers
Team Members: Ken Dozier, Zach Gharst, Joseph Soria, Thomas Tran, Thomas Yang

I. Updated User Stories

ID	User Story Name	User Story Description	Priority	Estimated effort (hours)	Actual effort (if completed)	Status (completed, toDo, inProgress)	Developer names
1	Game menu	As a player, I need a menu that allows me to start a new game or exit the program	Low	1		To do	Thomas Tran
2	Opponent	As a player, I need a choice between a computer opponent or another player.	High	5		To do	TBD
3	Player ordering	One player will be assigned white pieces and the other player will be assigned black pieces.	Med	1		To do	Zach Gharst
4	Starting Board	As a player, I need an empty board and an opponent to start playing the game.	Very High	2	2	Completed	Zach Gharst
5	Player's first turn	To play the game, we need to determine which player goes first (first player is white pieces).	Med	1	1	Completed	Zach Gharst
6	Phase 1 (placement)	As players, we need to alternate placing 9 pieces (each) on the board per player.	Very High	3	2	Complete	Zach Gharst, Thomas Tran
7	Valid placement of piece	To make a move, as a player, I need a board that indicates which spots are open and available to click on.	Very High	3	1	Complete	Ken Dozier, Joe Soria

8	Mill Rule	As a player, when I have a mill (three pieces in a row), I can eliminate an opponent's piece that is not in a mill unless the opponent only has pieces that are part of a mill.	High	3	3	Complete	Zach Gharst, Thomas Tran
9	Phase 2 (Play)	After all pieces have been placed, the board state should switch to the second (play) phase.	High	1		Complete	Ken Dozier, Joe Soria
10	Movement	During phase two, if it is my turn, I want to select one of my pieces and move it to an adjacent vacant spot. (then #18 check for mill)	High	3		Complete	Thomas Yang, Thomas Tran
11	Phase 3 (flying)	Once a player has three pieces left, that player enters phase 3 and can fly (move 1 piece per turn to any open spaces on the board).	High	3		To do	Thomas Yang, Thomas Tran
12	Exit the game	As a player, I want an option to forfeit the game early (forfeit button)	Low	2		To do	Ken Dozier, Joe Soria
13	UI turn check	As a player, I would like an indicator of whose turn it is currently.	Low	1	1	Complete	Zach Gharst
14	Score display	As a player, I would like to know what my current score is.	Low	1		To do	Thomas Tran
15	Undo button	As a player, I want an undo button to go back one turn (AI only).	Low	2		To do	Joe Soria
16	Board changes	As a player, I want different boards to play on (different board design)	Very Low	4		To do	Joe Soria
17	Request draw	As a player, I would want to request a "draw" when pieces are in stalemate condition.	Very Low	1		To do	Joe Soria

18	Reset	As a player, I would like to easily reset the board and start a new game.	Med	1	0.5	Complete	Zach Gharst
19	History	As a player, I would like a tab or section to show recent moves made	Very Low	2		To do	Zach Gharst
20	UI polish	As a player, I would like a “highlight”/glowing light for selected spaces.	Low	1	0.5	Complete	Zach Gharst
21	Win Condition 1	After each player’s turn, if the opponent has 2 pieces remaining, the player wins.	High	2	1	Complete	Zach Gharst, Thomas Yang
22	Win Condition 2	After each player’s turn, if the opponent cannot make a valid move, the player wins	High	2	2	Complete	Zach Gharst, Thomas Yang
23	Computer Opponent	As a player, I want a computer opponent to play against	medium	5		To do	TBD
24	Computer Opponent Phase 1 Behavior	As a player, I want the computer opponent to place pieces that either enables a mill or to block a mill for myself.	medium	2		To do	TBD
25	Computer Opponent Phase 2 Behavior	As a player, I want the computer opponent to move his pieces to adjacent spaces in a way that enables a mill, blocks a mill for myself, or sets up a victory through block-in.	medium	3		To do	TBD
26	Computer Opponent Phase 3 Behavior	As a player, I want the computer opponent to fly his pieces to any vacant space that either enables a mill or blocks a mill for myself.	medium	2		To do	TBD
27	Computer Opponent Mill Behavior	As a player, I want the computer opponent to pick a player’s piece to remove after earning it earns a mill.	medium	1		To do	TBD

28	Game Over	As a player, when a win condition has been reached, I want an end of game graphical sequence with options for new game or exit.	High	3		To do	TBD

II. Updated Acceptance Criteria (AC)

User Story ID and Name	A C ID	Description of Acceptance Criterion	Status (completed, toDo, inProgress)	Developer Names
1 Game Menu	1.1	GIVEN the program is initiated to run THEN a menu should open AND have a selection to exit or enter game.	To do	Thomas Tran
	1.2	Given the menu has start game button, When the start button is pressed, Then the menu will proceed to choosing and human or computer opponent.	To do	Thomas Tran
2 Opponent	2.1	GIVEN the program has initiated THEN the menu will ask for an enemy option AND I can select whether to play human or computer.	To do	Thomas Tran
	2.2	Given that we loaded the program, When the player chooses a computer opponent from the menu, then the game will start with a computer opponent.	To do	Thomas Tran
3 Player ordering	3.1	GIVEN that there's only 2 valid players AND a white piece always goes first THEN a random factor will decide which color the players will be.	In Progress	Zach Gharst, Ken Dozier
	3.2	GIVEN that players have been assigned a color WHEN the game has started THEN no two players should be assigned the same color.	In Progress	Zach Gharst, Ken Dozier
	3.3	GIVEN that the players are chosen randomly to be white WHEN the game has started THEN there should be an equal chance for either player to be assigned white.	In Progress	Zach Gharst, Ken Dozier
4 Starting Board	4.1	GIVEN that the game has started THEN the board should be empty AND appropriate players with selected color are ready.	Completed	Zach Gharst, Ken Dozier
5 Player's first turn	5.1	GIVEN that the game has started, WHEN the board is ready, THEN it is white's turn to place a piece.	Completed	Zach Gharst
	5.2	Given that the game has started, When the player has placed a piece, the other player will have a turn to place a piece	Completed	Zach Gharst

6 Phase 1 (placement)	6.1	GIVEN that the game has started WHEN a player makes a move THEN only the appropriate player's turn can put a piece in the board.	Completed	Zach Gharst, Thomas Tran
7 Valid placements of piece	7.1	GIVEN that the player clicks on a vacant space WHEN it is that player's turn AND it is phase 1 THEN a man should be removed from their pool AND placed on the vacant space.	Completed	Ken Dozier
	7.2	GIVEN that the player clicks on an occupied space WHEN it is that player's turn AND it is phase 1 THEN the player should be alerted that they must place a man on a vacant space.	Completed	Zach Gharst
	7.3	Given it is phase 1, When black places the last piece, Then we move on to phase 2	Complete	Ken Dozier, Joe Soria
	7.4	Given it is phase 2 and a piece has already been selected, when a player places a piece in the cell it came from, then the move is not valid and the turn should not change.	Complete	Thomas Tran
8 Mill Rule	8.1	GIVEN that a player completes a mill (three men in a continuous vertical or horizontal line) WHEN they have completed a vital move THEN they should be presented with the option to click on a piece to be eliminated.	Complete	Zach Gharst
	8.2	GIVEN that a player has clicked on an opposing man in a mill WHEN they have formed a mill THEN the game should check to see if there are any men not in a mill that can be removed first.	Complete	Zach Gharst
	8.3	GIVEN that a player has clicked on an opposing man in a mill WHEN they have formed a mill AND all of the opposing men are in a mill THEN that man should be removed from the board.	Complete	Zach Gharst
9 Phase 2 (Play)	9.1	GIVEN that the black player has ran out of pieces WHEN it is first phase THEN second phase should be enabled.	Completed	Ken Dozier
	9.2	Given it is phase 2, When a player tries to make a valid move, then it should check if the vacant target space is adjacent	Complete	Thomas Tran
10 Movement	10.1	GIVEN we are in Phase 2 WHEN a player makes a valid move THEN that player's turn is ended and the other player's turn starts.	Complete	Thomas Yang
	10.2	GIVEN that the move is valid, WHEN the player moves a piece to an empty intersection space THEN the piece will move to that empty intersection space.	Complete	Thomas Yang, Joe Soria
	10.3	GIVEN that a player makes an invalid move WHEN the player tries to make that invalid move the game will say no, stop, don't do that (not literally) THEN the player will continue to make that invalid move until they give up and make a valid move.	Complete	Thomas Yang, Zach Gharst

11 Phase 3 (flying)	11.1	GIVEN a player has only three men remaining, AND desperate measures are called for. THEN player's men are allowed to 'fly' to any vacant cell, not just adjacent ones.	Complete	Thomas Yang, Thomas Tran
	11.2	GIVEN if one player is down to three men AND the other player still has more than three, When both players attempt a move THEN only the player with three men is allowed to fly.	Complete	Thomas Yang, Thomas Tran
12 Exit the game	12.1	Given a player makes a valid move, When the opponent cannot make a valid move or has less than 3 men, then the player wins.	Complete	Zach Gharst
	12.2	GIVEN that both players are down to three men AND neither player can capture anything in a specific set of moves THEN the game ends in a draw.	In Progress	Ken Dozier
13 UI turn check	13.1	Given that a player's turn has ended, when the turn has changed then a message is shown indicating the other player's turn.	To do	Joe Soria
14 Score Display	14.1	GIVEN that a piece is eliminated THEN a score system should be shown AND inform who's winning	To do	Joe Soria
	14.2	GIVEN a tally of remaining pieces WHEN a player makes a move AND the number of pieces remaining on the bag used THEN it should prompt how many pieces I have left.	Completed	Zach Gharst
	14.3	GIVEN that no pieces are being eliminated WHEN a player makes a move THEN the score should not change.	To do	Thomas Tran
15 Undo (Cheaters) Button	15.1	GIVEN that a user is playing against the computer WHEN user places regrets placing a piece THEN user should have an undo button to make better decisions in life.	To do	Joe Soria
16 Board changes	16.1	GIVEN that a user is tired of playing on same boring board THEN user should have other selection board theme AND it changes the board.	To do	Joe Soria
17 Request a draw	17.1	GIVEN that both players are down to three men AND neither player can capture anything in specific set of moves THEN the game ends in draw.	To do	TBD
18 Reset	18.1	GIVEN that a player wants to reset the game WHEN the player is playing against a computer THEN the player should be able to press a button AND the game restarts.	Completed	Zach Gharst
	18.2	GIVEN that a player wants to reset the game WHEN the player is playing multiplayer THEN the game should ask him to forfeit first.	To do	Zach Gharst
	18.3	GIVEN that a player does not wish to reset the game WHEN they are playing THEN the game should retain the state of the game and not reset.	To do	Zach Gharst
	18.4	Given that the reset button is pressed, When all players agree, Then the board should reset to be empty.	To do	Zach Gharst
19 History	19.1	GIVEN that a player makes a valid move WHEN it is their turn THEN that turn(move) should be shown in the history tab AND recent moves is displayed.	To do	Zach Gharst

	19.2	GIVEN that a player does an undo WHEN the game is going THEN the history should remove undone actions.	To do	Zach Gharst
	19.3	GIVEN that a player makes an invalid move WHEN it is their turn THEN the history should not add that move to the history tab.	To do	Zach Gharst
	19.4	GIVEN that a player makes an invalid move WHEN it is not their turn THEN the history should not add that move to the history tab.	To do	Zach Gharst
20 UI polish	20.1	GIVEN that a player's turn with highlighted (vacant) spaces WHEN a player attempts to place a piece on an unhighlighted space THEN player should be notified for illegal move or nothing happens.	To do	Joe Soria
21 Win Condition (1)	21.1	GIVEN that a player has fewer than two pieces remaining WHEN a player makes a mill THEN the game ends and the other player wins.	Complete	Zach Gharst
	21.2	GIVEN that there are more than two pieces for both players WHEN a turn ends THEN the game should continue and not end.	Complete	Zach Gharst
	21.3	GIVEN that a player has fewer than three pieces remaining WHEN the game is over THEN the game should ask a player what they want to do: new game or quit.	In Progress	Zach Gharst
22 Win Condition (2)	22.1	GIVEN that the player's turn ends, WHEN the game checks if the opponent has 2 pieces remaining and/or cannot make any more valid moves THEN the game ends and the player wins.	Complete	TBD
	22.2	GIVEN that the player can make a valid move WHEN their turn begins THEN the game should not end.	Complete	TBD
23 Computer Opponent	23.1	GIVEN that the game menu WHEN the player wants to play with an AI THEN there should be a button indicating so.	To Do	TBD
	23.2	GIVEN that it is the computer's turn WHEN human attempts to make a move THEN human player should not be able to do anything.	To Do	TBD
	23.3	GIVEN that human player made its move WHEN it is the computer's turn THEN there should be "thinking" time to mimic human player thinking before computer makes a move.	To Do	TBD
24 Computer Opponent Phase 1 Behavior	24.1	GIVEN that there is a spot that would enable a mill for the computer WHEN it is the computer player's turn THEN the computer should place their piece there.	To Do	TBD
	24.2	GIVEN that there is a spot that would block a player's mill and there are no spots to create a mill WHEN it is the computer player's turn THEN the computer should place their piece there.	To Do	TBD

	24.3	GIVEN that there are no spots that create mills or block mills WHEN it is the computer player's turn THEN the computer should place a piece near one of their other pieces.	To Do	TBD
	24.4	GIVEN that there are no spots that create mills, block mills, or are adjacent to another piece WHEN it is the computer player's turn THEN the computer should place a piece in a random vacant spot.	To Do	TBD
25 Computer Opponent Phase 2 Behavior	25.1	GIVEN that there is a spot that would enable a mill for the computer WHEN it is the computer player's turn AND they have an adjacent piece THEN the computer should move their piece there.	To Do	TBD
	25.2	GIVEN that there is a spot that would block a player's mill and there are no spots to create a mill WHEN it is the computer player's turn AND they have an adjacent piece THEN the computer should move their piece there.	To Do	TBD
	25.3	GIVEN that there are no spots that create mills or block mills WHEN it is the computer player's turn THEN the computer should move closer to one of their other pieces.	To Do	TBD
	25.4	GIVEN that there is a spot that would completely block the human player from moving WHEN it is the computer player's turn THEN the computer should move their piece to that spot to win the game.	To Do	TBD
26 Computer Opponent Phase 3 Behavior	26.1	GIVEN that there is a spot that would enable a mill for the computer WHEN it is the computer player's turn THEN the computer should fly their piece there.	To Do	TBD
		GIVEN that there is a spot that would block a player's mill and there are no spots to create a mill WHEN it is the computer player's turn THEN the computer should fly their piece there.	To Do	TBD
		GIVEN that there are no spots that create mills or block mills WHEN it is the computer player's turn THEN the computer should fly adjacent to one of their other pieces.	To Do	TBD
27 Computer Opponent Mill Behavior	27.1	GIVEN that the computer player has earned a mill WHEN the player has a piece not part of a mill THEN the computer should remove a piece from the player's board that doesn't belong to a mill.	To Do	TBD
		GIVEN that the computer player has earned a mill WHEN the player only has pieces that are part of a mill THEN the computer should remove a piece in a mill from the player's board.	To Do	TBD

			To Do	TBD
28 Game over	28.1	GIVEN that the game has ended WHEN either win condition has been met THEN a graphical end of game sequence should be displayed which shows the winner and offers new game or exit to the players.	To Do	TBD
	28.2	GIVEN that the game has not ended WHEN neither win condition has been met THEN the graphical end of game sequence should not occur.	To Do	TBD

III. Updated Implementation Tasks

Include the tasks from the previous report and highlight the new tasks with a different color.

Summary of production code

User Story ID and Name	**AC ID**	**Class Name(s)**	**Method Name(s)**	**Developer Name(s)**	**Status**	**Notes (optional)**
3 Player Ordering	3.2	BoardManager	GetOppositePlayer()	Zach Gharst	Complete	
4 Starting Board	4.1	Board/Board Manager	Start(), InitGame(), CreateIntersections()	Zach Gharst, Ken Dozier	Complete	
5 Player's First Turn	5.1	BoardManager	InitGame()	Zach Gharst	Complete	

6 Phase 1 (placement)	6.1, 6.2	BoardManager/Intersection	Phase1()
			OnMouseDown()
				Zach Gharst
				Thomas Tran
					Complete	Currently showing remaining pieces in plaintext

7 Valid placements of piece	7.3	Intersection	OnMouseClick()	Thomas Yang	Complete	
	7.4	BoardManager	CheckSamePosition(int, int, int, int)	Thomas Tran	Complete	takes source row and column, and target row and column
8 Mill Rule	8.1	BoardManager	CheckMill()	Zach Gharst	Complete	
	8.2	BoardManager	AllMenInAMill()	Zach Gharst	Complete	
	8.3	BoardManager	Mill()	Zach Gharst	Complete	

9 Phase 2 (Play)	9.2	BoardManager	isAdjacent()	Thomas Tran	Complete	

10 Movement	10.1, 10.2, 10.3	Intersection, BoardManager	PieceSelection()
			PieceMovement()
				Thomas Yang, Thomas Tran, Zach Gharst	Complete	

12 Game End	12.1	BoardManager	HasAvailableMove(), GameOver()	Zach Gharst	Complete	
	12.2	BoardManager	GameOver()	Zach Gharst	Complete	
13 UI turn check	13.1	TextManager	Update()	Zach Gharst, Thomas Yang	In Progress	Needs polish, but in an acceptable place at the moment
	13.2					
14 Score Display	14.1	TextManager	Update()	Thomas Yang, Zach Gharst	In Progress	Needs extra polish
	14.2	TextManager : MonoBehaviour	Update()	Thomas Yang, Zach Gharst	Complete	
18 Reset	18.1	BoardManager	ResetBoard()	Zach Gharst	Complete	Currently the button R is to reset; there could be a button in the future if requested.
21 Win Condition #1	21.1, 21.2, 21.3	BoardManager	Mill(), GameOver()	Zach Gharst	Complete	
22 Win Condition #2	22.1, 22.2, 22.3	BoardManager	HasAvailableMove(), GameOver()	Zach Gharst	Complete	

Summary of automated test code (directly corresponding to some acceptance criteria)

User Story ID and Name	**AC ID**	**Class Name (s) of the Test Code**	**Method Name(s) of the Test Code**	**Description of the Test Case (input & expected output)**	**Status**	**Developer Name(s)**
4 Starting Board	4.1	BoardManagerTests	VacantSpacesAtGameStart()	After game is initialized, the board contain vacancies in the	Complete	Zach Gharst

				appropriate coordinates		
7 Valid placements of piece	7.1	BoardManagerTests	CheckValidMovePhase1()	A man is removed from the pool and the space is not vacant.	Complete	Ken Dozier
	7.4	CheckSamePositinoTests	CheckSamePositionTestValidInput()	returns bool after comparing source and target coordinates	Complete	Thomas Tran
8 Mill Rule	8.1	BoardManagerTests	CheckMill()	After a third piece in a row is laid out, millFormed should be true.	Complete	Zach Gharst
8 Mill Rule	8.1	BoardManagerTests	CheckMillFalse()	A mill should not be formed when the three pieces in a row are not the same color.	Complete	Thomas Yang
9 Phase 2 (Play)	9.1	BoardManagerTests	CheckValidMovePhase2()	Phase 2 is enabled when both players run out of pieces.	Complete	Ken Dozier
	9.2	isAdjacentTests	adjacencyValidInputTest()	input of source row and column, and target row and column, returns true	Complete	Thomas Tran
10 Movement	10.2	BoardManagerTests	CheckValidMovePhase2()	Phase 2 movement should remove a piece from a spot and add the piece to a different, adjacent spot.	Complete	Ken Dozier
11 Phase 3 (flying)	11.1	BoardManagerTests	CheckValidMovePhase3()	Both players are down to two men and they are allowed to move anywhere on the board that is a vacant space during their turn.	Complete	Ken Dozier
21 Win Condition #1	21.1	BoardManagerTests	CheckWinConditionOne()	Game should end when a player has two pieces.	Complete	Thomas Yang
22 Win Condition #2	22.1	BoardManagerTests	CheckWinConditionTwo()	Game should end when a player can’t move at the start of their turn.	Complete	Thomas Yang

22/23 Win Condition #1/#2	21.2, 22.2	BoardManagerTests	CheckWinConditionFalse()	Game should NOT end when a win condition isn't met.	Complete	Thomas Yang

Summary of manual test cases (directly corresponding to some acceptance criteria)

User Story ID and Name	Acceptance Criterion ID	Test Case Input	Test Oracle (Expected Output)	Status	Notes	Developer Name(s)
3 Player Ordering	3.1	Start game	Player White starts phase 1 first	pass	No main menu implemented	Thomas Tran
4 Starting Board	4.1	Start game	Empty board with white's turn first	pass		Thomas Tran
5 Player's first turn	5.1	Start game	Empty board with white's turn first	pass	same as 4.1	Thomas Tran
	5.2	first white piece placed	Player Black's turn	pass		Thomas Tran
6 Phase 1 (placement)	6.1	first white and first black pieces placed	Player White's turn	pass		Thomas Tran
7 Valid placement of piece	7.1	player clicks on vacant space	Player's piece (black or white) will be placed on that cell	pass		Thomas Tran
	7.2	player clicks on occupied space	no piece will be placed and piecesRemaining will not be decremented	pass		Thomas Tran
	7.3	player clicks on vacant space in Phase 2 without a selected piece	error output string that notifies to select a piece first	fail	not yet implemented	Thomas Tran
8 Mill Rule	8.1	player creates a mill	turn does not change, and next click will remove a piece	pass		Thomas Tran
	8.2	click on opponent's piece that is apart of a mill after forming mill	if there is a piece not part of a mill, piece remains and outputs message to select a target not in a mill	pass		Thomas Tran
	8.3	click on opponent's piece that is apart of a mill after forming mill	if all of the opponent's pieces are part of a mill, the selected piece is removed	pass		Thomas Tran
9 Phase 2 (play)	9.1	placing the last black piece from phase 1	White's turn awaiting selection of white's piece	pass		Thomas Tran

10 Movement	10.1	White player makes a valid move with no mill	turn changes to Black's turn and awaits a selection of a black piece	pass		Thomas Tran
	10.2	Black chooses a vacant adjacent cell after selecting a piece	vacant cell becomes occupied by the black piece and the previous cell is now vacant	pass		Thomas Tran
	10.3	a player makes an invalid move	outputs and error stating an invalid move was made and to try again	pass		Thomas Tran
11 Phase 3 (flying)	11.1	clicking a vacant non-adjacent cell after selecting a piece	moves selected piece to occupy vacant cell	pass	assuming player has 3 men left	Thomas Tran
	11.2	black clicks on non-adjacent vacant cell after selecting a piece	outputs an error and does not place the selected piece	pass	assuming white has 3 men and black has 4 or more	Thomas Tran
12 Exit the game	12.1	White forms a mill and reduces black's remaining pieces to 2	outputs a message that declares White the winner	pass		Thomas Tran
	12.2	move a black piece and when number of moves without mill is > 100	ends game in a draw	pass	condition for draw game is incomplete	Thomas Tran
13 UI turn check	13.1	moves black piece to a vacant cell	UI text changes to indicate white's turn	pass	same as US 17	Thomas Tran
18 Reset	18.2	press the 'R' button	asks to confirm resetting of board	fail	no confirmation	Thomas Tran
	18.3	press the 'R' button	asks if player forfeits	fail	no confirmation	Thomas Tran
	18.4	press the 'R' button	asks if player forfeits	fail	no confirmation	Thomas Tran

Summary of other automated or manual tests (not corresponding to the acceptance criteria)

Number	**Test Input**	**Expected Result**	**Class Name of the Test Code**	**Method Name of the Test Code**	**Status**	**Developer Name(s)**
12 Exit the game	click to select piece after game is over	piece will not be selected (picked up)	N/A Manual test	N/A Manual test	pass	Thomas Tran

IV. Meeting Minutes (only during this sprint)

Report the minutes of all meetings, including, but not limited to: project/sprint planning meeting, stand-up meeting, backlog grooming, retrospective meeting, and pair programming session.

Date	**Time and Duration**	**Place**	**Participant Names**	**Purpose of the Meeting**	**Specific Action Items**
10/20/2020	9:45pm, 85 mins	Discord	All present	Sprint 2 planning	Assigning user stories/AC. Further research on Unit test framework
10/27/2020	9:45pm, 55 mins	Discord	All present	More Sprint 2 planning; testing suites	Review of changed code and commits, plans discussing mill functions
11/10/2020	9:45pm, 90 mins	Discord	All present	Sprint 2 AC, refactoring, flying movement	Refactored code, elaborate on computer opponent AC, implement phase 2 (regular movement) and phase 3 (flying)
11/17/2020	9:45pm, 100 mins	Discord	All present	Finalize sprint 2	Finalize report, more testing, and plan video recording
11/18/2020	11:00pm, 150 mins	Discord	All present	Testing cases, Sprint 2 documentation	implement automatic and manual test cases, update sprint 2 report
11/19/2020	8:30pm, ? mins (report finished before end of meeting)	Discord	Zach Gharst, Thomas Tran	Sprint 2 documentation	finish Sprint 2 report, record demonstration video

V. Buddy Ratings

If you don’t feel comfortable to include your ratings in this report, you may email your ratings to the instructor or grader.

Rating receiver

Rating giver

	Ken Dozier	Zach Gharst	Joseph Soria	Thomas Tran	Thomas Yang
Ken Dozier	X	1	1	1	1
Zach Gharst	1	X	1	1	1
Joseph Soria	1	1	X	1	1
Thomas Tran	1	1	1	X	1
Thomas Yang	1	1	1	1	X
Average					