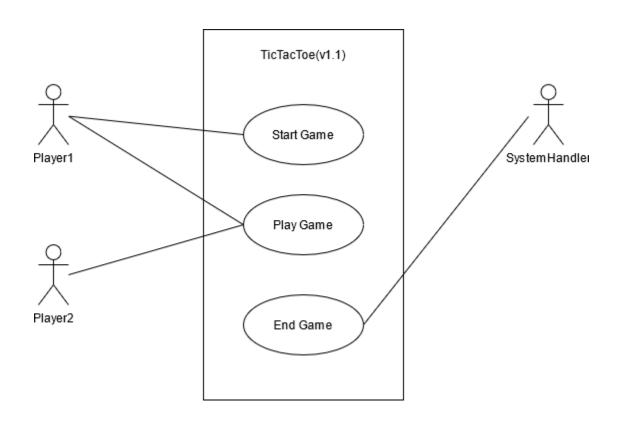
# TIC TAC TOE (v1.1)

### Use Case and UML Diagrams



Start Game

Actor Action	System Response
1. Player1 opens game	
3. Player1 selects "multiplayer"	2. System displays menu with options "multiplayer" or "quit game"
	4. System prompts
5. Player1 enters grid size	Player1 to enter grid size
	6. System displays "X" or "O" option
7. Player1 selects "X"	
or "O"	8. System generates grid size and starts game

Start Game (Alternative) - Quit

Actor Action	System Response
1. Player1 opens game	
2a. Player1 selects "quit"	System displays menu with options "multiplayer" or "quit game"
	2b. System closes the game

## Jeremiah Baclig, Rural Young, Kymberlee Sables Professor Kanewala CEN 4010 – PA2 7 March 2021

#### Play Game

Actor Action	System Response
2. Player1 selects grid square	System starts timer and starts with Player1's turn
4. Player2 selects grid square	System fills grid square and switches to Player2's turn
	5. System repeats 2-4 until 3 in a row is recognized

#### Play Game (Alternative) - Quit mid-game

Actor Action	System Response
5a. A player selects "quit" in the middle of the game	5b. System pauses timer and displays warning message
5c. Player confirms quit	5d. System stops game, returns to main menu

#### Play Game (Alternative) - Quit-Continue mid-game

Actor Action	System Response
5a. A player selects "quit" in the middle of the game  5c.1. Player chooses to	5b. System pauses timer and displays warning message
	5d. System resumes game

#### Play Game (Alternative) - Pause Game

Actor Action	System Response
4a. A player selects "Pause Game"  4c. A player selects "Resume"	4b. System pauses timer and displays a pause message with continue option
	4d. System resumes the game

#### Play Game (Alternative) - Timer runs out

Actor Action	System Response
Player1 selects grid     square	System starts timer, with Player1's turn
2b. Player2 fails to select	2a. System fills grid square and switches to Player2's turn
a grid square within time	2c. System declares game end and prompts to player to "play again" or "return to menu"

<sup>\*</sup>assume that this may happen to both players

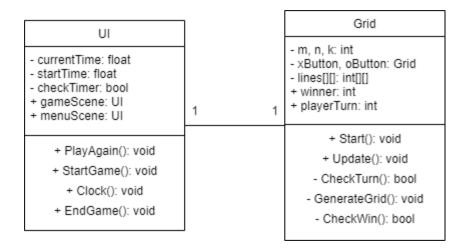
#### End Game

Actor Action	System Response
1.SystemHandler recognizes a player achieved 3 in a row	System displays victory message with options to "play again" or "return to menu"

## End Game (Alternative) - Tie

Actor Action	System Response
1a.SystemHandler does not recognizes a player achieved 3 in a row	System displays game tie message with options to "play again" or "return to menu"

Jeremiah Baclig, Rural Young, Kymberlee Sables Professor Kanewala CEN 4010 – PA2 7 March 2021



### Contributions and Time Spent

**Jeremiah** – (10 hours) Worked on game scene setup, board spawning, and game logic. Assisted with bug resolution and unit testing.

**Rural** – (12 hours) Worked on setting up the test cases, learning Nunit, and refactoring code/building upon existing code to ensure that the test cases are actually running properly.

**Kymberlee** – (10 hours) Worked on Menu and UI elements as well as connecting the UI to the game.

### Commit Log

"f3ffabf	Jeremiah Baclig	JeremiahBaclig@g mail.com	adjusted format of doc and diagram"
"46fa91a	KymberleeS	sableskymberlee@y ahoo.com	double checked documents"
"c9f9677	RuralYoung	ruralyoungiii@gmail. com	Updated my share of the Documents folder to input what I did"
"9eb3721	RuralYoung	ruralyoungiii@gmail. com	I found some weird naming schemes that I did so I went ahead and renamed them to stuff that makes more sense."
"87688ab	KymberleeS	sableskymberlee@y ahoo.com	added details to program description txt file"

7 111010117			
"c2dfe1a	KymberleeS	sableskymberlee@y ahoo.com	fixed return to menu button on O Win Scene"
"c28a0ce	Jeremiah Baclig	JeremiahBaclig@g mail.com	added to doc"
"2786113	KymberleeS	sableskymberlee@y ahoo.com	added program description file and word doc (later to be turned to pdf)"
"bcf832b	Kymberlee Sables	62261771+Kymberl eeS@users.noreply. github.com	Merge pull request #6 from UNF- CEN4010/Kym/MenuBugFixing"
"6609031	KymberleeS	sableskymberlee@y ahoo.com	edited/refined use case diagram and added a png form of the file"
"b6ecf0a	KymberleeS	sableskymberlee@y ahoo.com	switched to yes/no on abandon game screen to make it more clear"
"af9e3bf	KymberleeS	sableskymberlee@y ahoo.com	clicking play again now returns to the start up scene instead of the game again"
"4d6ebec	KymberleeS	sableskymberlee@y ahoo.com	created a separate game start up scene menu for easy access"
"e49947c	Jeremiah Baclig	JeremiahBaclig@g mail.com	fixed bug when quitting and coming back (turns)"
"d48ad0b	Jeremiah Baclig	JeremiahBaclig@g mail.com	added start with O feature"
"d166cdf	RuralYoung	ruralyoungiii@gmail. com	Merge branch 'main' of https://github.com/UNF-CEN4010/T2"
"9bd9d08	RuralYoung	ruralyoungiii@gmail. com	Refactored some more code"
"16339fb	Jeremiah Baclig	JeremiahBaclig@g mail.com	UML (forgot to push)"
"c897a28	Kymberlee Sables	62261771+Kymberl eeS@users.noreply. github.com	Merge pull request #5 from UNF- CEN4010/Kym/ConnectGameAndUI"
"335caab	KymberleeS	sableskymberlee@y ahoo.com	latest version of use case diagram"
"6b2ee11	KymberleeS	sableskymberlee@y ahoo.com	completed end game scenarios"
"4c28f6c	KymberleeS	sableskymberlee@y ahoo.com	setting up end game scenarios"
"c138340	KymberleeS	sableskymberlee@y ahoo.com	configured game to change scenes depending on win/tie scenarios"
"fbf1a43	KymberleeS	sableskymberlee@y ahoo.com	fixed tie scene"
"e294ebb	Jeremiah Baclig	JeremiahBaclig@g mail.com	test case matching script adjustment"

1 iviaitii 2	_U I		
"8519396	KymberleeS	sableskymberlee@y ahoo.com	completed timer ran out game scenario"
"b0a25ba	KymberleeS	sableskymberlee@y ahoo.com	created end game scenes; currently working on tie scene"
"fd4a95b	KymberleeS	sableskymberlee@y ahoo.com	created transition scene for when the timer runs out"
"4ce3cb6	KymberleeS	sableskymberlee@y ahoo.com	completed quit game functionality"
"5ebc2c0	KymberleeS	sableskymberlee@y ahoo.com	started quit game functionality"
"dc07fe4	KymberleeS	sableskymberlee@y ahoo.com	created a quit button; fixed alignment"
"bc8916d	KymberleeS	sableskymberlee@y ahoo.com	refined pause game functionality"
"fa78934	KymberleeS	sableskymberlee@y ahoo.com	pause game functionality complete; when pause is clicked timer stops and popup appears; clicking resume continues the game and the timer"
"cdda309	KymberleeS	sableskymberlee@y ahoo.com	when the pause button is clicked the timer stops and a pop up appears"
"1722d49	KymberleeS	sableskymberlee@y ahoo.com	timer pauses when pause button is clicked"
"f440ce9	KymberleeS	sableskymberlee@y ahoo.com	added pause button"
"e3b4360	Kymberlee Sables	62261771+Kymberl eeS@users.noreply. github.com	Merge pull request #4 from UNF- CEN4010/Kym/TimerAndGameUI"
"aebdc05	KymberleeS	sableskymberlee@y ahoo.com	changed menu background colors to match game background"
"b016d28	KymberleeS	sableskymberlee@y ahoo.com	changed menu color scheme to match the game"
"6435d11	KymberleeS	sableskymberlee@y ahoo.com	checking background color for game scene"
"cc142c0	KymberleeS	sableskymberlee@y ahoo.com	when timer reaches 0 it does not go to negative numbers"
"630946a	KymberleeS	sableskymberlee@y ahoo.com	added timer to game scene"
"daf450a	KymberleeS	sableskymberlee@y ahoo.com	fixed use case diagram concerning timer"
"d1a3a94	RuralYoung	ruralyoungiii@gmail. com	Changed a couple more things for testing purposes"
"e11a002	RuralYoung	ruralyoungiii@gmail. com	I restructured the program into manageable pieces"

Jeremiah Baclig	JeremiahBaclig@g	tweaked sprite spawn in layer"
_	mail.com	
Jeremiah Baclig		added tag to prefab"
1, 1 1 0 11		110000000000000000000000000000000000000
Kymberlee Sables	1	Merge pull request #3 from UNF-
		CEN4010/Kym/MenuAndUIElements"
I/: una la a ul a a C		finished some startum and regions are
KymberieeS		finished game startup and main menu scene"
KymborlooS		start game button transitions to
Kymbenees		GameScene when clicked"
KymberleeS		created toggle to select between X and
Ttymboncoo		O"
KymberleeS		adding options on game start up
	ahoo.com	screen"
KymberleeS	sableskymberlee@y	working on game startup screen"
	ahoo.com	
KymberleeS	sableskymberlee@y	clicking on multiplayer now transitions
	ahoo.com	to the game start up screen"
KymberleeS	sableskymberlee@y	worked on menu buttons started
	ahoo.com	adding button functionality"
Jeremiah Baclig	JeremiahBaclig@g	adjusted sprite numbering"
ocroman baong		adjusted sprite flamboring
Jeremiah Baclig		Merge branch 'main' of
constituting		https://github.com/UNF-CEN4010/T2"
Jeremiah Baclig	JeremiahBaclig@g	adjusted prefab sizing and spacing"
	mail.com	, , ,
KymberleeS	sableskymberlee@y	created menu background with title and
	ahoo.com	version displayed"
KymberleeS	sableskymberlee@y	created Tests folder"
KymberleeS	-	added current Use Case and UML
Leave de la Decella		diagrams"
Jeremian Bacilg		adjusted squares prefab"
Joromiah Baolia		added prefab"
Jerennan Daung	0 0	auded pretab
Jeremiah Baclio		more sprites"
Jordinan Davily	Josephianbachgeg	more spines
	mail.com	
Jeremiah Baclig	mail.com  JeremiahBaclig@g	added sprites and scene"
	Jeremiah Baclig  Kymberlee Sables  KymberleeS  KymberleeS  KymberleeS  KymberleeS  KymberleeS  KymberleeS  Jeremiah Baclig  Jeremiah Baclig  Jeremiah Baclig  Jeremiah Baclig  KymberleeS	mail.com  Jeremiah Baclig  JeremiahBaclig@g  mail.com  Kymberlee Sables  KymberleeS  Sableskymberlee@y  Sabl

Jeremiah Baclig, Rural Young, Kymberlee Sables Professor Kanewala CEN 4010 – PA2 7 March 2021

"7c5510e	KymberleeS	sableskymberlee@y	updated unity version"
		ahoo.com	
"aec06e3	KymberleeS	sableskymberlee@y	Merge branch 'main' of
		ahoo.com	https://github.com/UNF-CEN4010/T2"
"ea1dd06	KymberleeS	sableskymberlee@y	initialized PA2; Working with Unity and
	-	ahoo.com	C#"