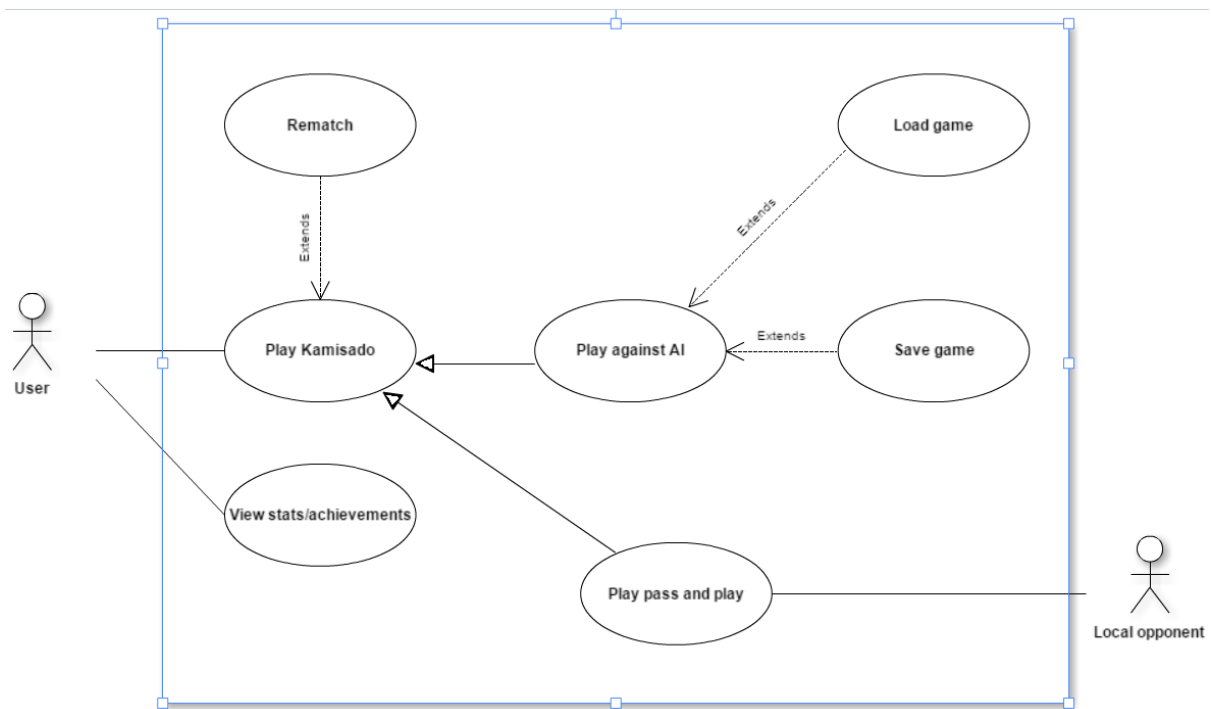


## Niklavs Meiers, Ben Hubbard CS207 task 1 requirements



### Use cases description

**Use case:** Play Kamisado

**Brief description:** Lets user play a game of Kamisado

**Primary actor:** User

**Precondition:** The user has selected that they wish to play Kamisado.

**Main Flow:**

- 1) The user selects to play a game of Kamisado.
- 2) The user is then presented with options to either play local multiplayer or single player
- 3) (For Flows on either, see below)

**Postcondition:** user is brought to another menu

**Use case:** Play against AI

**Brief description:** Play against AI (Inherits from play Kamisado as it is extra functionality)

**Primary actor:** User

**Precondition** The user has selected that they wish to play Kamisado.

**Main Flow:**

- 1) The user then selects that they wish to play Against an AI opponent.
- 2) User now sets the game configurations

- a) They choose which game mode (either speed mode and standard 1 point game)
  - b) What difficulty of AI
  - c) Decide if they want to be player 1 or 2
- 3) The game then starts
  - a) When it is the users turn, they select desired move
  - b) If move is valid, piece is moved and board updated
  - c) Next player's turn
- 4) The game is either saved for later play, or they have finished and the game has exited.
- 5) Stats update.

**Postcondition:** The user has concluded their game or saved it, stats have been updated.

**Use case:** Play pass and play

**Brief description:** Play against another player on the same machine (Inherits from play Kamisado as it is extra functionality)

**Primary actor:** User

**Precondition:** The user has selected that they wish to play Kamisado.

**Main Flow:**

- 1) The user then selects that they wish to play a pass and play game (local multiplayer).
- 2) User now sets the game configurations
  - a) They choose which game mode (including speed mode and standard 1 point game)
- 3) The game then starts
  - a) When it is the users turn, they select desired move
  - b) If move is valid, piece is moved and board updated
  - c) Next player's turn
- 4) The users have finished and the game has exited.
- 5) Stats update.

**Postcondition:** The user has concluded or exited their local two player game, stats have been updated.

**Use case:** View user stats

**Brief description:** View win/loss ratios for games against AI as well as achievements and match history

**Primary actor:** User

**Precondition:** The user has entered their username.

**Main Flow:**

- 1) User selects view stats from main menu
- 2) Stat file is checked to not be empty

- 3) Stats are displayed to the user
- 4) User then returns to the main menu when finished

**Alternative Flow:**

- 3.1) Message displayed to user indicating no stats to display
- 4) user is returned to the main menu

**Postcondition:** The stats are displayed to the user.

**Use case:** Save game

**Brief description:** Saves the current board state (extends play against AI)

**Primary actor:** User

**Precondition:** The user is currently playing against an AI opponent.

**Main Flow:**

- 1) User selects save game option when it is their turn
- 2) User then names the save
- 3) Checks if name has already been taken
- 4) Displays message that it has been successfully saved
- 5) The game then resumes on their turn and the user has the option to exit

**Alternative Flow:**

- 4.1) Name has already been taken, appropriate message displayed.
- 5) Allows user to retry or return to game

**Postcondition:** The current board state has been saved to a new file.

**Use case:** Load game

**Brief description:** Loads previously saved board state (extends play against AI)

**Primary actor:** User

**Precondition:** The user has selected a valid saved game in which to load.

**Main Flow:**

- 1) The user selects a save file name to load
- 2) The user is then put into the game where they left off
- 3) Game is played out with the saved games settings and modes

**Alternative Flow:**

- 2.1) no saved game to load
- 3) displays message

**Postcondition:** The selected file has been correctly loaded and ready for user interaction.

**Use case:** Rematch

**Brief description:** Allows you to play with the same settings as the previous game (keeps a tally for best of n)

**Primary actor:** User

**Precondition:** The user has just finished a game.

**Main Flow:**

- 1) After the game is over the user selects button rematch
- 2) They are then presented with a settings screen so they can choose how many single point matches they would like to play
- 3) A game then starts with settings supplied by user in previous stage
  - a) A counter of player 1 and 2s win/loss is displayed
- 4) The number of games specified in the settings is then played

**Alternative Flow:**

- 4.1) Or saved partial way through (only in games against the AI)

**Postcondition:** The win/loss is then displayed for the user after completion, stats are updated

**Features:**

1. Multiple different difficulty levels for AI(easy and hard)
2. Game mode where players must make their move within a set amount of time
3. AI must make its move within 5 seconds
4. Present user stats and achievements
5. Player can pick its team colour
6. Player should be able to use keyboard to navigate
7. Available hints for single player game
8. Rematch button to replay the same opponent (Best of ..)
9. Undo button for single player
10. Customise username
11. A game menu
12. Save board state to a file
13. Load game from a file

	1	2	3	4	5	6	7	8	9	10	11	12	13
Play Kamisado		*				*				*	*		
Play against AI	*		*		*		*		*				
Play pass and play					*								
View user stats				*		*							
Save game												*	
Load game													*
Rematch								*					