

## Use cases

1. The functions or activities performed by a specific actor are listed.
2. Use-cases
3. Activity diagram
4. Swim lane diagram

## Player:

- a. I should be able to view high scores from main menu. Main menu should also have an option to exit the app. There should be an option to start a game. After that there should be options for 3 or more sorting algorithms. After selecting any one of them pseudo code and rules for playing that are both specific to sorting algorithm and general game must be displayed. I should be able to view these rules in the middle of playing a game. After that game begins, and a counter which is displayed on the screen starts counting. 8 to 10 two digit numbers which are in unsorted order should be given. These numbers should be placed on one of the face of a cube to make the game fun. I should be able to move these cubes to rearrange them in sorted order according to the algorithm using touch screen. During each swap there is a sound produced. For every right move I get +10 and for every wrong move I get -10. If there are more than 3 consecutive wrong moves I should get a prompt to restart the game or start a new game, deleting the current playing game. I should be able to pause a game at any point and resume it afterwards. The counter must stop when the game is paused and started after resuming it. I should also be able to stop the game at any point of time and return to main menu. There should be an option to restart the game at the middle of playing it. After successful completion of game there should be a prompt to give the player name. The score is calculated based on number of wrong moves and number of right moves and time taken to complete it and number of restarts. After that, score along with player name, time taken, wrong moves, right moves, number of restarts. It is stored in high scores if it is high enough and return to main menu. There should be one high score list for every sorting algorithm game.