

Use Case Description “Take a Turn”

Use case	Take a Turn
Primary Actor	Players
Secondary Actor	None
Pre-conditions	A round chip is randomly selected.
Post-conditions	A specific coloured robot is moved to a specific marked region. The round chip indicates the colour of the robot to move and the marked region. A player collects the chip at the end of the turn.
Main Flows	<ol style="list-style-type: none"> 1. A round chip is selected randomly. 2. Players identify which robot to move to the marked region as given on the chip. Also, players can get a hint, which robot to move and where to move, from hint functionality. 3. A player will state a possible number of steps for the robot to reach the destination. 4. Once a player states the number, he starts a timer for other players. 5. The timer is set for 1 minute. 6. Other players have to response with a smaller number of steps than the first player, if possible. 7. The player with the smallest number of steps, shows the steps. 8. The player collects the round chip.
Alternative Flows	<ol style="list-style-type: none"> 1. No chips available to select. <ul style="list-style-type: none"> • The system declares the player with the highest number of chips as winner of the game. 2. Other players couldn't response with a smaller number of steps within the required time. <ul style="list-style-type: none"> • The first player shows his steps and collects the chip. 3. The player with smallest number of steps stated can't show a correct path. <ul style="list-style-type: none"> • The player with the second smallest number of steps stated shows their steps and collects the chip.

	<ul style="list-style-type: none"> • If the second player fails as well, then the player with the third smallest bid shows and collects the chip and so on. <p>4. None has the right path or correct numbers; the only bidder can't match the stated number of steps or can't place the robot properly.</p> <ul style="list-style-type: none"> • (Don't the solution as of now, depends on the program)
Exception	<p>1. If a player closes the program at the middle of the game, the system recognizes and shows a message that he lost regardless of the number of chips he collected.</p>
Special Requirements	<p>1. Asks for the level of difficulty from the users.</p> <p>2. Provide support for people with vision deficiency.</p>