

TestCases - GUI

US	TEST GROUP	TEST CASE	PRE-CONDITIONS	ACTIONS TO PERFORM	EXPECTED BEHAVIOR	TEST RESULT	COMMENTS
GUI	Launch GUI	Launch GUI	none	launch the game	GUI is loaded	PASSED	
	Number of players	Default number of players	none	launch the game	2 top left player panels are enabled (max number of players to enable is 6)	PASSED	
		Add new player	player panel is disabled player panel has not been enabled during current launch	click on the disabled panel	disabled panel becomes enabled	PASSED	
					nickname is set to default	PASSED	
					control keys are set to default	PASSED	
		Remove existing player	player panel is enabled at least 3 panels are enabled	click the X button on the enabled panel	enabled panel becomes disabled	PASSED	
					nickname is saved so that it can be restored	PASSED	
					control keys are saved so that they can be restored	PASSED	
		Restore player (optional)	player panel is disabled player panel had been enabled during current launch when player panel was enabled, nickname and control keys was modified and set	click on the disabled panel	disabled panel becomes enabled	PASSED	
					nickname is restored (set to the previously set version)	PASSED	
					control keys are restored (set to the restored version)	PASSED	
	Player nicknames	Default nicknames	none	launch the game	players have default nickname presets (eg. PLAYER 1, PLAYER 2, etc.)	PASSED	
		Set player nickname	player panel is enabled	click on the nickname input field and type 1-9 characters (letters and digits only)	player nickname is set The nickname is written in capital letters only	PASSED	imiona nie muszą być różne
		Empty nickname	player panel is enabled	click on the nickname input field, make sure it's empty, click somewhere else	player nickname is set to default	FAILED	defaultowo ustawia się na PLAYER 1 dla każdego, poza tym można ustawić spacje na nick, czy tak może być?
		Too long nickname	player panel is enabled	click on the nickname input field and type 10+ characters	not possible to type the 10th char (it doesn't appear in the input field)	PASSED	
	Player colors	Default colors	none	launch the game	players have distinct default colors	PASSED	
	Player control keys	Default control keys	none	launch the game	players have distinct default control keys	PASSED	
		Set left/right key	player panel is enabled	click on the left/right input field and press a supported key	left/right control key is set a corresponding abbreviation is displayed	PASSED	lista klawiszy?
		Set key which is already used	player panel is enabled	click on the left/right input field and press a key that is already set for any enabled player	not possible to set an already used key (it leaves a default input field)	PASSED	
		Unsupported keys	player panel is enabled	click on the left/right input field and press an unsupported key	not possible to set an unsupported key (it leaves a default input field)	PASSED	
		Set keys from default keys set	player panel is enabled	click on the left/right input field, set a keys which is default or previously set to one of disabled player and enable this player panel	in first panel keys are set, in previous disabled panel the input fields are empty	PASSED	
	Arena size	Default arena size	none	launch the game	arena size is set to medium	PASSED	
		Set arena size	none	set slider position as left/middle/right	arena size is set to small/medium/large	PASSED	
	Player speed	Default player speed	none	launch the game	player initial speed is set to medium	PASSED	
		Set player speed	none	set slider position as left/middle/right	player initial speed is set to slow/medium/fast	PASSED	
	Player size	Default player size	none	launch the game	player initial size is set to medium	PASSED	
		Set player size	none	set slider position as left/middle/right	player initial size is set to small/medium/large	PASSED	
	Start button	Start button	players control keys set to empty (see TC: Set keys from default keys set)	none	START button is disabled	FAILED	
	Start game	Start game	START button is active (see TC: Start button)	click START button	game arena is loaded arena size is set according to GUI settings player and game settings are set according to GUI settings	PASSED	
		Next game	previous game finishes final screen appears	click PLAY AGAIN button	GUI is loaded Settings from previous game are restored	PASSED	
	End game	Final screen	end game (see RULES TC: End game)	none	when the game is finished, a final screen with a score board appears as a shaded layer on top of the last round	PASSED	
					the PLAY AGAIN and EXIT buttons are displayed	PASSED	
					the colors from the GUI palette are used on the final screen	PASSED	
					the displayed information is consistent with game results	PASSED	
					the score board is sorted in descending order	PASSED	
		Play again	final screen displayed	click PLAY AGAIN button	game goes back to the GUI	PASSED	
	Exit application	Exit game	final screen displayed	click EXIT button	game application is quit	PASSED	
		Exit application	none	click EXIT button	game application is quit	PASSED	

TestCases - GAMEPLAY

TEST GROUP	TEST CASE	PRE-CONDITIONS	ACTIONS TO PERFORM	EXPECTED BEHAVIOR	TEST RESULT	COMMENTS
GAMEPLAY	Get initial position	arena is loaded	none	player has random initial position within the arena	PASSED	
	Get initial direction	arena is loaded	none	player has random initial direction	PASSED	
	Draw head	arena is loaded	none	a circle (of player color) is drawn according to current player position	PASSED	
				its radius depends on current player size	PASSED	
				its drawn properly when arena limits are reached	PASSED	
	Move forward	player is active during current round none of the player control keys is pressed	none	player position is changing "in a straight line" according to current direction	PASSED	
				player position is changing with a constant speed	PASSED	
	Leave trace	player is active during current round none of the player control keys is pressed	none	a set of marks corresponding to player position (varying in time) is drawn	PASSED	
				the trace creates an impression of continuous line	PASSED	
	Turn left/right once	player is active during current round none of the player control keys is pressed	press left control key once press right control key once	counterclockwise rotation of a direction vector by ϕ degrees	PASSED	
				clockwise rotation of a direction vector by ϕ degrees	PASSED	
	Turn left/right continuously	player is active during current round none of the player control keys is pressed	press one control key constantly	rotation of a direction vector by ϕ degrees	PASSED	
				trace becomes an arc with a radius r that depends on the speed	PASSED	
				radius of the arc is larger than radius of the player head for initial player setting	PASSED	skrajne przypadki: mala prędkość + pogrubienie mogą to zmienić ale jest to dopuszczalne
	Leave holes	player is active during current round	none	form time to time, the trace is not drawn for a very short period of time t	PASSED	
				it happens with a constant frequency	PASSED	
				NF: the moment of leaving a hole can be somewhat predicted by a player	PASSED	
	Go through walls	player is active during current round	reach arena limit	player position is changed so that the head appears on the opposite side of arena	PASSED	
	Collision	player is active during current round	move forward, reach such a position so that a part of the player head covers a previously drawn trace	player is inactive (no longer able to play in this round)	PASSED	występują przypadki w których kolizja jest wykrywana i player jest zatrzymywany odrobinę za wcześniej jeszcze zanim zetknie się z innym śladem
	Start game	START button was clicked	none	the game is frozen for 3 seconds	PASSED	
				countdown (3, 2, 1, GO!) is displayed as white letters in the middle of the arena	PASSED	
				after the countdown game starts	PASSED	

TestCases - RULES

TEST GROUP	TEST CASE	PRE-CONDITIONS	ACTIONS TO PERFORM	EXPECTED BEHAVIOR	TEST RESULT	COMMENTS
RULES	Pause	arena is loaded round is active	press spacebar key once	round is paused (players haven't changing positions) appropriate text appears on screen to inform that game is paused	PASSED	
	Pause inactive round	arena is loaded round is inactive (countdown or next round delay)	press spacebar key once	no effect on screen and game behavior	PASSED	
	Unpause	arena is loaded round is paused	press spacebar key once	round is active	PASSED	
	Transitions between rounds	arena is loaded	eliminate all players except one (see TC: Collision)	after elimination of penultimate player, last player can move freely for a few second and after that time next round is started	PASSED	
				after next round starts, all traces on arena are cleared	PASSED	
				after next round starts, all settings configured in menu (for the arena and the players) before game started are the same	PASSED	
				after next round starts, all players are freeze on new, random positions within arena	PASSED	
				after 3 seconds from next round start, all players become active and playable again	PASSED	
	Earning points	arena is loaded game is started	eliminate player (see TC: Collision)	every active player in round earns 1 point	PASSED	
			collide two players in a same time (see TC: Collision)	player, which earns 1 point is choosed randomly from both collided players	PASSED	
	End game	game is started	make at least one player to earn at least N*5 points (where N means number of players)	game ends (all players are not able to play) and final screen appears (see GUI TC: Final screen)	PASSED	