

## TestCases - GUI (Tomek)

TEST CASE GROUP	TEST CASE NAME	TEST CASE RESULT
Number of players	Enable new player panel (there cannot be more than 6 players enabled).	PASSED
	Disable existing player panel (there is only possibility to disable a panel if there is more than MinimumNumberOfPanelsEnabled).	PASSED
	Disabling and the enabling the panel restores the previously set data.	PASSED
	Set each player's nickname.	PASSED
Player's nickname	There is a default nickname preset for each eanbled panel.	PASSED
	The nickname lenght is limited to 9 characters.	PASSED
	The nickname is written in capital letters only.	PASSED
	The nickname is unique for each player.	FAILED
	There is no possibility to set empty an string as a nickname.	PASSED
Player's color	Each player has its uqniue color.	PASSED
	Set each player's left and right turn key.	PASSED
	There is no possibility that a player has the same key set for both left and right turn.	PASSED
Player's movement keys	There is no possibility that two players has the same key set.	PASSED
	There is a list of supported keys.	PASSED
	There is no possibility to set the unsupported key.	PASSED
	Each key from the supported key list has its output format abbreviation.	PASSED
Arena size	User is able to choose one of three sizes.	PASSED
Player speed	User is able to choose one of three speeds.	PASSED
Player size	User is able to choose one of three sizes.	PASSED
Start	Pressing start button loads the game arena.	PASSED
Next game	Reloading GUI after the finised game restores the settings from the previous play.	NOT TESTED

## TestCases - GUI + MERGE

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	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 nickname is set to default control keys are set to default	PASSED	na pomarańczowo - opcjonalnie (dot. "Restore player")
		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 nickname is saved so that it can be restored 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 was modified and set	click on the disabled panel	disabled panel becomes enabled nickname is restored (set to the previously set version) control keys are restored (set to the restored version)	OPTIONAL OPTIONAL OPTIONAL	na pomarańczowo - opcjonalnie (dot. "Restore player")  opcjonalnie - do dyskusji (fajnie by było, ale ja tego nie wymagam)
	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 lowercase letters are displayed as corresponding uppercase letters	PASSED	NOTE: 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	PASSED	
		Too long nickname	player panel is enabled	click on the nickname input field and type 10+ characters (letters and digits only)	not possible to type the 10th char - it doesn't appear in the input field	PASSED	a dlaczego 9? u mnie największych mieści się 6
		Characters other than letters and digits	player panel is enabled	click on the nickname input field and type a character other than letter or digit	not possible to type a char other than letter or digit - it doesn't appear in the input field	PASSED	a czemu? dlaczego nie mogą być *AGA* ? :(
	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 (TO BE UPDATED)	left/right control key is set a corresponding abbreviation is displayed (TO BE UPDATED)	TO BE UPDATED TO BE UPDATED	lista klawiszy
		Empty key	player panel is enabled	click on the left/right input field and type 0 characters, click somewhere else	left/right control key is set to default	FAILED/NEEDS INFO	wg mnie klawisze myszy nie powinny być wspierane
		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 doesn't appear in the input field	FAILED/NEEDS INFO	wg mnie klawisze myszy nie powinny być wspierane
		Same keys for different players	player panel is enabled	click on the left/right input field and press a key that is already set for another player	not possible to set an already used key - it doesn't appear in the input field	WIERZE, ŻE 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	NEEDS INFO	co jak ktoś ma małą rozdzielczość?
	Player speed	Default player speed	none	launch the game	player initial speed is set to medium	PASSED	u mnie skalowanie jest możliwe podczas gry - chcemy tak?
		Set player speed	none	set slider position as left/middle/right	player initial speed is set to slow/medium/fast	PASSED	u mnie przy skalowaniu wszystko oprócz kropek (tło i "trejsy") szarzeje
	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	
MERGE	Start game	Start game	players have control keys set distinct	click START button	game arena is loaded arena size is set according to GUI input player and game settings are set according to GUI input	PASSED PASSED PASSED	
	Next round	Next round	round finishes	none	next game is loaded arena size is set according to GUI input player and game settings are set according to GUI input	PASSED FAILED/NEEDS INFO PASSED	trzecia runda z jakiegoś powodu się zmniejsza i widać GUI pod spodem (C)
	Next game	Reload GUI	game finishes	click PLAY AGAIN button ?	Settings are restored	TO BE UPDATED	

## 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	counterclockwise rotation of a direction vector by $\phi$ degrees	PASSED	
			press right control key once	clockwise rotation of a direction vector by $\phi$ 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 $\phi$ 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	
	Go through walls	player is active during current round	reach arena limit	NF: the moment of leaving a hole can be somewhat predicted by a player	PASSED	
				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 odrobine za wcześniej jeszcze zanim zetknie się z innym śladem
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	
				every active player in round earns 1 point	PASSED	
	Earning Points	arena is loaded game is started	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	PASSED	

## TestCases - FLOW

EXPECTED BEHAVIOR	TEST RESULT	COMMENTS
new arena is loaded and player heads appear on the screen according to the new initial position	PASSED	
The game is frozen, there is a countdown: 3, 2, 1, GO!	PASSED	
white letters in the middle of the arena	PASSED	
after the countdown game starts	PASSED	
when the game is finished, a final screen with a score board appears	PASSED	
the final screen is a shaded layer put on top of the last scene	PASSED	
the colors from the GUI palette are used	PASSED	
the display text is consistent with findings	PASSED	
the score board is sorted in descending order	PASSED	
"Play Again" button allows to go back to the GUI	PASSED	
next game starts with the previous game settings	PASSED	
general game flow is preserved (GUI - Countdown - Arena - ... - Countdown - Arena - Score board - GUI - Countdown - Arena - etc.)	PASSED	