

Test Plan		
Home Page		
Function	Testing	Result
Cursor Should be visible on screen	Open program & move mouse around on screen	Cursor is visible as expected
Any GUI Elements should display properly	Open program & check the home page against its corresponding wireframes	All GUI elements are displayed as shown on the wireframes
All buttons should turn red and play a sound depending on settings once the mouse hovers over each one	hover over button with cursor	All Buttons turned red and play sound as expected unless the settings have been set false, in which case the buttons turn red but do not make sound
All Buttons should execute their respective procedures, playing a noise to signal the change depending on settings	Left click on button with mouse	Buttons execute their corresponding procedures as expected, playing sound depending on the settings
Exits program when escape key is pressed	Open program, press escape	Escape key exits program as expected
Instructions Page		
Cursor Should be visible on screen	Open program, navigate to the instructions page & move mouse around on screen	Cursor is visible as expected
Any GUI Elements should display properly	Open program & observe instructions page to check for any faults in rendering or spelling errors	All GUI elements render as expected, no spelling errors are observable
When hovering over the Main Menu button, the text should change colour to red & play a sound depending on settings	Open program, navigate to the instructions page & hover over the main menu button	Button changes colour as expected as well as playing a sound
Main Menu Button should take you back to the home page after playing a sound based on settings	Open program, navigate to the instructions page & click the main menu button	Button takes you back to the home page and plays a noise as expected
Settings		
Cursor is visible on screen	Open program, navigate to settings page & move mouse around the screen	Cursor is visible as expected
GUI elements should display properly	Open program, navigate to settings page & observe the GUI for any rendering faults or spelling errors	All GUI Objects display as expected
When hovering over the buttons, the text should change colour & play a sound depending on settings	Open program, navigate to settings page & hover over the buttons with the mouse	All buttons change colour as expected as well as playing a sound

Usability		
Aspect	Achieved	
Is the program consistent		
Is the program easily understood (instruction, settings etc)		
Is the program easy to use (buttons right size & position etc)		

When you click the music button, it toggles the text to True/False and sets the corresponding setting to True/False	open program, navigate to settings page & click the button	Changes Text & Settings value as expected
When you click the sound effects button, it toggles the text to True/False and sets the corresponding setting to True/False	open program, navigate to settings page & click the button	Changes Text & Settings value as expected
<b>Game</b>		
Cursor is not visible	open program, navigate to new game page & move mouse around screen	No cursor appears as expected
GUI elements should display properly	open program, navigate to new game page & observe	All GUI elements display as expected
when up arrow is pressed, rotate block clockwise & play sound effect	open program, navigate to new game page & press the up arrow key	function is executed and the block on screen rotates 90 degrees as long as its within the bounding boxes of the grid & plays sound effect appropriately
When left or right arrow is pressed, move block right or left & play sound effect	open program, navigate to new game page & press the left or right arrow key	function is executed and the block on screen moves either left or right one space as long as its within the bounding boxes and plays sound effect appropriately
When down arrow is pressed, move block down & play sound effect	open program, navigate to new game page & press the down arrow key	function is executed and the block on screen moves down one space as long as its within the grid bounding box and plays the sound effect properly
current score should be displayed in the right side of the screen	open program, navigate to new game page & observe the UI, printing out the users score during the gameplay loop may help find any issues	score is displayed correctly in the right position, score also is added correctly
A new random block should appear once the last current block has reached the bottom of the grid and hit the ground	open program, navigate to new game page, wait until the current block hits the grid base and watch to check for a new, different block to appear	block is properly randomised and waits until the other current block is out of play before rewarding 50 points and drawing a new block to the screen
music should only be played if the setting for music is toggled on	open program, navigate to settings page & set the music button to true, then navigate to the new game page and listen for music	music comes on appropriately and is muted if the setting for it is toggled off
sound effects should only be played if the setting for sound effects is toggled on	open program, navigate to settings page & set the sound effects button to true, then navigate to the new game page & listen for sound effects	sound effects play appropriately and is muted if the setting for it is toggled off
the block should fall down one space every 30 frames	open program, navigate to new game page and watch the newly drawn block	block falls without input at 30 frame intervals, as expected
the speed of the falling blocks should speed up every 500 points the user has gained	open program, navigate to new game page and play the game for a bit, wait to see an increase in speed of the blocks falling	block falls faster in conjunction with a higher score as expected

once a full line is full of blocks, a function should run to give the user 100 points and to remove the blocks, pushing every other block above it down one space	open program, navigate to new game page & play the game, try to fill an entire line	lines clear, score increases as expected
blocks should stop falling once they reach the grid base or another stacked block	open program, navigate to new game page and try to stack the blocks on the y axis	the blocks stop once they encounter another stacked block or the grid base
blocks shouldn't be able to move left or right if there is a block or the grid boundaries at either side of them	open program, navigate to new game page & try to move the blocks into each other on the x axis	unable to move left & right once blocks are up against other rectangles in the block group, blocks input as expected
the game should switch to the name input screen once the blocks have reached the top of the grid	open program, navigate to new game page & try to stack the blocks up as high as possible	Once reaching a specific y value, the game changes pages to the name input screen to enter your name
<b>Name Input</b>		
Cursor Should be visible on screen	open program, navigate to the scoreInput page & enter your initials	cursor is visible, as expected
GUI elements should display properly	open program, navigate to the scoreInput page & observe UI, checking for spelling & rendering errors	All GUI elements render properly
When typing thier name, the name should only be allowed to be 3 characters long and only alphabetical characters	open program, navigate to the scoreInput page & type your name, making sure to test non-alphabetical characters and to type more than 3 characters	Function handles user input properly, blocking illegal character presses and preventing any name larger than 3 characters long, as expected
<b>Highscore</b>		
Cursor Should be visible on screen	open program, navigate to the highscore page & enter your initials	cursor is visible, as expected
GUI elements should display properly	open program, navigate to the highscore page & observe the UI to check for spelling or rendering errors	all GUI elements display as expected
button text colour turns red when hovered over	open program, navigate to the highscore page & hover over the buttons	all buttons turn red when hovered over, playing a sound
on click buttons should execute their respective functions	open program, navigate to the highscore page & click on the buttons	all buttons execute their respective functions properly, playing a sound once done