

Unit	Topic	Lesson	Lesson Objectives
<b>Flash Game Development</b>			
<b>Course Overview</b>			
		<b>Introduction</b>	<ul style="list-style-type: none"> <li>Describe the goal of the course</li> <li>Describe the types of jobs that require animation skills</li> <li>List tips for achieving academic success in the course</li> </ul>
		<b>Start the Course</b>	<ul style="list-style-type: none"> <li>Identify computer requirements</li> <li>Learn how to move through the course</li> <li>Switch between windows</li> </ul>
		<b>Set Up Your Computer</b>	<ul style="list-style-type: none"> <li>Find files and folders on a computer</li> <li>Set up a computer to show the List folder view and file name extensions</li> <li>Make a course folder</li> </ul>
		<b>Set Up a Browser and Install 7-Zip</b>	<ul style="list-style-type: none"> <li>Set up a Web browser</li> <li>Download and install a zip utility</li> </ul>
		<b>Download Resources and Zip Assignments</b>	<ul style="list-style-type: none"> <li>Get the course resources</li> <li>Zip and unzip files and folders</li> </ul>
<b>Zoo Escape</b>			
		<b>Set Up the Rooms</b>	<ul style="list-style-type: none"> <li>Identify the purpose of branching in a game</li> <li>Create and save a Flash project</li> <li>Set up the Flash workspace</li> <li>Add and name keyframes</li> </ul>
		<b>Create a Room</b>	<ul style="list-style-type: none"> <li>Arrange panels in the workspace</li> <li>Open an external library and copy the assets to an internal library</li> <li>Add, name, and arrange layers</li> <li>Use the Undo and Redo commands</li> <li>Add and align images</li> </ul>

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		<b>Add Text</b>	<ul style="list-style-type: none"> <li>Lock layers</li> <li>Prepare the Text Tool</li> <li>Add text</li> </ul>
		<b>Create More Rooms</b>	<ul style="list-style-type: none"> <li>Add more background images and doors on other frames</li> <li>Edit text</li> <li>Add play again buttons</li> </ul>
		<b>Control the Timeline</b>	<ul style="list-style-type: none"> <li>Test the game</li> <li>Open the Actions panel</li> <li>Write an ActionScript stop() function</li> </ul>
		<b>Create and Edit Buttons</b>	<ul style="list-style-type: none"> <li>Convert movie clip symbols to button symbols</li> <li>Give instance names to symbols</li> <li>Open a symbol's child Timeline and edit it</li> </ul>
		<b>Code the First Doors</b>	<ul style="list-style-type: none"> <li>Write an event handler</li> <li>Code the doors in the first room to move to other rooms when they are clicked</li> <li>Check the syntax of the code</li> </ul>
		<b>Code the Other Buttons</b>	<ul style="list-style-type: none"> <li>Code the back button to move to the start room</li> <li>Code the doors in other rooms to move to the correct frames</li> </ul>
		<b>Make a Title Screen</b>	<ul style="list-style-type: none"> <li>Create title screen frames</li> <li>Add and align the title image</li> <li>Add a start button</li> <li>Code the title screen so the start button moves to the first room</li> <li>Publish the game as SWF and HTML files</li> </ul>

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	<b>Pirate Ship Peril</b>		
		<b>Make the Title Screen</b>	<ul style="list-style-type: none"> <li>Create and save a new project</li> <li>Open an external library and copy the assets to an internal library</li> <li>Add and align the background image</li> <li>Add a title, text, and a start button</li> </ul>
		<b>Create Level 1</b>	<ul style="list-style-type: none"> <li>Add the maze, ship, and goal</li> <li>Add frame labels</li> <li>Add a stop() function</li> <li>Name the symbol instances</li> <li>Check the syntax and test the game</li> </ul>
		<b>Code the Ship</b>	<ul style="list-style-type: none"> <li>Open the ship's child Timeline and add code inside it</li> <li>Position the ship at the start of the maze</li> <li>Code the ship to move when the mouse clicks and drags it</li> </ul>
		<b>Add a Goal Hit Test</b>	<ul style="list-style-type: none"> <li>View bounding boxes of symbols</li> <li>Write a hit test between the bounding boxes of the ship and goal</li> </ul>
		<b>Add Maze Hit Tests</b>	<ul style="list-style-type: none"> <li>Write a hit test between the maze's shape flag and the ship's registration point</li> <li>Change the hit test to use a point on one edge of the ship's bounding box</li> <li>Add hit tests between the maze and points on the other edges of the ship</li> </ul>
		<b>Add a Timer</b>	<ul style="list-style-type: none"> <li>Add dynamic timer text to the game</li> <li>Set the timer at 40 seconds</li> <li>Write a countdown function that counts down from 40</li> <li>Use an interval to call the function once per second</li> </ul>
		<b>Make Level 2</b>	<ul style="list-style-type: none"> <li>Add the game elements to the Level 2 frame</li> <li>Change the maze to a more difficult one</li> <li>Copy and paste code from one frame to another</li> <li>Add a Level 2 title screen</li> </ul>

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		<b>Add End Screens</b>	<ul style="list-style-type: none"> <li>Add and name keyframes</li> <li>Add the end screen background and text</li> <li>Add and code play again buttons</li> <li>Publish the game as SWF and HTML files</li> </ul>
	<b>Dragon Tamer</b>		
		<b>Add Game Items</b>	<ul style="list-style-type: none"> <li>Change the document size</li> <li>Add the background and maze</li> <li>Add the player and lives</li> <li>Add collection items</li> </ul>
		<b>Code the Player</b>	<ul style="list-style-type: none"> <li>Code the player to move with the arrow keys</li> <li>Add hit tests between the maze's shape flag and points on the player's edges</li> </ul>
		<b>Code the Food Items</b>	<ul style="list-style-type: none"> <li>Make item and life variables</li> <li>Add hit tests between the collection items and the player</li> <li>Increase the score and move the item when the player collects it</li> <li>Code the goal so the player wins if they reach the goal with all the items</li> <li>Add end screens</li> </ul>
		<b>Add an Enemy</b>	<ul style="list-style-type: none"> <li>Add an enemy that looks like a flame</li> <li>Open the enemy symbol's code window</li> <li>Add code that makes the enemy move with artificial intelligence</li> <li>Create hit tests between the enemy and the maze</li> </ul>
		<b>Hurt the Player</b>	<ul style="list-style-type: none"> <li>Code the player to lose a life and reset its position when it hits an enemy</li> <li>Export sounds from the Library panel</li> <li>Code the player to scream when it hits an enemy</li> <li>Add more enemies</li> <li>Code the game so the player loses when all the lives are lost</li> </ul>

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		<b>Add Music and a Title Screen</b>	<ul style="list-style-type: none"> <li>Add background music to the game</li> <li>Stop the sound on title and end screens</li> <li>Add a title screen with a play button and text</li> <li>Publish the game as SWF and HTML files</li> </ul>
		<b>Space Scavenger</b>	
		<b>Scroll the Stars</b>	<ul style="list-style-type: none"> <li>Change the document size and background color</li> <li>Add a starry background with stars that appear near and others that look far</li> <li>Code the game so the starry background scrolls vertically</li> <li>Create a parallax perspective by scrolling the near stars faster than the far stars</li> </ul>
		<b>Add the Spaceship</b>	<ul style="list-style-type: none"> <li>Add the spaceship to the game</li> <li>Code and name frames in the ship's child Timeline</li> <li>Code the ship to move with the arrow keys and to stay on the Stage</li> <li>Add the laser and code it to appear when the spacebar is pressed</li> <li>Use an alpha effect to make the laser disappear quickly or fade</li> </ul>
		<b>Add Enemies</b>	<ul style="list-style-type: none"> <li>Add an enemy that looks like space junk</li> <li>Code the enemy to appear randomly at the top of the Stage</li> <li>Code the enemy to move downward at a random speed</li> <li>Reset the enemy at the top of the Stage when it reaches the bottom</li> <li>Write a for loop that duplicates the enemy so there are three enemies</li> </ul>
		<b>Make a Scoreboard</b>	<ul style="list-style-type: none"> <li>Add a scoreboard with static and dynamic text for the score and time</li> <li>Create variables for the time, score, lives, and level</li> <li>Code the scoreboard to display the variables</li> <li>Code the timer to count down once per second</li> </ul>

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		<b>Make Title and End Screens</b>	<ul style="list-style-type: none"> <li>Make an end screen that displays the level, score, and a message</li> <li>Remove the duplicated enemies from the end screen</li> <li>Add and code a play again button on the end screen</li> <li>Add a title screen with a start button and text</li> <li>Code the title screen's start button to start the game</li> </ul>
		<b>Hurt the Player</b>	<ul style="list-style-type: none"> <li>Code the player to lose a life when an enemy hits it</li> <li>Reset the enemies at the top when an enemy hits the player</li> <li>Export explosions and play an explosion when an enemy hits the player</li> <li>Add a health bar and code it to show how much life the player has left</li> </ul>
		<b>Destroy Enemies</b>	<ul style="list-style-type: none"> <li>Add a hit test between the laser and the enemies</li> <li>Code the game to increase the score when the laser hits an enemy</li> <li>Play an explosion when the laser hits an enemy</li> <li>Code the game to create a new level whenever the player hits 10 enemies</li> <li>Reset the timer and add an enemy when the player reaches a new level</li> </ul>
		<b>Restore Health</b>	<ul style="list-style-type: none"> <li>Add a health pack that appears when the player reaches a new level</li> <li>Code the health pack to restore a life to the player when the player hits it</li> <li>Limit the lives to 4 so the player can't collect too many</li> <li>Publish the game as SWF and HTML files</li> </ul>
		<b>Robot Rescue</b>	
		<b>Make the Start Room</b>	<ul style="list-style-type: none"> <li>Set up the game and add a room background</li> <li>Add, rotate, and position doors on each wall</li> </ul>
		<b>Add the Player</b>	<ul style="list-style-type: none"> <li>Add the player robot to the game</li> <li>Code and name frames in the player robot's child Timeline</li> <li>Code the player to move with the arrow keys and stay on the Stage</li> <li>Add the sleeping and awake helper robot to the game</li> </ul>

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		<b>Code the Doors</b>	<ul style="list-style-type: none"> <li>Add the room background and doors to other rooms</li> <li>Code the doors to move to the correct rooms when the player hits them</li> <li>Change the hit test to use the door's shape flag and points on the player's edges</li> </ul>
		<b>Collect Objects</b>	<ul style="list-style-type: none"> <li>Add a key and code it so the player can collect it</li> <li>Create a locked door that opens when the player has the key</li> <li>Add and code collection objects in the choice room</li> </ul>
		<b>Wake Up the Helper</b>	<ul style="list-style-type: none"> <li>Code the sleeping helper to disappear when the player touches it with the battery</li> <li>Code the awake helper to appear when the sleeping helper disappears</li> <li>Code the awake helper to follow the player robot through the rooms</li> <li>Add the generators and power buttons to the power room</li> <li>Code the game so the player can win and lose</li> </ul>
		<b>Add a Title and Sound</b>	<ul style="list-style-type: none"> <li>Add a title frame, image, play button, and text</li> <li>Add background music to the game and adjust the volume</li> <li>Add and code sounds for when the player collects items and wakes the helper</li> <li>Open Flash's built-in sound library</li> <li>Publish the game as SWF and HTML files</li> </ul>