

Software Development One

CMPT 220 • Spring 2014

- Project One - 125 points

Goal	I want to see what you learned in <i>Introduction to Programming</i> . I also want you to have fun with developing an interactive fiction adventure, since that's what we'll be doing all semester.
Instructions	Design, develop, and test (a lot) the 1.0 release version of your very own, original, interactive fiction game in the spirit of Adventure and Zork in JavaScript .
Deliverables	<ul style="list-style-type: none"><input type="checkbox"/> Display the title of your game on the game page.<input type="checkbox"/> Write an <code>init()</code> function called from the <code><body></code> tag's <code>onload</code> event. This <code>init</code> function should display the first location's text in the main <code>textarea</code>.<input type="checkbox"/> Use a matrix (two-dimensional array) for location navigation; no if-else, no switch-case; no linking objects (yet).<input type="checkbox"/> Write a function that takes the <i>current location</i> and <i>direction moved</i> as parameters and returns the new location (or the same location if it's an invalid move).<input type="checkbox"/> Provide four buttons: North, South, East, and West, each of which will take the player to a different location in your game.<ul style="list-style-type: none">• Visually indicate which of the directional buttons are valid for the current location by dynamically enabling or disabling them as necessary every time the location changes.<input type="checkbox"/> Implement a case-insensitive text input control in which the user can enter text commands.<ul style="list-style-type: none">• Valid commands are the directionals n, s, e, w; i for inventory; and h for help. (Maybe d for dance, if you're into that. Feel free to add more. Make it fun.)• If the player enters an invalid command then say so in the game's <code>textarea</code> and explain the valid commands.• Note: The directional buttons must also work. Playing the game with the buttons should be the same as typing directional commands.<input type="checkbox"/> Add a "go" button next to the text input control that the player can press to denote that he or she is done entering text and the command should be processed. Pressing the enter key should trigger the same action.<input type="checkbox"/> Your game must have at least eight (8) different locations.<input type="checkbox"/> Develop a <code>Location</code> prototype <code>{id, name, description, item[], toString()}</code><input type="checkbox"/> Instantiate an instance of <code>Location()</code> for each location in your game.<input type="checkbox"/> Store the location instances in a global array.<input type="checkbox"/> Write an event handler to display each location using the current location and the (global) array of location instances.<input type="checkbox"/> Draw a map of your game environment and include it on the game page.<input type="checkbox"/> Keep score. Add five (5) points the first time each time the player goes to a location.<input type="checkbox"/> Display the score on the game page.<input type="checkbox"/> Develop an <code>Item</code> prototype <code>{id, name, description, toString()}</code><input type="checkbox"/> Instantiate an instance of <code>Item()</code> for each item that can be found in your game (at least four (4) of them, please) and then store zero or more at each location.<input type="checkbox"/> Declare a global array to hold the player's inventory.<input type="checkbox"/> Allow the player to take items and put them in their inventory.
Source Code	<ul style="list-style-type: none"><input type="checkbox"/> Your code must separate structure from presentation, be professionally formatted, use and demonstrate best practices, and make me proud to be your teacher.
Submitting	Push to your GitHub repository early and often, with great commit messages. Push the final version before the class in which it is due and e-mail me a link to your repository. Neatness counts.