

# CIS 3344 Lab 3 – JavaScript

---

The goal of this assignment is to give you some experience working with JavaScript to make a Web page interactive. This assignment will involve creating an interactive video game web application.

## Requirements:

1. Create a Lab3 folder inside the root of your website, which will be used to publish the webpage and images for this assignment.
2. Create the Games.html HTML page that implements a web store that allows the user to read information about video games. This application will allow the user to search for games and find games that meet their criteria.
  - a. Create an array to store JavaScript objects that represent each video game with its necessary data. The JavaScript object will contain the title, developer, release date, game description, price, genre (action, adventure, simulation, sports, etc...), game rating (1 to 5 stars), platform (PC, PS4, Xbox One, Nintendo Switch, etc..), and an image of the video game (source URL of the image).
    - i. Create at least 5 games for each genre, and at least 5 genres.
    - ii. A game may be available for more than one platform. For example, one game may be available for PS4, Xbox, and PC.
  - b. The page will need a drop-down list to select the gaming platform (PC, PS4, Xbox One, etc...). Once the user selects a platform, the page should display all the games in the array that match that gaming platform.
    - i. The search results should only show the image of the game, title, and price for each game.
    - ii. Provide a way for the user to view more detailed information on a game. When the user chooses to view more information about the game, the page display should show only the video game they selected along with all of the game's information (title, developer, release date, description, etc...)
    - iii. Also, provide a way for the user to go back to the search results after they are finished viewing the detailed information for a game.
  - c. The page will need a filter tool that allows the user to refine the list of games to meet specific criteria.
    - i. Allow the user to filter the list of games based on a maximum price. This filter should display all the games that are under the maximum price entered by the user and remove all the ones that are above this maximum.
    - ii. Allow the user to filter the list of games based on the genre (action, adventure etc...).
    - iii. Important: you should not delete game objects from the array when performing a search/filter since you will need the list of games for the application to use.
    - iv. Also, provide a way for the user to go back to the search results after they are finished viewing the detailed information for a game.

- d. The page will need the ability to add a new game to the list.
  - i. Modify the display to show only the necessary controls needed to get the game information from the user.
  - ii. Create a JavaScript object with data coming from the form controls and store the object in the array.
  - iii. The user can enter a URL for an image since you cannot allow them to select an image and upload it to your website.
  - iv. The form should use a mixture of controls and not use textboxes for all input.
  - v. You need to use input validation for all inputs.
  - vi. Display a confirmation message that the game was added successfully.
  - vii. Once the new game is added, you should reload the page as though they are entering the store-front for the first time (use `location.reload();` in JavaScript).
- 3. Also, you need to use CSS to style the page and make it look professional and attractive.
  - a. The page should have a store-front with some content. This means you should not have a blank store-front page with no content before the user performs a search.
  - b. Make sure your display is consistent with consistent image sizes and alignments.
- 4. Remember to add a section to the labs.html page created in Lab 1 for this lab.
  - a. Include a description of what you learned, what elements you liked/disliked, and a link to the page you created for Lab 3.
- 5. Extra credit opportunity:
  - a. Implement the ability to display different images for the ratings. For example, display a different image for 1 star, 2 stars, 3 stars, 4 stars, and 5 stars.
  - b. Implement “Deals of the Day” where certain games that are discounted can be displayed on the page’s store-front. This display must be dynamic, which means you need to use JavaScript to find the games that are part of the promotion and display them.

### **Submission:**

You need to publish your Web site to the cis-iis2 Web server, upload your code as a zip file containing your entire Web site to Canvas, and provide the URL to your home page. Make sure a current version of your Web site along with a backup copy is located in your G:\cis3344 folder. Assignments that are not submitted properly will not be graded.

The grade for the required elements is based on the published version of your Web site. This means the elements must work from the published Web site, not just the files submitted through Canvas. It’s important to make sure your published Web site is the current version and that everything works. You should not publish to the Web server after the assignment has been submitted. Otherwise, it will be considered late or may not be accepted when it’s passed the deadline. If you make changes to your Web site, you will need to republish and resubmit the project. Generally, you shouldn’t publish or make

changes until after you receive a grade.

You need to zip the entire Web site folder into a single zip file and submit the assignment in Canvas. To submit the assignment, you need to click the Assignment's Title "**Lab 3**" to view the submission form and upload the file.

**Make sure you properly submit your assignment and that it works. Programs that don't run or don't contain all the necessary files will not be graded and marked late.**