

Adv Js day

Js OOP

1. Display the area and perimeter of an object created from using Rectangle Constructor that has width and height properties and 2 extended methods (using prototype property) for calculating area, perimeter (last day task).
 - a. Override toString() function to display a message declaring the width, height, area and perimeter of the created object.
 - b. Create Class Property that counts numbers of created objects and Class method to retrieve it.
2. Make proper updates in your previous code of generating Rectangle object that should inherit from Shape Constructor, and create your Square constructor that inherits from Rectangle. Prevent creating any object from shape, allow creation of only rectangles and square

Bonus: allow creation of only one square and one rectangle.

3. Create your box object that contains books objects, ensure that you can
 - a. count # of books inside box.
 - b. delete any of these books in box according to book name or type.
 - c. create book object and add it to box object content property
 - d. use toString() to tell its dimensions and how books are stored in it.
 - e. implement valueof() so that if there is more than one box object we can
 - a. get total books in these boxes by adding the i.e. box1 has 5 books while box2 has 2 books, box1 + box2 should return 7

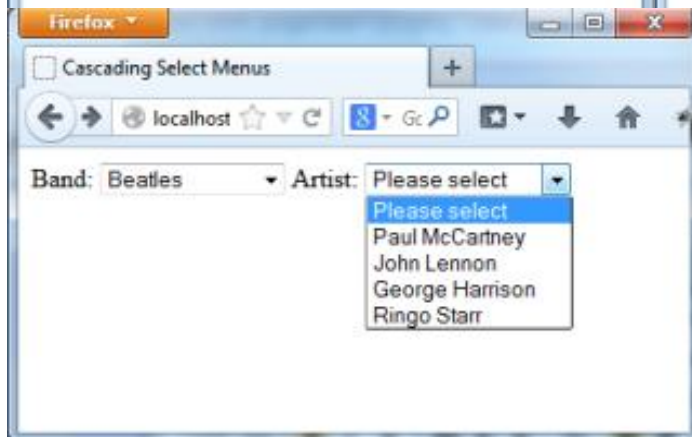
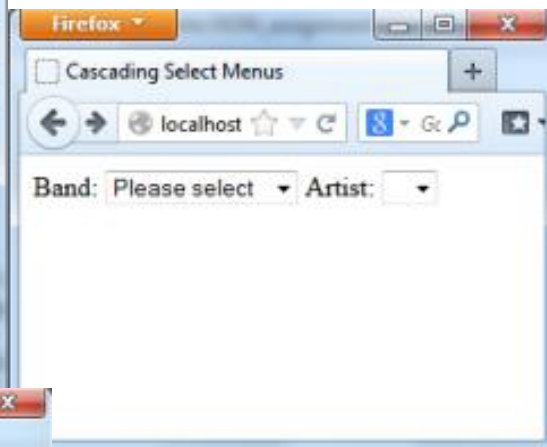
Note:

- there is no inheritance
- **box object has the following properties:** height, width, length, numOfBooks, volume, material, content.
- **The content property** contains an array of books.

- **book object has the following properties:** title, numofChapters, author, numofPages, publisher, numofCopies
- you can define any function needed for both box and book objects.

2. AJAX & Json

1. Make your own interface to display post title and body by requesting posts from this API: <https://jsonplaceholder.typicode.com/posts>
2. find out the rockbands.json file to make a page with 2 dropdown lists, the 1st one is filled with the band and the 2nd one is filled with the artist after selecting a band from its dropdown list. Once the user selects an artist of the band; open his link



1. Cookies

Make your own .js library to create, display and delete cookies, then use it in creating the required cookies to display a greeting message to your visitor with displaying an image as his profile pic referring to his gender, and inform him with his number of visits to the site. Display username and number of visits with font color according to his choices.

Replace the registration page with the profile page using location object the library should have the following functions:

- `getCookie(cookieName)`: Retrieves a cookie value based on a cookie name.
- `setCookie(cookieName,cookieValue[,expiryDate])`: Sets a cookie based on a cookie name, cookie value, and expiration date.
- `deleteCookie(cookieName)`: Deletes a cookie based on a cookie name.
- `allCookieList()`: returns a list of all stored cookies
- `hasCookie(cookieName)`: Check whether a cookie exists or not

