School of Information Technologies
Dr. Ying Zhou

COMP5347: Web Application Development **2.Sem./2017**

Assignment One: Client Side Scripting

Individual Work: 10% **21.03.2017**

Introduction

In this assignment, you will demonstrate that you have basic understanding of the core client side technologies (HTML, CSS and JavaScript) and are able to create a HTML page with desirable style and certain interactive features. You will be given a small start file set, which contains a complete css file and a skeleton HTML file. Your task is to produce an art gallery page similar to Figure 1:

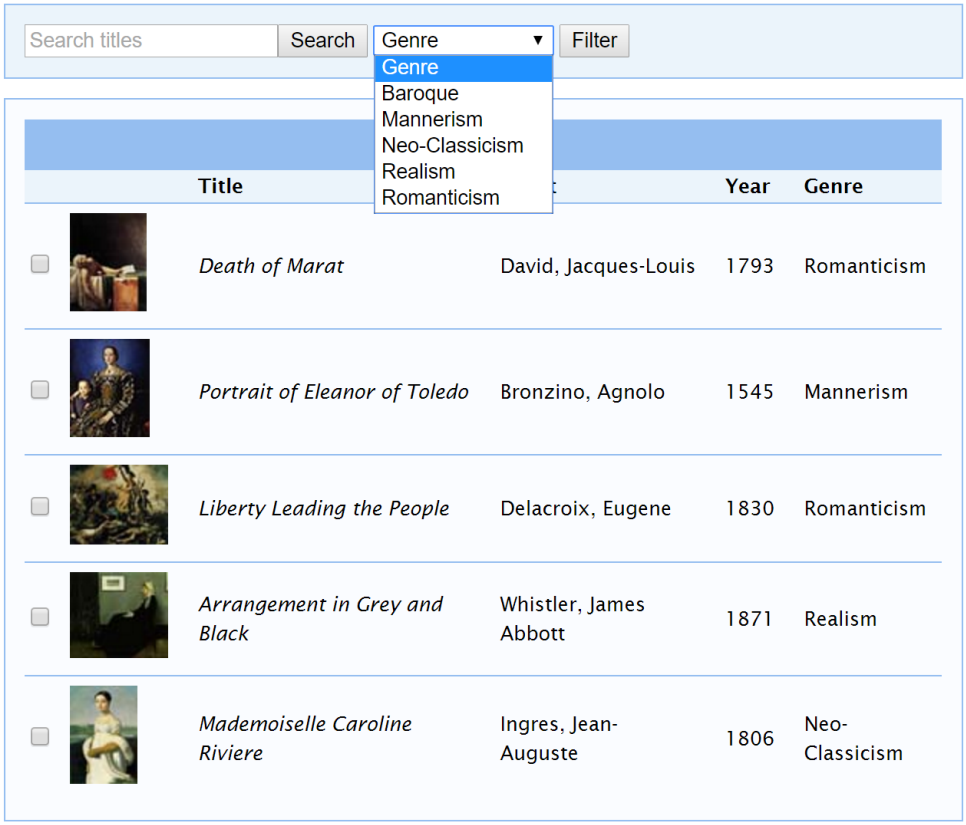

Figure 1: Screenshot of the Art Gallery

The art gallery page as show in Figure 1 displays collection of paintings in a table

format. The information to be displayed for each painting include a thumbnail picture, title, artist, year and genre.

There are two buttons: `Search` and `Filter`, at the top of the page. The `Search` button is expected to search for painting titles that match a given search term. If find, the rows that match the search term will be highlighted with a colored background. The filter button is expected to filter all paintings belonging to a selected genre. An end user can select genre from a drop-down selection list. The selection list may include genres that are currently not in the collection. It should also provide an option representing "select-all" behaviour. For instance, in Figure 1, the first option "Genre" is designed for such behaviour. If "Genere" is selected, the whole collection will be displayed.

Figure 2 shows an example of `Filter` function where the genre "Neo-Classicism" is selected and the only painting in that genre is displayed.

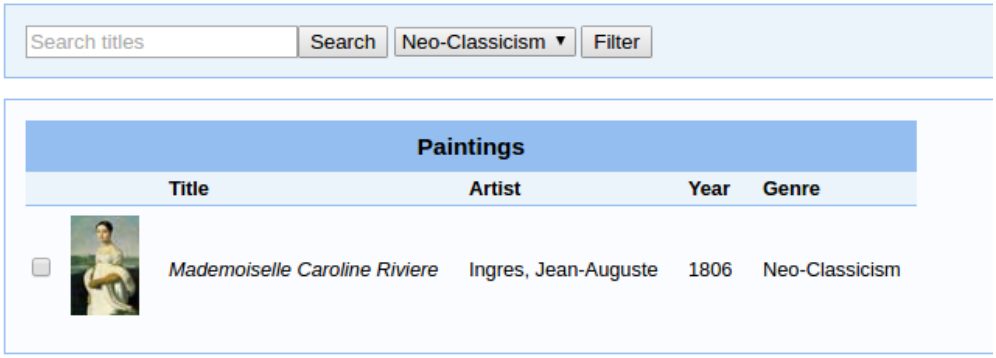

Figure 2: Example of filter function

Figure 3 shows an example of search function. The search term "liberty" appears in one title and that title is highlighted.

Both buttons should be able to work on the results created by the other button to produce a combined result. For instance, Figure 4 shows an example of the combined results of filtering genre "Romanticism" and searching for term "liberty".

Design and Implementation Requirements

You may use your own art collection and genre list. The output does not have to be exactly the same as the example in Figure 1. For instance, you may modify the given css file to have slightly different color scheme, border and text styles. You can also decide if the search is case sensitive or not.

You should design the behaviour of boundary cases and make sure they are distinguishable from other cases. Example boundary cases include, but are not restricted to the following:

- search term does not appear in any title

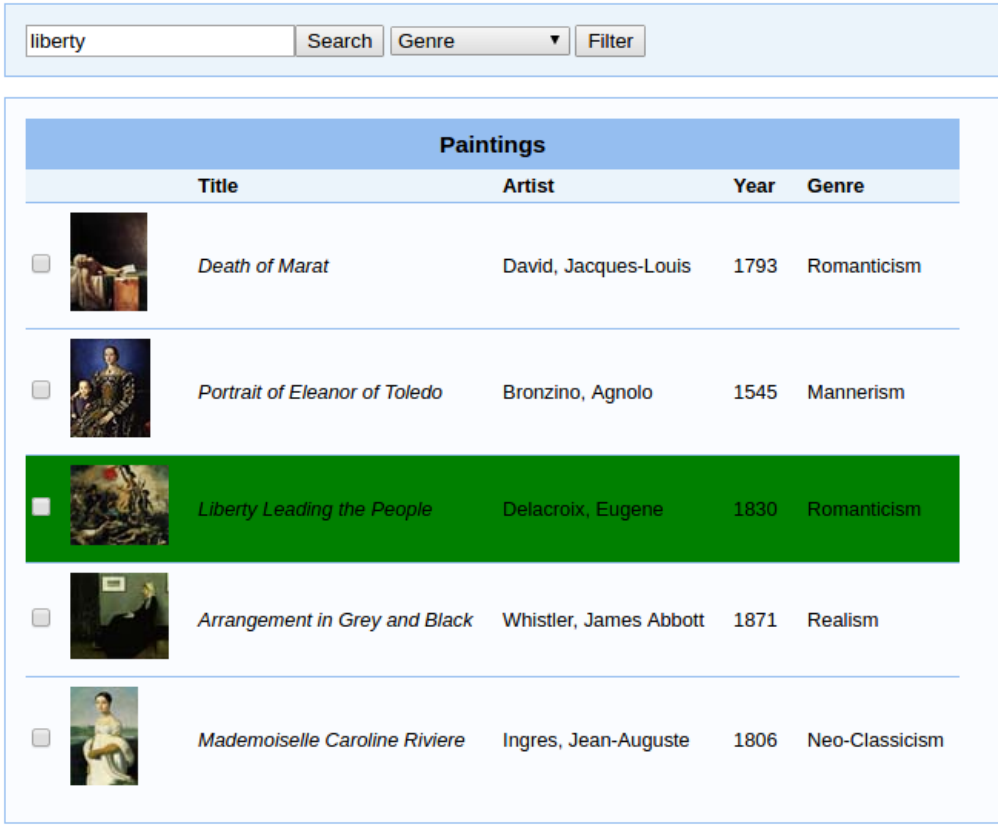

Figure 3: Example of search function

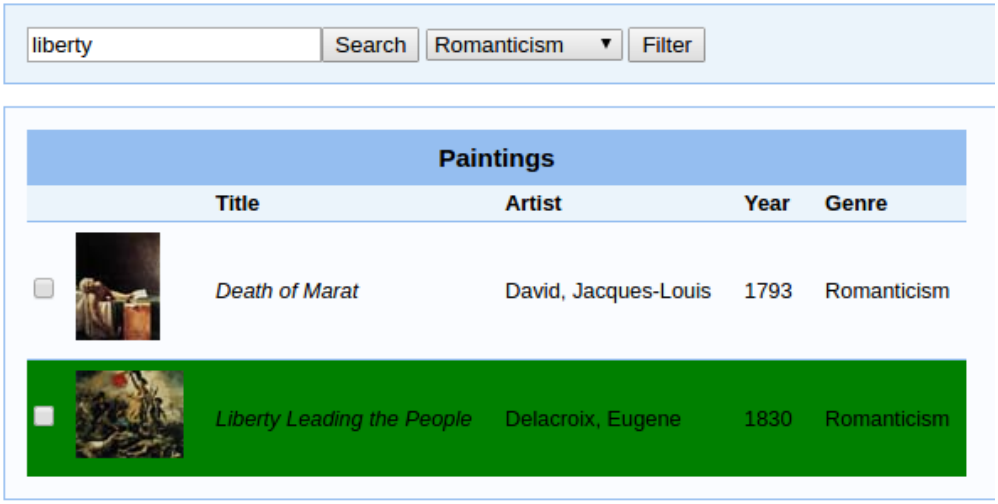

Figure 4: Example of combined filter-search result

- selected genre does not contain any paintings

Make sure that your HTML, CSS rules and JavaScript code are kept in separate files. Inline style or JavaScript code is not accepted.

Make sure that your HTML and CSS files are “clean” enough. They should not contain

any unnecessary automatically generated content such as scattered `<span>` element with pieces of styles.

Use of JQuery or other JavaScript library is not allowed in this assignment.

Mark Distribution

- Static features: 5 marks
  - 3 marks for having all essential elements
  - 2 marks for applying similar styles
- Interactive features: 5 marks
  - 2 mark each for normal search and filter function
  - 1 mark for boundary cases

Deliverable and Submission Guideline

- **Source code submission**
  Submit a zip file containing the HTML, CSS and JavaScript files on eLearning site, before 5:00pm on Tuesday ^{4th} of April, 2017 (week 5). Please do not include the image files in the submission.
- **System Demo**
  Each student will demo to their tutor in week 5 lab with the submitted version.