COMP 3512
Assignment #1: Database-Driven Web Pages

Due Friday October 18, 2013 at midnightish
Assignment #1 Version 1.0 (Sept 22, 2013)

Overview

This assignment provides an opportunity for you to demonstrate your ability to generate web pages from database content using ASP.NET.

Submitting

Put your assignment in a folder named assign1_*yourlogin* (e.g., assign1_fsmi9876). Put all resources used by your assignment into this folder. Copy this folder to the submit drive in B215. You will lose marks if you do not follow these submission instructions.

Grading

The grade for this assignment will be broken down as follows:

Visual Design and Styling	15%
Functionality (follows requirements)	80%

Database

In this assignment you will be provided with a Microsoft Access database containing information for an art store (i.e., artists, paintings, customers, sales, etc). The schema for the database is shown on the next page. To connect to this database, the database file (`Art.mdf`) will have to reside in the `App_Data` folder in the root of your site. You will also have to add/replace the `ConnectionStrings` element in your application's `Web.config` file with the following:

```
<connectionStrings>
    <add name="ConnectionString" connectionString="Provider=Microsoft.Jet.OLEDB.4.0;
       Data Source=|DataDirectory|\art.mdb;Persist Security Info=True" providerName="System.Data.OleDb"/>
</connectionStrings>
```

NOTE: due to word wrapping in Microsoft Word, the above might not be clear. To clarify: the connectionString attribute is all one line that *begins* as follows:

```
connectionString="Provider=Microsoft.Jet.OLEDB.4.0; Data Source=|DataDirectory …
```

I've also provided you with the appropriate `web.config` file.

Database Schema

While the database contains quite a few tables, this assignment will make use of only six tables: artists, works, genres, subjects, orders, and order details. Two linking tables are also used.

An art work has a single artist. An artist can have many art works. An order consists of many order details; each order has a single customer. An order detail has a single art work. An art work can have many subjects and genres.

Examining the Database

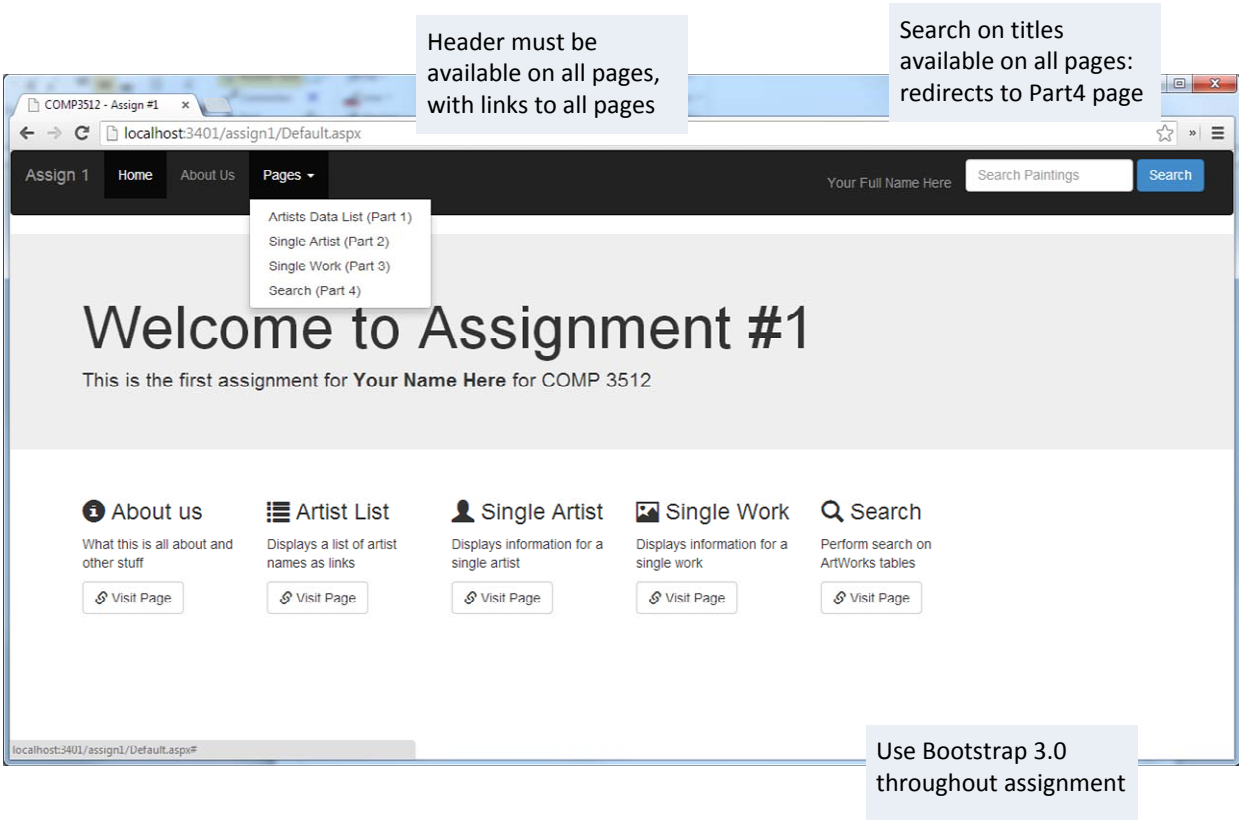
If you have followed the instructions (i.e., database file in `App_Data` folder), then you will be able to examine the database within Visual Studio (since it is an Access database you can also examine it via Microsoft Access). If you double-click on the database file in the Solution Explorer, then you will see a Server Explorer window, through which you can examine the tables, or test SQL queries (via New Query). **You are NOT allowed to change data or table definitions!**

Requirements

This assignment consists of 6 pages with the following functionality:

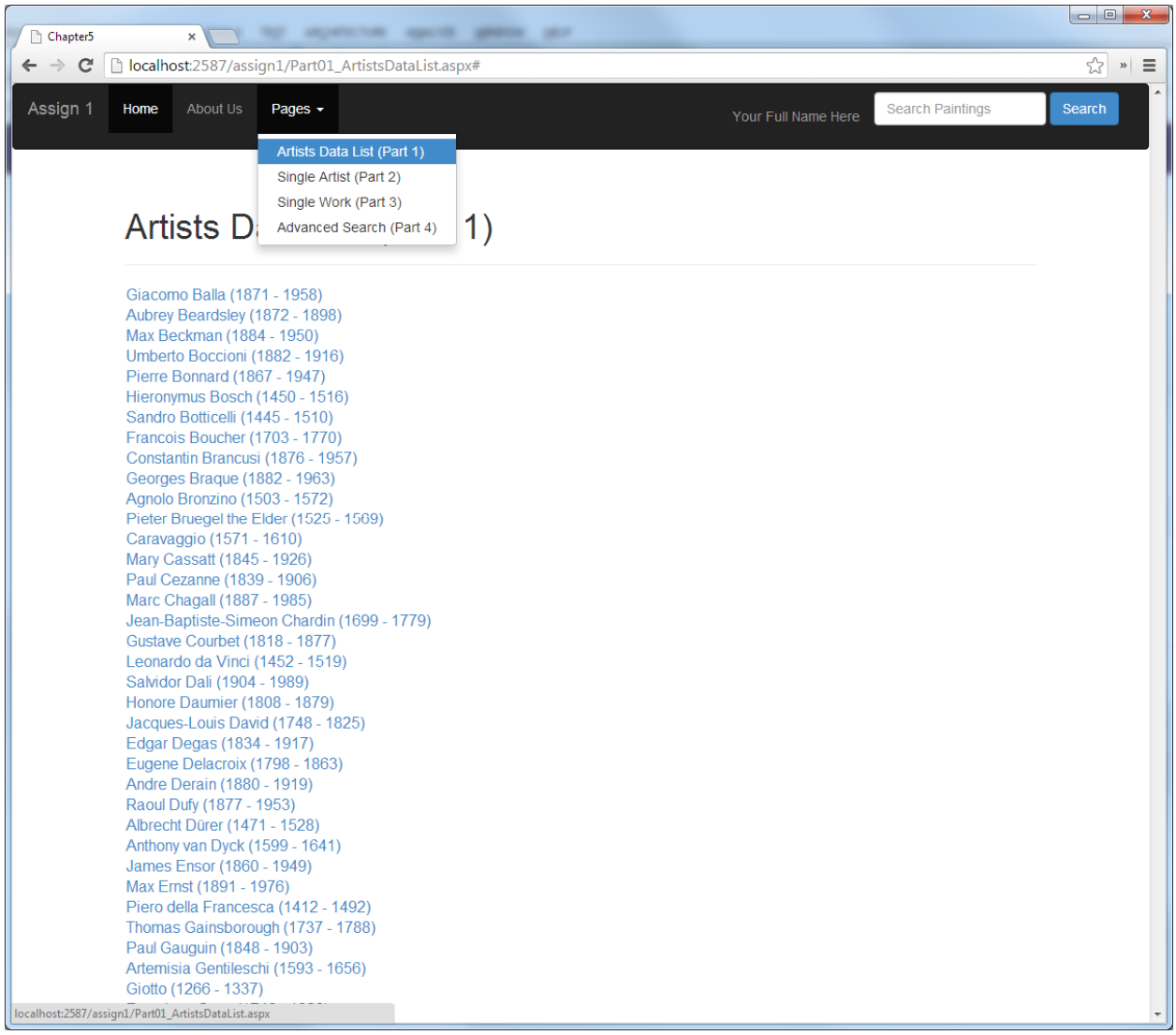
1. You must make use of the Bootstrap CSS Framework (http://getbootstrap.com/) to style and layout your pages. While this framework does have a little bit of a learning curve, you will find that it makes your life as a web developer significantly easier since you will be able to concentrate on programming and let Bootstrap handle the CSS. Look at the examples on the Bootstrap web site to help you understand how the make use of it. You will be using Bootstrap on the other assignments this semester so you might as well start learning it now.
2. The about page must be named `about.aspx`. This about page must specify that this site is an assignment for COMP 3512, your name, and the date [worth 4 marks]
3. The site **must** use a single CSS file for any additional text and color formatting. Though it is optional, you may find using Master Pages (chapter 6) helpful though not essential. [visual design worth 15 marks]
4. All pages must have six links: to `Default.aspx`, `AboutUs.aspx`, `Part01_ArtistsDataList.aspx`, `Part02-ArtistDetails.aspx?id=19`, `Part03-ArtistDetails.aspx?id=394`, `Part04_Search.aspx` pages. [worth 4 marks]

5. The home page **must** be named `default.aspx`. This home page must contain additional links to the pages as shown below:



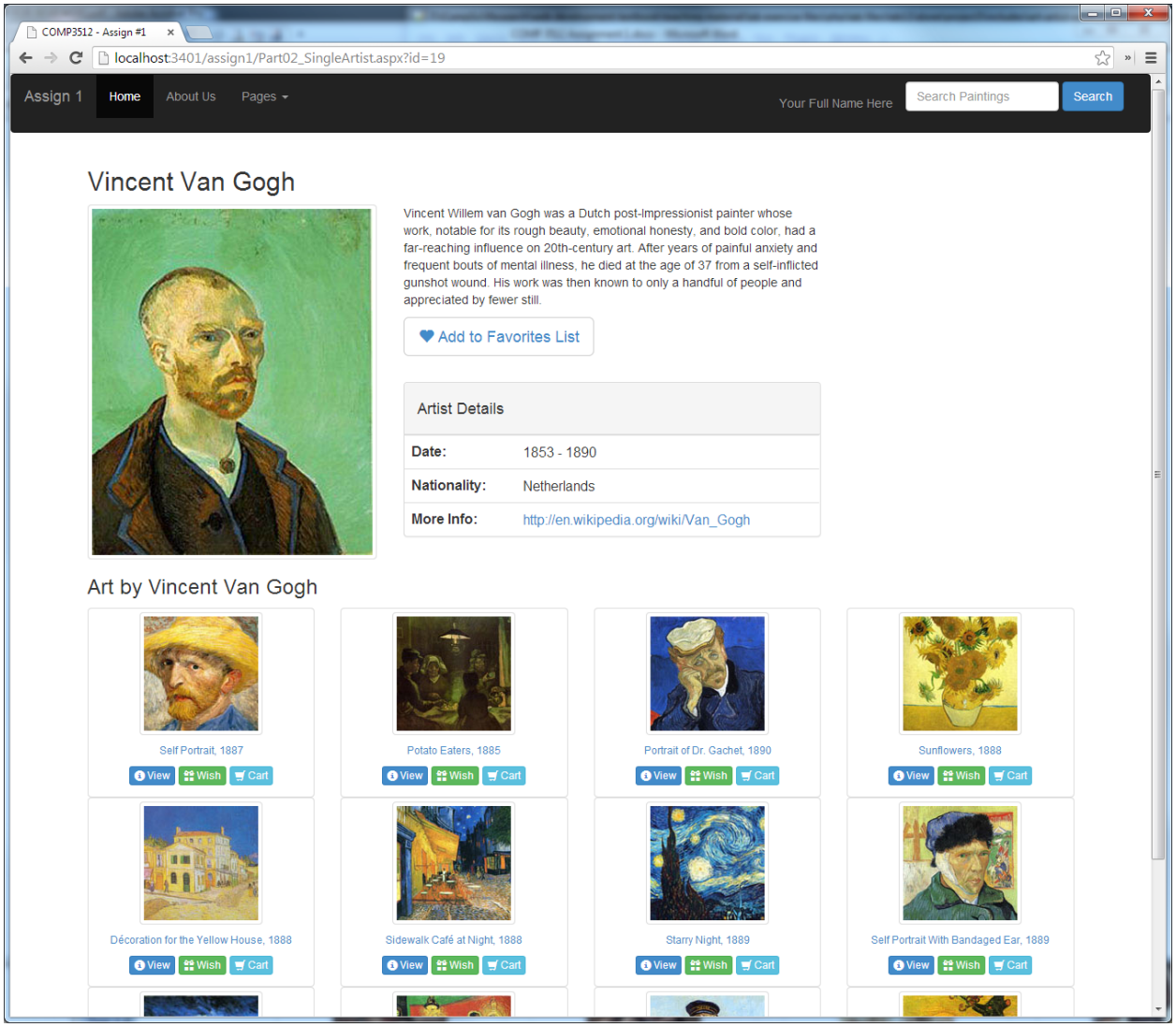
I would also strongly recommend creating the following pages in the order provided below.

6. This page must be named `Part01_ArtistsDataList.aspx`. It must use a `DataList` control (see pages 587-594) to display a list of artist names (from the `Artists` table) that should look like that shown below. Notice the sort order. Each artist should also be a hyperlink to `Part02_SingleArtist.aspx` with a querystring parameter `id` which is equal to the `id` of the artist. Use a `SqlDataSource` for data access. The [worth 8 marks]



7. This page must be named `Part02_SingleArtist.aspx`. This page displays information from the `Albums` and `Artists` tables for a single artist (specified via the artist `id` passed in via a querystring parameter). You must use a `Repeater` or `ListView` control to display the artist information. This page should handle a missing or invalid querystring `id` parameters by redirecting to a page called `Error.aspx` [Hint: `Response.Redirect`].

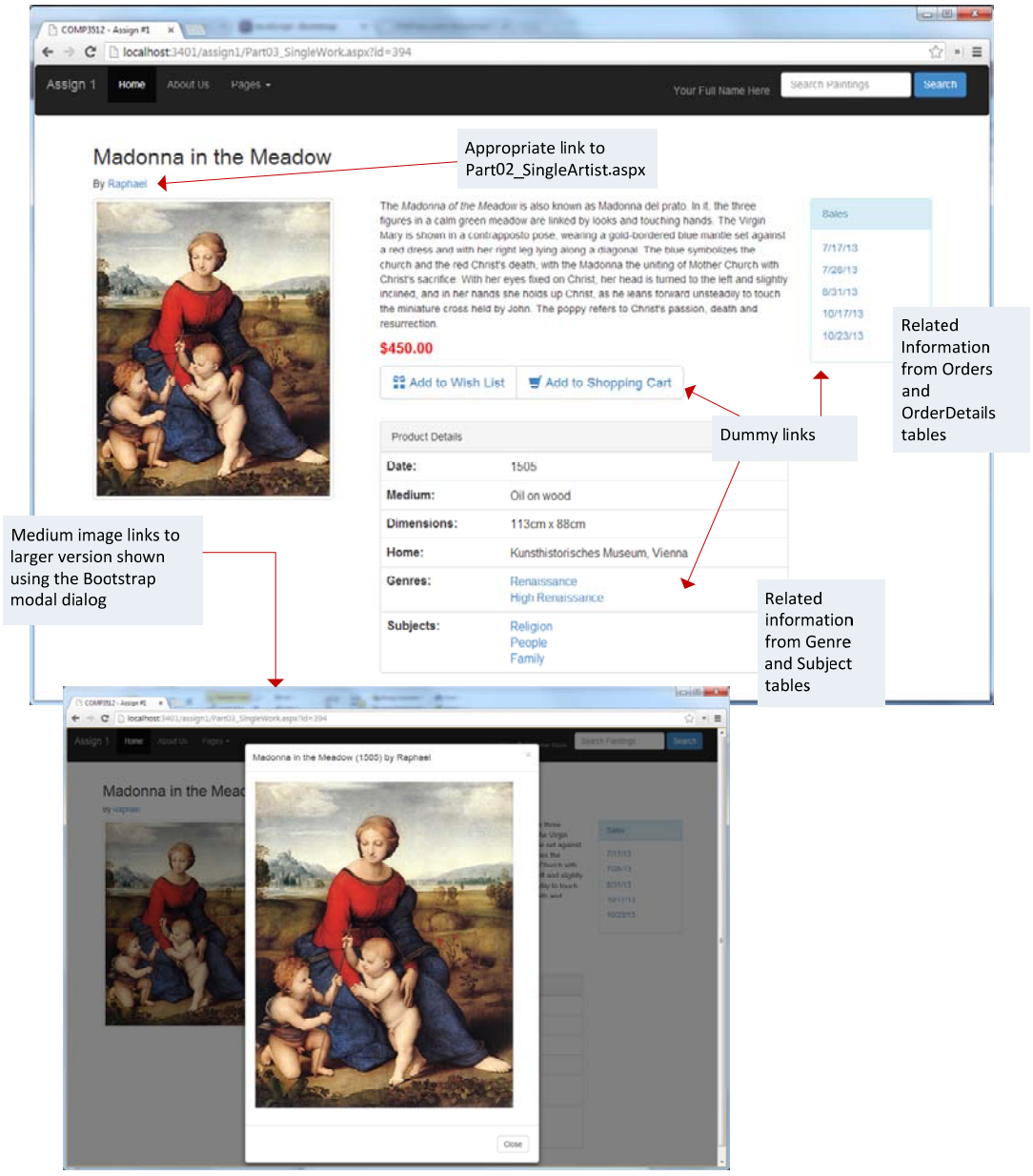
   The works for the artist must be displayed in an embedded `Repeater` control. Use the Bootstrap Thumbnail class. The work's thumbnail, title, and the View button must be links for that work to `Part03_SingleWork.aspx`). Use two `SqlDataSource` controls for data access (one for the requested artist, the other for art works by requested artist). [worth 17 marks]



8. This page must be named `Part03_SingleWork.aspx`. This page displays information from the `Works` and `Artists` tables for a single work (specified via the art work `id` passed in via a querystring parameter). You must use a `Repeater`, `FormView`, or `DetailsView` control to display the painting information (hint: remember that SQL allows you to join information from multiple tables). The artist name must be a link to `Part02_SingleArtist.aspx` for that artist. Notice that you must also display genres and subjects for the requested art work, as well as any orders for the requested art work. Use four `SqlDataSource` controls for data access.

   The image must be a link to the large version. Use the Bootstrap Modal dialog (in Javascript section of documentation) to display the larger version.

   Like with `Part02_SingleArtist.aspx` this page should handle a missing or invalid querystring `id` parameter. [worth 22 marks]

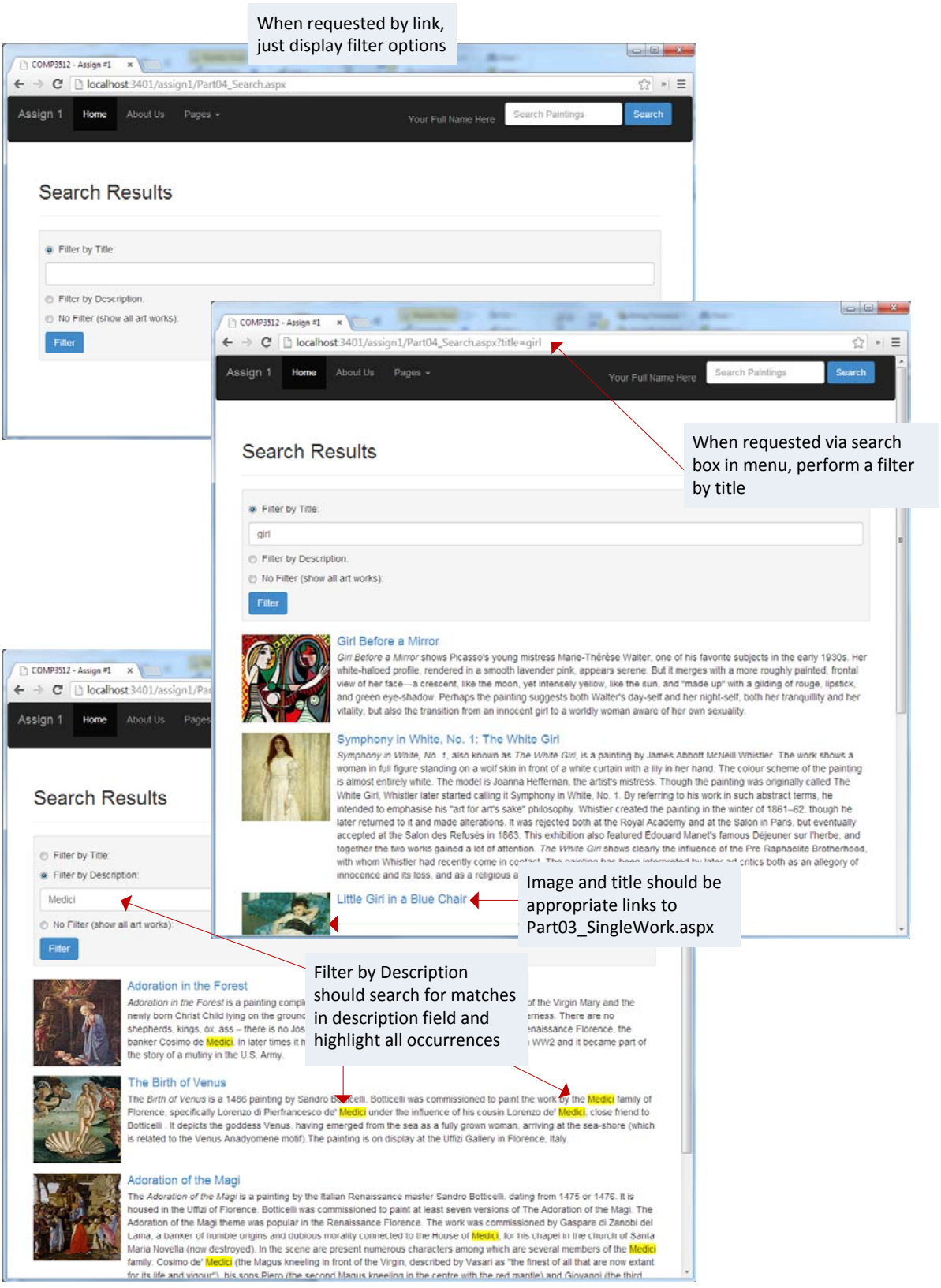


9. This page must be named `Part04_Search.aspx`. It must use a `Repeater` or `ListView` control to display art work information (from the `ArtWork` table) that should look like that shown below. If the page is requested via a link, it should at first display only the filtering criteria. Notice that you will have to hide/show textboxes depending upon the state of the radio buttons. If the user has typed in a value in the search box in the header on any page, then it should redirect to this page using a query string, and perform a filter by Title for the query string value.

   Both title and description searches should use the SQL `LIKE` operator with wildcards so that it matches any occurrence of the search string. When the user presses the Filter button, then display the square art work image, the title, and the description for any matching art works. The title and image must be a link to `Part03_SingleWork.aspx` for that art work.

   If user does a filter by description, then highlight in yellow the search field in the resulting description (hint use `Replace()` method of string; this will be case sensitive, but don't worry about that).

   Do **not** use `SqlDataSource` controls for data access. Instead in this example, use programmatic data binding and ADO.NET. [worth 30 marks]


When requested by link, just display filter options
COMP3512 - Assign #1
localhost:3401/assign1/Part04_Search.aspx
Assign 1
Home
About Us
Pages
Your Full Name Here
Search Paintings
Search
Search Results
Filter by Title:
Filter by Description:
No Filter (show all art works):
Filter
localhost:3401/assign1/Part04_Search.aspx?title=girl
When requested via search box in menu, perform a filter by title
girl
Girl Before a Mirror
Girl Before a Mirror shows Picasso's young mistress Marie-Thérèse Walter, one of his favorite subjects in the early 1930s. Her white-haloed profile, rendered in a smooth lavender pink, appears serene. But it merges with a more roughly painted, frontal view of her face—a crescent, like the moon, yet intensely yellow, like the sun, and "made up" with a gilding of rouge, lipstick, and green eye-shadow. Perhaps the painting suggests both Walter's day-self and her night-self, both her tranquillity and her vitality, but also the transition from an innocent girl to a worldly woman aware of her own sexuality.
Symphony in White, No. 1: The White Girl
Symphony in White, No. 1, also known as The White Girl, is a painting by James Abbott McNeill Whistler. The work shows a woman in full figure standing on a wolf skin in front of a white curtain with a lily in her hand. The colour scheme of the painting is almost entirely white. The model is Joanna Hefferman, the artist's mistress. Though the painting was originally called The White Girl, Whistler later started calling it Symphony in White, No. 1. By referring to his work in such abstract terms, he intended to emphasise his "art for art's sake" philosophy. Whistler created the painting in the winter of 1861–62, though he later returned to it and made alterations. It was rejected both at the Royal Academy and at the Salon in Paris, but eventually accepted at the Salon des Refusés in 1863. This exhibition also featured Édouard Manet's famous Déjeuner sur l'herbe, and together the two works gained a lot of attention. The White Girl shows clearly the influence of the Pre-Raphaelite Brotherhood, with whom Whistler had recently come in contact. The painting has been interpreted by later art critics both as an allegory of innocence and its loss, and as a religious a
Little Girl in a Blue Chair
Image and title should be appropriate links to Part03_SingleWork.aspx
Medici
Filter by Description should search for matches in description field and highlight all occurrences
Adoration in the Forest
Adoration in the Forest is a painting compl
of the Virgin Mary and the
newly born Christ Child lying on the ground
erness. There are no
shepherds, kings, ox, ass – there is no Jos
enaissance Florence, the
banker Cosimo de Medici. In later times it h
WW2 and it became part of
the story of a mutiny in the U.S. Army.
The Birth of Venus
The Birth of Venus is a 1486 painting by Sandro Botticelli. Botticelli was commissioned to paint the work by the Medici family of Florence, specifically Lorenzo di Pierfrancesco de' Medici under the influence of his cousin Lorenzo de' Medici, close friend to Botticelli . It depicts the goddess Venus, having emerged from the sea as a fully grown woman, arriving at the sea-shore (which is related to the Venus Anadyomene motif).The painting is on display at the Uffizi Gallery in Florence, Italy.
Adoration of the Magi
The Adoration of the Magi is a painting by the Italian Renaissance master Sandro Botticelli, dating from 1475 or 1476. It is housed in the Uffizi of Florence. Botticelli was commissioned to paint at least seven versions of The Adoration of the Magi. The Adoration of the Magi theme was popular in the Renaissance Florence. The work was commissioned by Gaspare di Zanobi del Lama, a banker of humble origins and dubious morality connected to the House of Medici, for his chapel in the church of Santa Maria Novella (now destroyed). In the scene are present numerous characters among which are several members of the Medici family: Cosimo de' Medici (the Magus kneeling in front of the Virgin, described by Vasari as "the finest of all that are now extant

Preliminary Marking Guide COMP 3512 Assignment #1

/ 15 **Visual Design and Styling**
- Text and Color Formatting + CSS usage + consistency
- Used Bootstrap appropriately
- Layout accurate Part01
- Layout accurate Part02
- Layout accurate Part03
- Layout accurate Part04
- Layout accurate Part05

/ 8 **Home and About Page**
- links + appropriate content
- link to home page on each page

/ 8 **Part01_ArtistsDataListWithLinks.aspx**
- DataList, hyperlink with proper querystring id
- SqlDataSource

/ 17 **Part02_SingleArtist.aspx**
- Data control + correct album data
- Repeater/ListView control for artist + correct data + links
- handle querystring errors
- SqlDataSource
- show art work for artist with appropriate links

/ 22 **Part03_SingleWork.aspx**
- Data controls + correct art work, artist, order, subject, and genre data
- handle querystring errors
- Use modal dialog to show larger image
- SqlDataSource

/ 30 **Part04_Search**
- Data controls
- Filtering
- hide/show fields
- highlight search term in description
- Proper data
- search in header works on all pages
- ADO.NET

/ 100 Total Mark