2622ICT – Dynamic Multimedia Systems
Project

Due: 9am Monday 27 October 2014 (Week 13)
Marks: out of 100
Weighting: 40%
Individual Project
Submission to: Dwarf **AND** Learning@Griffith

You have been hired by DMS Travel, to make a web application (with HTML, CSS, and JavaScript) to display/showcase photos taken by their customers during tours organised by DMS Travel. DMS travel has an existing Facebook page where their customers can post/share their photos. The web site you need to implement will obtain the photos, their description, and the number of likes from the Facebook page via Facebook's web services. Then provide a user interface to display/showcase the photos. You should assume more photos and albums will be added to the Facebook page later on.

Their Facebook page is at: https://www.facebook.com/pages/DMS-Travel/815157038515764
The object ID for this page is: 815157038515764

The following features are to be implemented:

- There should be a splash screen and a thumbnail screen, and user can traverse forward and back between these two screens.
- Upon start up (or after user login), it should:
    - Display the splash page with CSS3 animation. Your animation should be consistent with the overall theme of this web application.
    - Fetch and display the **page description** of DMS Travel from its Facebook page. This description can be obtained by querying the graph API with this page's object ID, and from the result, extract the text from the description property.
    - Fetch photo from all albums, except for Profile Pictures, and Cover Photos albums, from its Facebook page to be displayed in the thumbnail screen (photos from all albums can be all displayed in the same thumbnail screen). Hint, start your implementation by fetching photos from only one album.
- Upon transiting to thumbnail screen, it should display photo thumbnails, photo descriptions (taken from the "name" property of the photo object), and the number of "likes" from Facebook.
    - Use the standard s320x320 size photo for thumbnail display.
- On clicking of the thumbnail, it will display the largest size photo, and photo description in Lightbox. These photos should be in the same set.
- Upon user command, it will **search** and display product thumbnails that match the user specified text. (Note: this is a local search.).
- Upon user command, it will **sort** the product thumbnails by the number of likes in descending order (most liked to least liked). This sorting should also work on search results.
- Allowing the user to **login** and then fetches and displays user name.
- Allow user to **logout**.
- A logged in user can "**like**" a photo, which will increase the like count for that photo on Facebook as well as locally. If a user "likes" a photo that s/he has already "liked", user will be told that s/he has already "liked" that photo. If user tries to "like" a photo, but is not logged in, s/he will be told to log in first.
- The solution needs to be hosted on **Dwarf** (or other web server).
- In addition to the splash screen and thumbnail screen, there should be at least two other HTML pages. One page is for your documentation (see User Interface Design Section). The other page can be the "About" page

that contains the page description (fetched from Facebook) or author name. There should be appropriate links to these **additional pages** (possibly via a navigation menu).

Technical requirements:

- Facebook's graph API (v1.0, v2.0 or v2.1[1]) should be used to for this web application to request and retrieve data from Facebook. Facebook's JavaScript SDK may also be used.
- Use a JavaScript MVC framework to structure the source code. For part marks, source code should be separated into Model, View, and Controller.
- The source code should be properly indented and commented (at least a description for each function).

User Interface Design and Documentation:

- You should design and implement your own user interface by applying the design principles (covered in the lectures) to your design. **You will need to write a 250 word (max) report to describe at least three design principles you have followed to implement which part of your user interface.**

Bonus marks may be given if the teaching team is very impressed with your:

- Implementation of all required AND extra functionalities.
- User Interface (including CSS3 and animation) design and implementation.

[1] All versions are accepted. It is easier to start with v1.0. With v2.0 most API calls need to be made with an access_token. Hence, user login is required before any v2.0 graph API call can be made.

Submission

Submit your solution by carefully completing the following steps:

1. Upload your solution to Dwarf.

2. Submitted a zip file on Learning@Griffith before 9am Monday 27 October 2014 (Week 13). The zip file should contain your source code
   In the Learning@Griffith submission comments include a link to your web application page on dwarf.

3. Attend your lab class in Week 13 to demonstrate your work and answer questions.

Marking Scheme

Description	Marks
User Interface Design and Implementation	**20 marks**
Design Quality (screen layout, colours, fonts, balance, originality etc.)	15 marks
Usability	5 marks
Functionalities Implementation	**65 marks**
Splash screen animation	4 marks
Page Description	5 marks
Splash and Thumbnail screen transition	5 marks
Thumbnails from only 1 album/all albums - 1 mark deduction each for incorrect photo size and no photo description	6 marks/10 marks
Lightbox	4 marks
Search	8 marks
Sort	6 marks
User Authentication	6 marks
Like	8 marks
On Dwarf (or web server)	5 marks
Additional pages, and links to those pages	4 marks
Technical Requirements	**15 marks**
MVC/Framework	5 marks / 10 marks
Code Comment, indent, neatness.	5 marks