Lecturer: MSc Alfredo Salazar Vélez October 9, 2019

Web Applications Development. Laboratory 6 – YouTube APP

1. For this laboratory you will have to build a page with a simple search form that allows the user to search YouTube videos.

- 2. To be able to use the YouTube API you will have to get an API key.
 - a. Log into the <u>Google Developer's Console</u>. This is where you can get access to the Google API's. **Note that you'll need a Google account.**
 - b. Click the YouTube Data API v3
 - c. Click the "Create Project" button, give it a name of your choice, and agree to the terms of service (accepting the email is up to you)
 - d. Click "Enable" to be able to use the API key that you will generate.
 - e. Then click on "Credentials" > "Create credentials"
 - f. Leave the first dropdown as it is, change the second to "Web Browser (JavaScript)", select "Public Data" and click the blue button.
 - g. Choose a name, then click "Create API key"
 - h. You will see the API key you need to make your project work. Make sure you save it in a safe place.
- 3. Once you have the API key you should be able to build up the application of this laboratory which consists of the following:
 - a. You will have to create an HTML with a form that will have a text input and a button. When the user types a search term and clicks the submit button you should retrieve information from the YouTube API relevant to the given search term.
 - b. Based on the search results the page will display at maximum 10 videos each with:
 - i. Title of the video
 - ii. Thumbnail image of the video
 - c. When clicking in the title or the thumbnail image you should open the corresponding video in a new tab. A YouTube video has a unique id that is placed at the end of the following URL in order to open it in play mode: https://www.youtube.com/watch?v=IDGOESHERE
 - d. At the bottom of the list of results you will need to show buttons to get more results (using the previous and next page links from the JSON). Add the appropriate functionality to make this requirement possible.
- 4. The following URL points to the documentation that you need to read in order to learn how to use this API: https://developers.google.com/youtube/v3/docs/search/list. The documentation do not list it but the api key is sent as a parameter: key=your-api-key
- 5. Use the AJAX techniques seen at class to complete the laboratory.
- 6. Once you finish with the development you will have to add this laboratory to your github under a new repository called "youtube-app". The link to this repository must be added as a comment or in the edit text box of a new page that you will have to create under your profile.

This lab must be delivered on Monday October 14th by 11:59PM. It is an individual exercise and it must be uploaded in your corresponding Student Profiles under a new Page named in the following way:

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StudentID_Lab6

Example: AlfredoSalazar45_Lab6

In that Page you must add as a comment or in the edit text box the URL of the Github that contains this laboratory.