Project Documentation

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Abstract: The code is designed to implement an interactive network for IMDB movie data set

Web-Technologies Used: HTML, CSS, D3.js, Json, xampp.

Compatibility: The created web pages work’s fine in Microsoft Edge, Mozilla fire fox (Quantum-69.0.1), Google chrome (77.0.3865.90)

Description: The code consists of a HTML page described as index.html, a cascading style sheet which provides style for the web page and a JavaScript code that provides functions for the webpage. Firstly, we created a json file from movie data set and in the index.html where we created the html code and links to json file and style sheets we created 2 sub networks in the same html file and executed similarity Matrix.

Function Used:

In the html page we used the following tags,

Html tag – Creates a webpage.

Head tag – element is a container for all the head elements.

Title tag – It is used for declaring the title, or name, of the HTML document.

Body tag – It defines document body

Input tag – It specifies input files where the user can enter the data

Button tag – it is used to create clickable button

Div tag – It defines div or section of the code

Table tag – It defines table in HTML

Tr tag – It is row of a table

Td tag – it defines data of a table

Br tag – it defines boarder of a table

Link tag – Used to link a CSS file externally.

Script tag – Used to link a JavaScript file externally.

Q&A:-

1. We constructed a network using html, CSS and D3.js. Data is stored in Json format. The dataset consists of information of movies from the year 2001-2016 in genres horror & comedy. Based on the content rating give to them we created the links and nodes. we deleted unwanted columns using Macro’s and links are placed based on the indexing.
2. After making the network we made 2 subnetworks movies based on the years. The first subnetwork contains data from the year 2001 to 2010 and the second subnetwork had the data from the year 2011 to 2016. In the two-sub network’s we have the data of movies based on the main network by making a movie matrix and took 60 samples out of which 30 samples are for sub-network-1 and sub-network-2.
3. We used Jaccard similarity to find out the correlation between the nodes selected from each subnetwork. These subnetworks are based on nodes (movies) and their connections (similar content rating).
4. There could be a lot of possible design architectures to build this. we displayed the common data of the selected nodes from the subnetworks and we also show the Jaccard similarity calculated.
5. To run the code, we need a local server, keep the files in the local server and run the Index.html through the server. But make sure that you have all the required files HTML, CSS, Json, Script file in same folder.

Reference: -

1. <https://stackoverflow.com/> for Java script and HTML, CSS
2. https://www.w3schools.com/ for Java script and HTML,CSS