**Project: Johansen Family Movie Night Assignment System**

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**Background & Goals**

Our household has a vast collection of movies that we want to watch, and we can never decide on one in a timely manner. Due to collective indecisiveness, we could have watched a film in the time that it took to decide on one. This is a major frustration for me in that it is a waste of time where I could be productive. Prior to my enrollment in this course this was a project that was desired by my whole family. I had the intention to write it using PHP/MariaDB in conjunction with Laravel to make a mobile friendly web app, but like many other to-do projects, it never got started. This simple software will take information from a spreadsheet saved in CSV format, and randomly select a movie. There will be an additional option to select randomly from the top ten most anticipated movies. This option will be weighted by the sum of everyone’s anticipation and/or excitement of the movie using a 1 – 10 rating system and 10 being the highest. This gives a user a chance to steer the randomness slightly and avoid a selection that has a low interest. After the movie has been randomly selected, an option to remove it from the running list will be presented. This will assist in managing the active list for future random selections.

**Scope**

For the sake of this assignment, I tried to minimize the scope, and kept it to just selecting a movie from the list and offering to remove it. It still needed to be flexible enough if an additional user was added or removed. The CSV format was selected to make input simplified for other users. Creating and editing a shared google sheet with 10 to 15 movies would be easy for everyone that is involved. Adding new films within the software will not be a feature due its cumbersome nature and would be a deter users from contributing to its use. The software’s primary focus is to randomly select a movie title and remove it from the list if desired.

**Design**

**Input:**

1. CSV file in the following format, example below:

* “Title” is required within cell A1
* First column is for movie titles.
* Additional columns are for each user.
* A rating of 1-10 entered based on user’s preference, with 10 being the highest anticipated.

|  |  |  |  |
| --- | --- | --- | --- |
| Title | User1 Name | User2 Name | User3 Name |
| Gremlins | 8 | 1 | 1 |
| The Princess Bride | 5 | 10 | 1 |
| Ghostbusters | 10 | 5 | 10 |

2. User input will be in the form of prompted menu selections, example below:

Please select from the following:

L - List Top 10 most anticipated movies.

T - Random selection from Top 10 most anticipated.

C - Completely random selection

Q - Quit

Select L T C or Q:

**Output:**

1. A randomly selected movie title to facilitate family movie night.

2. Altered CSV file with random selection removed from storage if selected when prompted.

**Additional Processes:**

The top 10 most anticipated movies are ordered by the sum of the user anticipation from greatest to lowest anticipation by movie title. To achieve this, list function sum() will be used.

**Documentation**

Provide a CSV file named “movies.csv” with the first column being movie titles with a header of “Title”, each additional column has a header of each participates name. There are no participant/user limits, add an additional column for each user. Each participant column will have an anticipation/enthusiasm rating from 1 – 10 (10 being highest) in each row relevant to each movie title. Once a csv file has been prepared and the program has been initiated you will be guided through series of prompts. Lowercase letters are accepted.

CSV spreadsheet example:

|  |  |  |  |
| --- | --- | --- | --- |
| Title | User1 Name | User2 Name | User3 Name |
| Gremlins | 8 | 1 | 1 |
| The Princess Bride | 5 | 10 | 1 |
| Ghostbusters | 10 | 5 | 10 |