

## **CodeJam() 2016 Senior Challenge**

### **Problem Background**

There has never been more TV series to watch. In march 2016, Netflix USA alone had 1,200 TV shows to choose from! Which ones to pick? There is not enough time to try everything... This is a general problem of media consumption; too much information and too little time. We are bombarded with thousands of choices every day when it comes to what to read, listen to or watch. Companies like Google, Amazon and Facebook invest millions into improving their recommendation engine to help you purchase books or items based on your profile. Mastering both smart filtering and data visualization is key to our digital future!

Currently, when you want to know what to watch on TV, you can rely on reviews and ratings found online or on your friends... But online reviewers or friends don't know your taste, so their suggestions might not always be accurate. If you like a show, how do you find others that are similar, not by the category or subject, but to their alignment with your preferences? Also, how do you find brand new shows that are different from the usual, but enjoyable based on who you are or want to be?

### **The Challenge**

Devise a recommendation engine for TV shows that predicts if you may want to watch a show based on your preferences and watching behaviors.

Your recommendation engine should draw on the following sources of information: TV show descriptions, ratings and reviews and your preferences/watching behavior. You are responsible for acquiring this information. Information like this is available on the internet on websites such as (BUT NOT LIMITED TO) MetaCritic, IMDB and Rotten Tomatoes. How you acquire or input this data into your recommendation engine is completely up to you but this engine should work for more than one tv show from the same source.

### **Deliverables**

A good user experience is very important to the success of your application. You need to design an application that is:

- 1) Useful. It helps identify TV shows that might be worth watching based on user profile,
- 2) Usable. It is easy to use and doesn't require a manual to understand how it works and
- 3) Graphically enticing. Its look and feel is modern and elegant.

We will judge your application based on these three criteria.

To create a good user experience, it is important that you understand your target users. It is recommended to talk to people around you to understand how they watch TV, what is important for them when choosing a show, what TV shows they have watched etc. This is how you will generate your user profile. It is also recommended to sketch your application on paper and show the main elements to users before starting coding, to ensure that your application is useful and usable.

**NOTE:** *Everything, except for application sketches, must be submitted via your assigned GitHub Repository. Sketches are to be submitted to representative in ECSESS Lounge Room on the 1<sup>st</sup> Floor of the Trottier Building. Your team name along with the corresponding repository must be on these sketches.*

**Base Requirement:**

- User profiles and highlights of user behaviour
- Design sketches
- Software source code (All of it)
- A “read-me” text detailing how to use the software

**Themed Requirement:** This is human computer interaction. The output should be fully interactive. The extent of this interactivity is left up to the teams. Wow us!