# Assignment 1 Instructions: Non-Personalized and Stereotype-Based Recommenders

## Overview

This assignment will explore non-personalized and lightly-personalized recommendations.

Your spreadsheet includes headers that provide movie ID (and name, in case you're curious) and user ID (but not name). There is a second column that represents gender, with 1=female and 0=male. The rest of the cells are a 20x20 ratings matrix (user-movie ratings) where blank cells represent the lack of a rating.

Download matrix data

### Deliverables

There are 7 deliverables for this assignment. Each deliverable represents a different analysis of the data provided to you. The first three deliverables represent non-personalized summary statistics; the next two represent product association using two different mechanisms (we aren't using lift here because of how similar the popularity levels are). The last two represent a demographic analysis to explore whether using gender would be wise given this dataset. Each question has its own "quiz" in which the responses are entered.

1. Mean Rating: Calculate the mean rating for each movie, order with the highest rating listed first, and submit the top three (along with the mean scores for the top two).
2. Rating Count (popularity): Count the number of ratings for each movie, order with the most number of ratings first, and submit the top three (along with the counts for the top two).
3. % of ratings 4+ (liking): Calculate the percentage of ratings for each movie that are 4 or higher. Order with the highest percentage first, and submit the top three (along with the percentage for the top two). Notice that the three different measures of "best" reflect different priorities and give different results; this should help you see why you need to be thoughtful about what metrics you use.
4. Top movies for someone who has seen Toy Story: Calculate movies that most often occur with Movie #1: *Toy Story,* using the (x+y)/x method described in class. In other words, for each movie, calculate the percentage of *Toy Story* raters who also