Capstone Project Proposal

1. What is the problem you want to solve?
   * Using historical engagement-data from one of World of Warcraft’s servers, I will develop a churn-model.
2. Who is your client and why do they care about this problem? In other words, what will your client DO or DECIDE based on your analysis that they wouldn’t have otherwise?
   * For this particular dataset, the client would be Blizzard Interactive (publisher and producer of World of Warcraft). Warcraft is a subscription-based MMO video game. Revenue for this game is generated from users that subscribe to a monthly payment to use/play the game. As revenue should be directly correlated with the number of active-paying users per month, it is in Blizzard’s best interest to understand the engagement of their game’s users. Every player that churns out (and deactivate their payment plan), is a lost opportunity for revenue.
   * Data from a churn model could be used to predict and identify players with high likelihood of churn. This data could then be used by the Blizzard marketing team to prompt players to continue playing or as a paid marketing campaign to incentivize players to continue playing.
3. What data are you going to use for this? How will you acquire this data?
   * Data will be sourced from the World of Warcraft Avatar History Kaggle Dataset
   * https://www.kaggle.com/mylesoneill/warcraft-avatar-history
4. In brief, outline your approach to solving this problem (knowing that this might change later).
   * Using the kaggle dataset, metrics will be created to determine playtime (unique days) for a player’s lifetime. Players will be identified as churned if they do not have a timestamp within 2 weeks from the end of the dataset (may change pending results). Additional playtime metrics will be created focusing on the last 4 weeks of the player’s lifetime. Using playtime metrics and engagement metrics (guilds, guild changes, class / race, class/ race changes, and map-area usage, a decision tree model will be created to predict user churn.
5. What are your deliverables? Typically, this would include code, along with a paper and/or a slide deck.
   * Deliverables will be code and a PowerPoint slide deck presentation.