Project Deliverable B: **Needs Identification and Problem Statement (Gr. 11)**
GNG1103 - Engineering Design

Introduction & Expressed Clients Needs:

The client, Ross Video, needs new and fresh content to improve fan experience at Ottawa 67's hockey games. Using the client's "DashBoard" panel alongside "XPression" software, a solution is needed for the following aspects:

- **Team Setup**
    - The user wishes to display the team logos for Home and Away teams alongside their primary and secondary team colors.
- Goalie Matchup
    - The client would like to allow the operator of the control panel to be able to specify the starting goalie names on both teams, and their respective metrics. The information needs to be easily editable and configurable for the operator.
- Standings/Stats
    - The user would like to display the statistics of the teams playing to the fans to be able to compare the points that each team has accumulated. The user requires that the standings portrayed are easily editable by the operator.
- Full Page Sponsor Elements
    - Similar to an advertisement, the user requires us to curate the commercials during the breaks.
- **Fan Birthdays**
    - The user requires the ability to include a birthday message accompanied with an image followed by a set duration depending on the amount of birthdays shown during the game.
- Three Stars
    - Give a number of stars to specific players. Stars must appear one at a time. Up to the operator's discretion to choose how many stars each player has. The user needs us to configure the text shown and pass on information to the graphics system.
- Sponsor "Bugs"
    - The user wants to include a graphic overlay that appears at the top or the bottom of the screen, while not taking too much space. The sponsor "bug" has to be integrated into the game and needs to be a very quick message.
- Crowd Prompts and Make Noise
    - The user emphasises on the creativity of the make noise and crowd prompts. They wish that fans can be encouraged and willing to participate throughout the whole game. Although creativity is unlimited, they want the content used to be appropriate for all ages.

Listed Client Need	Interpreted Need	Importance Rank	Justification for Importance Rank
Needs panel and designs to be highly editable in order to keep up with last minute changes	Editable	4	If the design is uneditable, the user experience for those that are paying attention to the names, stats, teams, etc. is going to be diminished, but since not everyone is going to be paying attention to these details, they are still of importance but not

			as great as important as having an engaging fan experience. All information is easily configurable for every game or last minute changes.
Needs designs to grab the attention of fans and keep them engaged	Engaging	4.5	If the fans aren't entertained, then the entire purpose of the animation is nullified and the user experience is negative. Thus, the content being engaging is of critical importance.
Needs fresh and exciting content to improve fan experience.	Fresh Content	5	If fans are bored with old content, the entire purpose of the content is negated, so the content being fresh is of the highest importance.
Simple panel design that allows for easier use	Simple and Intuitive Panels	5	If one cannot operate the tech panel quickly and easily, one risks creating breaks and gaps of no action in the game, which bores fans and leads to a bad user experience. Therefore, technicians understanding and ease of operation of the system is as important as the animations and graphics themselves.
Satisfying the sponsors	Sponsor Satisfaction	3.7	If sponsors are displeased with the level to which their products or services are being endorsed, they are less likely to sponsor the company again, so sponsor satisfaction is reasonably important.

Problem statement:

Ross Video is looking to add multiple functions to their DashBoard, however two are of top priority. One to display personalized fan birthday messages, and the other is to display team set up. The functions will include highly editable designs, simple and intuitive panels that can be operated easily, as well as new and engaging content that can grab the attention of the fans.

User perceptions:

Hockey games are one of the most action-packed games with some of the most dedicated and committed fans around. Fans go all out to portray their loyalty for their team by painting their faces, wearing crazy wigs and making silly banners to gather the attention of the crowd. Therefore, the fans' needs and experiences should be ranked very high in the scale of importance.

Unknowns?:

- Time allowed for all birthday messages: ($\frac{Total\ Time\ allowed\ for\ birthday\ messages}{Amount\ of\ birthdays}$= Time per birthday message)
- In what form must the birthday message be? Biography? Personalized message to congratulate the person?

Conclusion:

In conclusion, the solution to the client problem must be engaging and entrancing to the audience while remaining easy to operate by the control booth staff. It must be personal to each individual and enjoyable for the audience. Thus, fan birthdays and team setup are the solution parts that the team has decided to work on.