

GNG 1103 Project: Deliverable D

Group 15

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Abstract

Ross Video requires a quick, user-friendly, highly configurable system so that sports fans can be provided with an engaging and appealing display for sporting events at the TD Place. The design concepts for implementation of sponsor graphics, fan birthdays, goalie matchups, and team setup generated for this deliverable were analyzed and evaluated for constraints and feasibility. In Dashboard, the control layout for each component of the overall control panel was designed and presented to Ross Video. The benefits and drawbacks of each concept design were discussed and analyzed. Going forward, it was decided that the team will be developing the concepts for sponsor graphics, fan birthdays, and team setup, since they were determined to be the most beneficial and most feasible to execute well.

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1 Introduction

Ross Video, a video production company that affects billions of viewers, wants to create an interactive environment for a memorable sports fan experience at the TD Place. In this deliverable, several design concepts for control panel elements powered by Dashboard are outlined.

Our team will be building several user interfaces that are intuitive and easy for the user to operate. Elements that contribute to a memorable fan experience in the stadium include team setup, sponsor elements, goalie matchup information, and fan birthdays. Dashboard will be used to create a user-friendly interface to efficiently control these aspects of sporting events at the TD Place. The goal is to create a quick, user-friendly, highly configurable system that allows operators to provide fans with an engaging and interactive experience.

2 Concept Description and Analysis

2.1 Concept 1: Team Setup (Mirko)

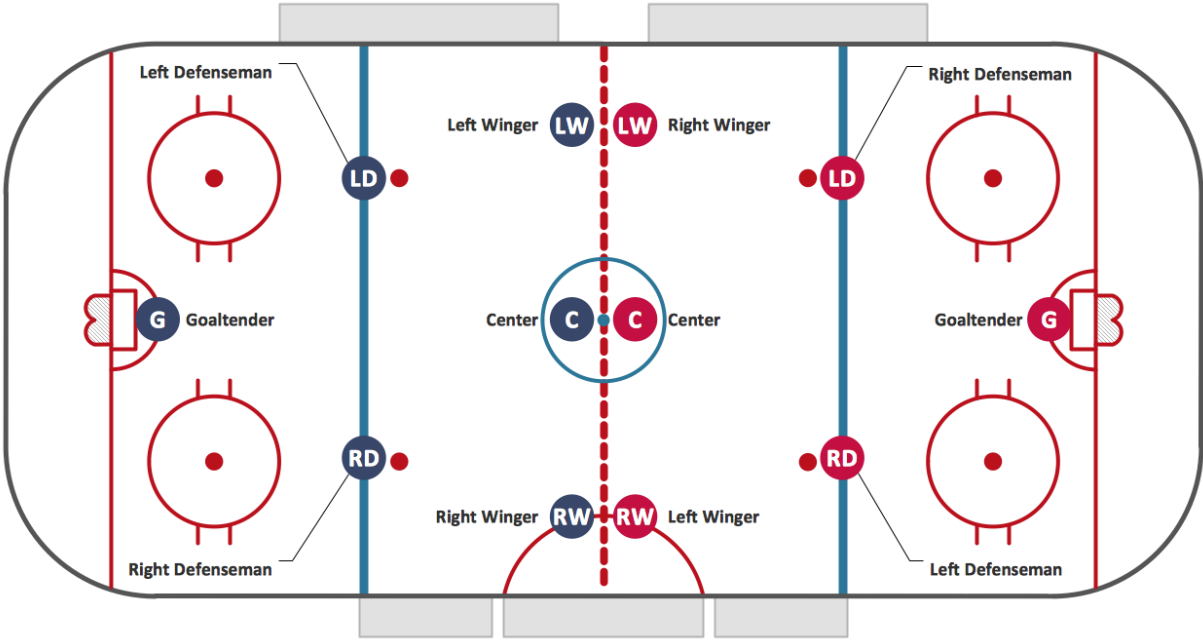


Figure 1. Setup of hockey teams at the beginning of a game.



Figure 2. Dashboard control panel design.

Firstly, the design of this device is in the shape of the arena to help the operator with the team setup. The operator will see the team starting setup and this will render this more user friendly. Many people are visual learners and having the team setup dashboard buttons match the view of the team setup on the arena makes this easier to understand.

Next, the ability to set and select colours. Each team will be set a colour and this will also render it more user friendly and easy to understand. Figure 2 demonstrates that although there are several buttons, this makes the design more simple (more detail in the following point). Setting a different team colour will change the colour of the whole team starting lineup (e.g. changing one of the teams to yellow will change each individual player position stat in the lineup to yellow - centre, left-winger, right-winger, left and right defensemen).

The design is also aesthetically pleasing. It is organized in the shape of the visible starting lineup on the ice. The colours and symmetry render it more pleasing to look at. This is important because oftentimes the minimalist the design is, the better. Looking at it, it is not overly complicated to infer which button does what. This is a very important aspect.

2.2 Concept 2: Sponsor Elements (Lexy)

Ross Video requires 16:9 sponsor graphics and the ability to store 6-8 sponsors per game. During a penalty kill or a power play, sponsors pay for a logo “bug” to show up on the top of the screen. Seen in Figure 3 below is a conceptual design for the control layout controlling sponsor graphics in Dashboard.

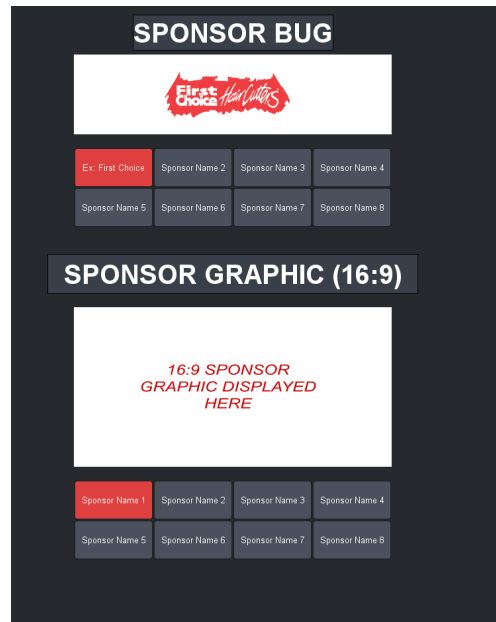


Figure 3. Design concept for a control layout for implementation of sponsor graphics on-screen.

The main goal of the control panel is to be user-friendly and easy to use. Using buttons configured with the “toggle” option allows the user to easily see which sponsor graphic is selected. The tabs above the button controls display the graphic or logo that is seen on the screen. Importantly, this allows the use of the control panel to see quickly at a glance which sponsor is currently being displayed to the audience. Given the fast-paced environment of broadcasting, this may prove very helpful to the operator.

After speaking with the client, it was noted that the sponsor storage must be highly (and very easily) configurable, as it is not practical to reconfigure the sponsors within the inner workings of Dashboard every game. As this concept is developed, an interface in which the user can type and search for different sponsors to configure the buttons will be implemented.

2.3 Concept 3: Goalie Matchup (William)

The Ross company requires a goalie matchup concept for sports fans to enjoy at the TD Place. It was decided that the goalie matchup concept will be simply designed to be clear for the fans. There will be a large title saying “Goalie Matchup!” in the top center of the display.

Furthermore, the two teams goalies will be separated with a vertical line. Each team’s goalie will have a picture, team name, goalie name and statistics. The picture will be pre-uploaded before the game in the dashboard.

The team statistic formula will be programmed in the dashboard. All the operator will be required to do is click one of two buttons per team to update the statistics. The buttons will be “goalie saved” or “goalie not saved” respectively.

This concept is designed to be simple, clear for the audience and easy to use for the operator.

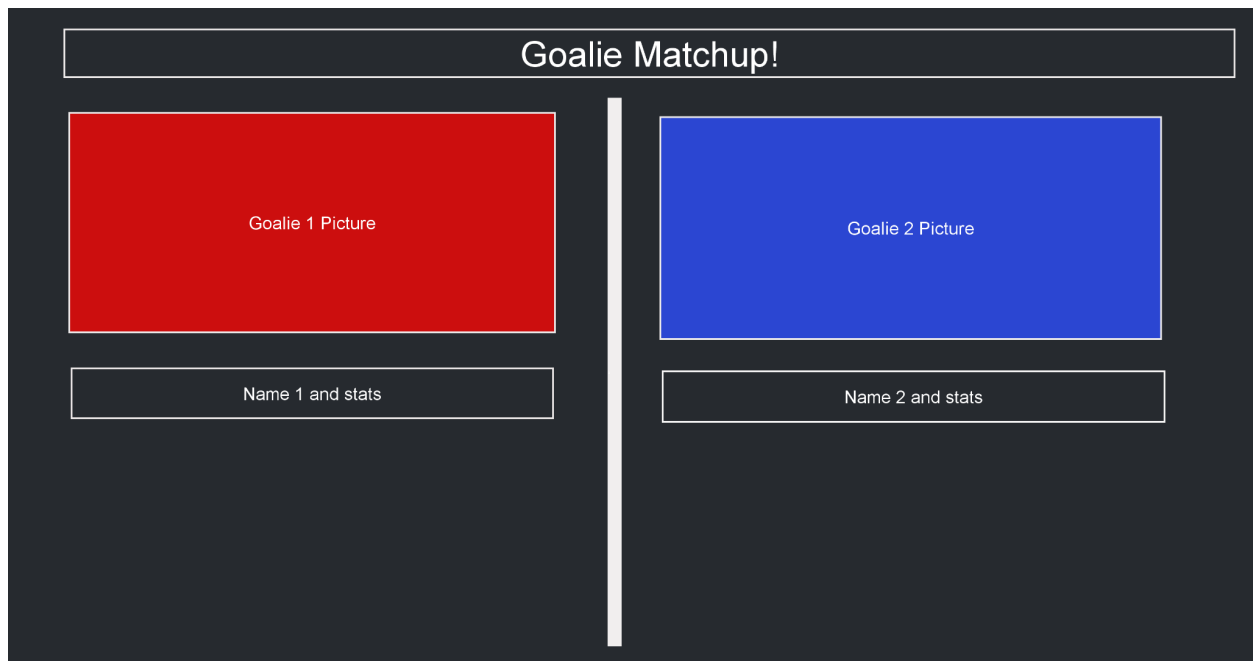


Figure 4. Goalie Matchup! concept.

2.4 Concept 4: Fan Birthdays (Paige)

For design concept #4, the requirements were outlined by the clients at Ross Video. For the fans birthday, the goal is to create birthday graphics containing an image and short birthday message which all play back to back with a set configurable duration. Below in figure 5, this was a concept design hand drawn to begin the process of creating an easily configurable design process for Fan Birthdays.

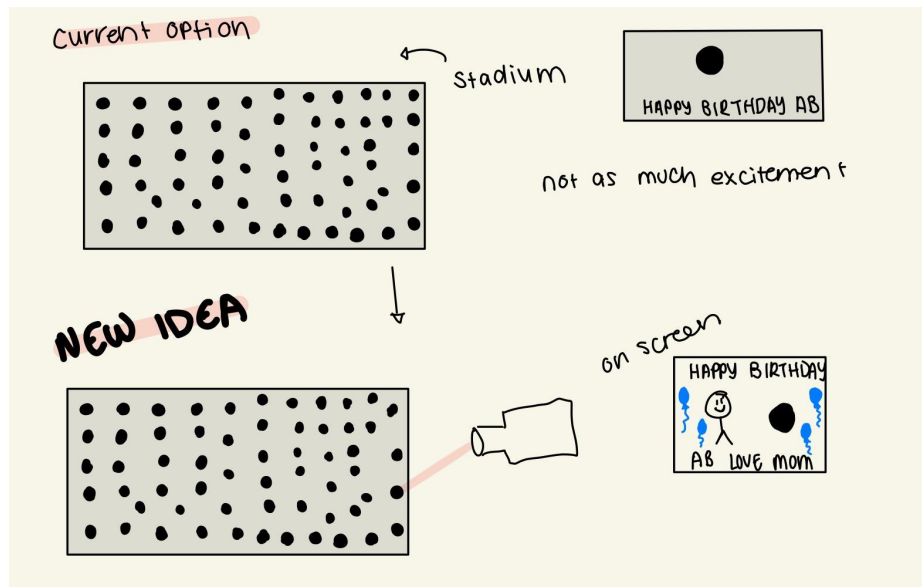


Figure 5. Fan Birthday Hand Drawn Concept

The first figure of Fan Birthdays includes a photo of what the stadium would look like in regards to a plain message being played on the screen. The plain birthday message wouldn't create a very exciting fan atmosphere. The goal to make a fan engagement key, was to design a program on Dashboard that would easily switch between birthday messages as well as create excitement within the crowd. The new Fan Birthday concept was to use aesthetic appearance, a photo of the fan, as well as a moveable camera that places the fan on the screen at the same time their photo is present.

HAPPY BIRTHDAY STANLEY



Figure 6. Fan Birthday Current Screen

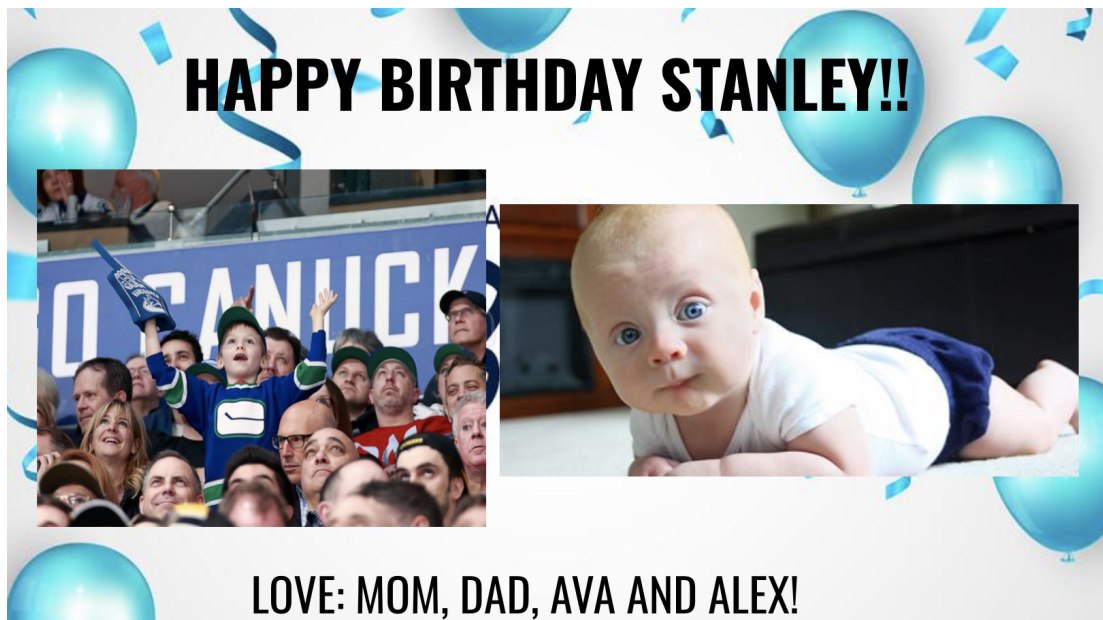


Figure 7. Fan Birthday New Design Concept

Figure 6 represents the old projection of Fan Birthdays at the TD Stadium while Figure 7 represents the new design concept for Fan Birthdays. As shown multiple changes have been made to create a new and improved Fan Birthday experience.

- Camera added to show the seat of the fan at the time their slide is showing
- Aesthetically pleasing background is added
- More design and wording added

The goal is now to make the new design concept easily configurable and doable within DashBoard. Beginning with some examples:

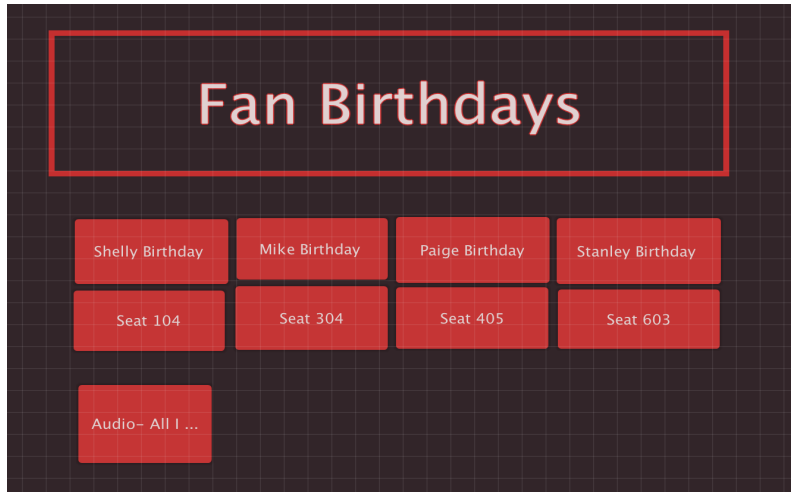


Figure 8. Fan Birthday DashBoard Example 1

Within the first Dashboard example there would be multiple buttons (depending on how many fan birthdays there are that specific day). For example, if there was only one minute allocated to Fan Birthdays and there were four firthdays on Monday, each person would receive 15 seconds on the board. While on Wednesday, if there were six birthdays, each person would receive 10 seconds on the board. If there were four birthdays, there would be four buttons with names that correspond to their seat number for camera access to that specific seat. As well an audio button for the song “All I do is Win” is included to play. With all of the buttons insync at the same time, an exciting atmosphere is created focused on Fan Birthdays.

	Positive Feedback	Negative Feedback
Dashboard Example 1	<ul style="list-style-type: none"> - Great idea for fan engagement - Organized Layout for User 	<ul style="list-style-type: none"> - Less configurable than needed

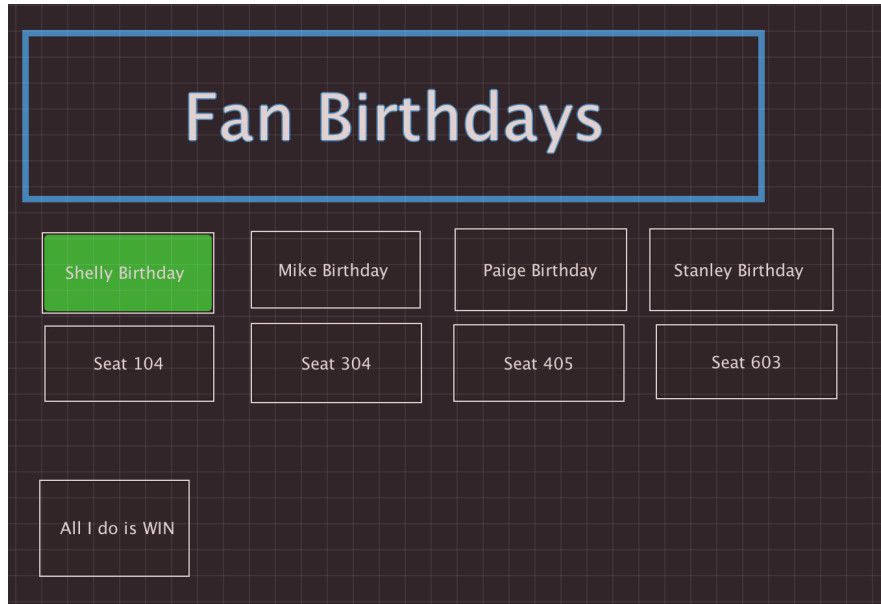


Figure 9. Fan Birthday Dashboard Example 2

The main difference that is included in the second example within the dashboard in comparison to the first dashboard is the “Toggle Effect” within the buttons. This allows the user to view which Birthday is being projected on the main screen. Again the same formatting with four birthdays as well as corresponding seats for each fan.

	Positive Feedback	Negative Feedback
Dashboard Example 2	<ul style="list-style-type: none"> - Great idea for fan engagement - Organized Layout for User - Toggle Effect 	<ul style="list-style-type: none"> - Less configurable in the sense of Audios as well as number of birthdays, not much room for change

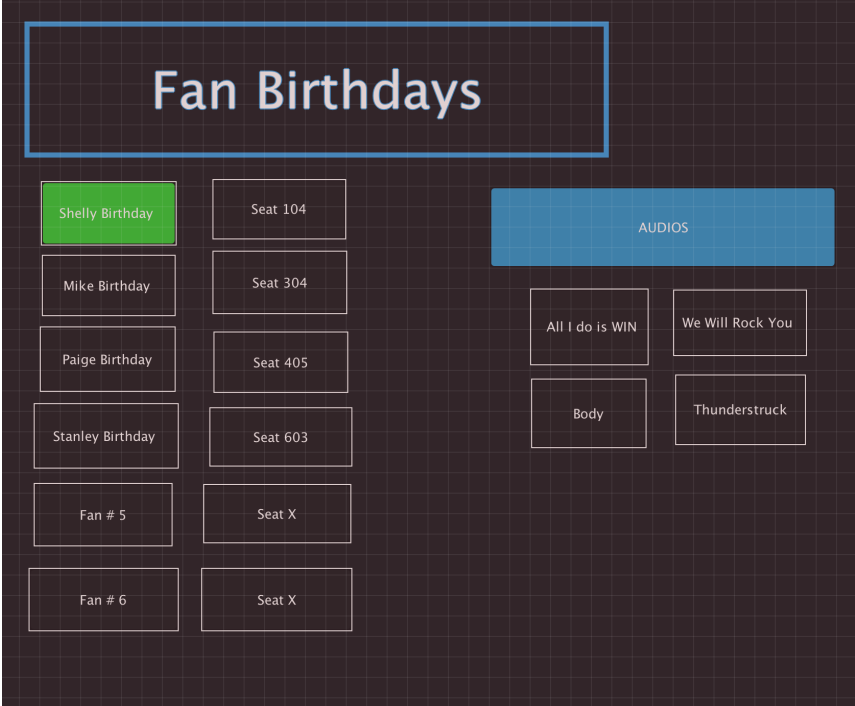


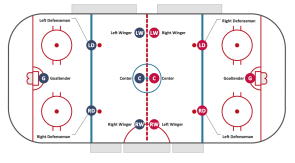
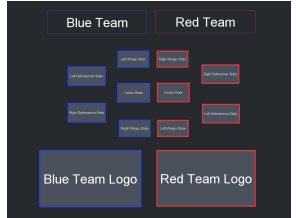
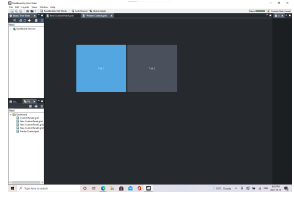
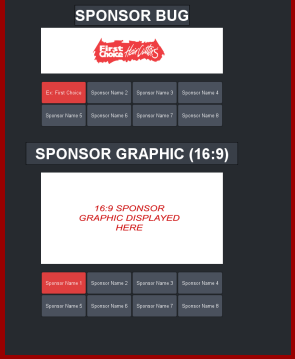
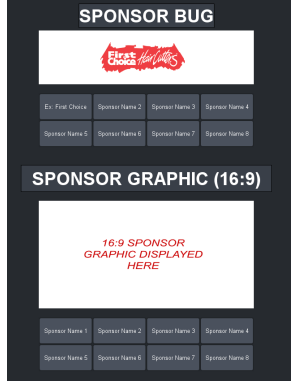
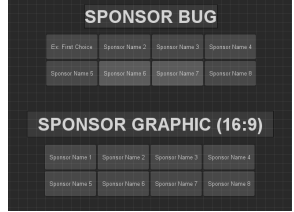
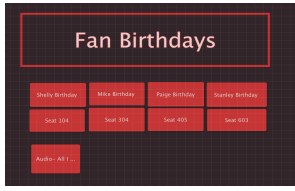
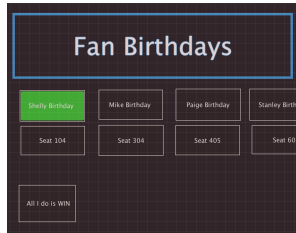
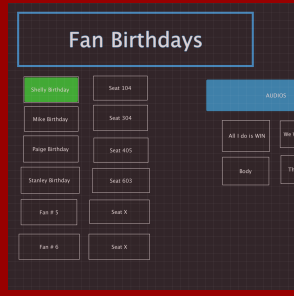
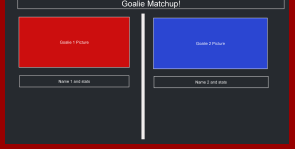
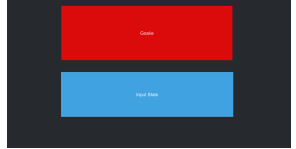
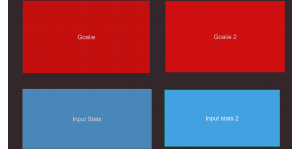
Figure 10. Fan Birthday DashBoard Example 3

For the final dashboard example, a vertical setup was now used for easier, more organized viewing. There have been more fan birthdays added as well as seat numbers added for more flexibility of fan birthdays. Here, there is room for adding the name instead of editing the programming which can become frustrating for the client/user when the programming is needed. As well, within the audio section, there has also been more songs added for flexibility/configurability. Within the above figure, the toggle buttons have been inserted for easy use.

	Positive Feedback	Negative Feedback
Dashboard Example 3	<ul style="list-style-type: none"> - Great idea for fan engagement - Organized Layout for User - Toggle Effect - More configurable in the sense of Audios as well as number of birthdays, much more room for change 	<p>MAY need further programming dependant on new fan birthday additions</p>

3 Selection Matrix

Seen below is a selection matrix highlighting the potential designs for each concept in order to choose the best one.

Concept	Design		
	A	B	C
Team Setup			 One button for Home Team, another for Away.
Sponsor Elements			
Fan Birthdays			
Goalie Matchup			

Explanations For Selection Choices:

Team Setup:

Design B was chosen for the team setup. It is inspired off of the hockey positions on the ice. Clicking on each individual play stat button will allow the operator to access statistics of that player from a database. They may input a photo of the player as well which should also be accessible in that database. This will render the system more simple to operate for its user. This minimalistic aspect is important as it makes the design the most effective, easy, and efficient of the designs presented.

Sponsor Elements:

Design A was selected for the sponsor elements concept. It features a tab display for the user to easily see at a glance the graphic being shown to the audience. It also features toggle buttons so the user can see which sponsor option is highlighted. Option B does not include the toggle button, and Option C does not include a visual of the graphics. These elements are essential to creating a user-friendly interface that can be used quickly and easily, therefore Option A is the superior design.

Fan Birthdays:

Design C was selected as the Fan Birthday design concept. A vertical setup was now used for easier, more organized viewing. There have been more fan birthdays added as well as seat numbers added for more flexibility of fan birthdays. Here, there is room for adding the name instead of editing the programming which can become frustrating for the client/user when the programming is needed. As well, within the audio section, there has also been more songs added for flexibility/configurability. The toggle buttons have been inserted for easy use. This design allows the most flexibility for the user as well as easy use with the addition of fan buttons/seat buttons as well as toggle buttons for easier recognition of which fan is being projected on the main screen.

Goalie Matchup:

Design A was selected for goalie matchup design concept. This is the case because it has built in formulas in the programming to calculate the statistics. This will improve user operation. Design B and C used a concept of manually inputting the statistics by the operator. This is more difficult for the user to operate since they would need to perform their own calculations. Furthermore Design A has the best aesthetics which is an important characteristic in the problem statement.

4 Conclusion

After analyzing several concepts to be implemented for the project, it was decided that the following three concepts will be further developed: Team Setup, Fan Birthdays and Sponsor Elements. The team used brainstorming techniques to create three different designs (which can be seen in the selection matrix). Then the team analyzed which designs were most suitable for the problem definition and would be the most feasible and beneficial to execute. The Goalie Matchup concept was chosen to not be further developed, as the other designs were deemed the most beneficial to the sporting experience.