Prototype II Images

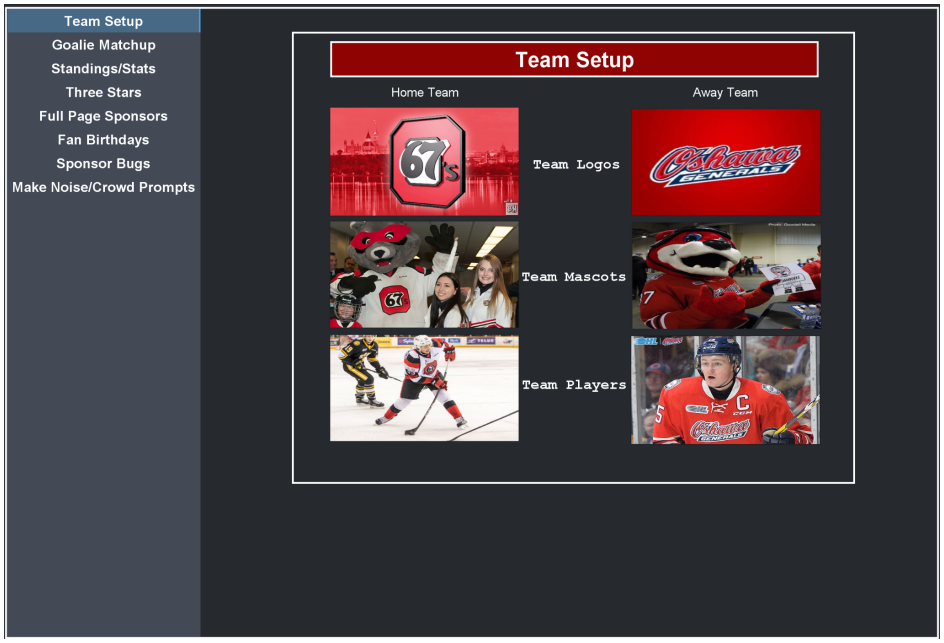

Image 1 - Team Setup

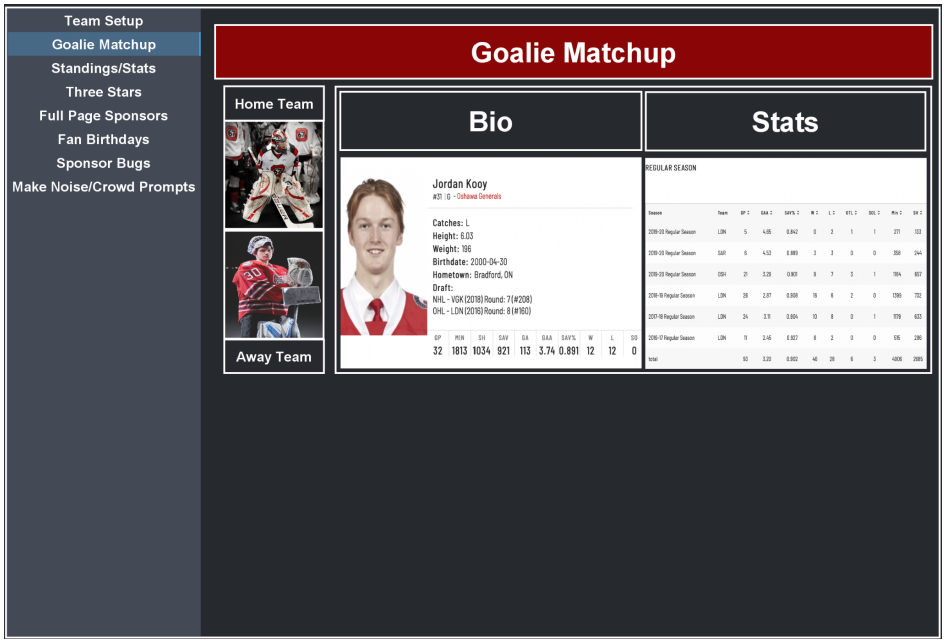

Image 2 - Goalie Matchup

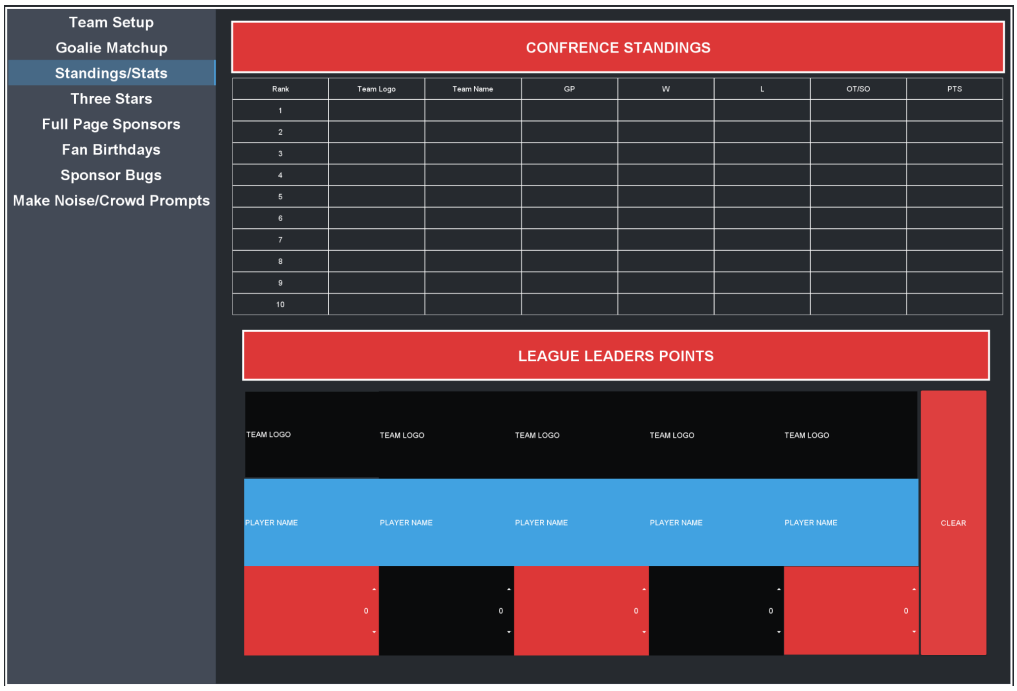

Image 3 - Standing/Stats

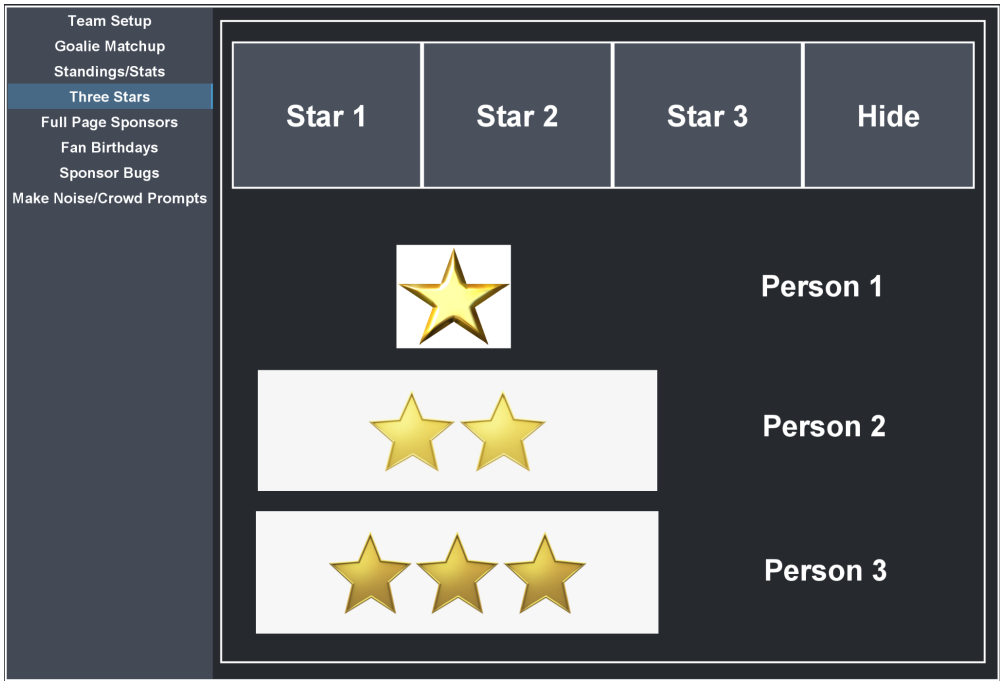

Image 4 - Three Stars

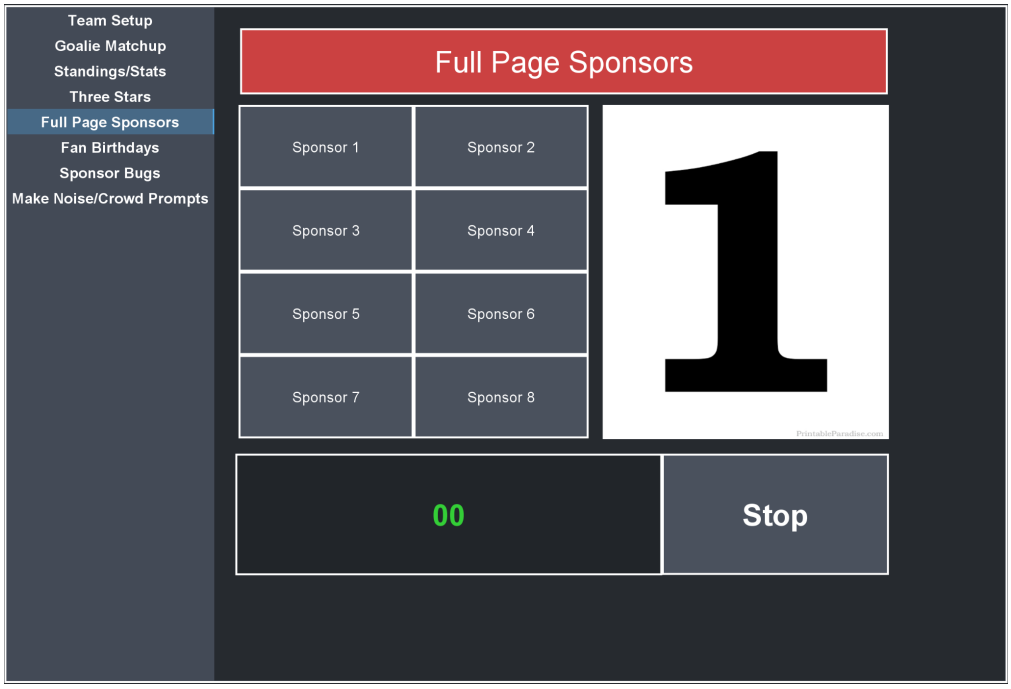

Image 5 - Full Page Sponsors

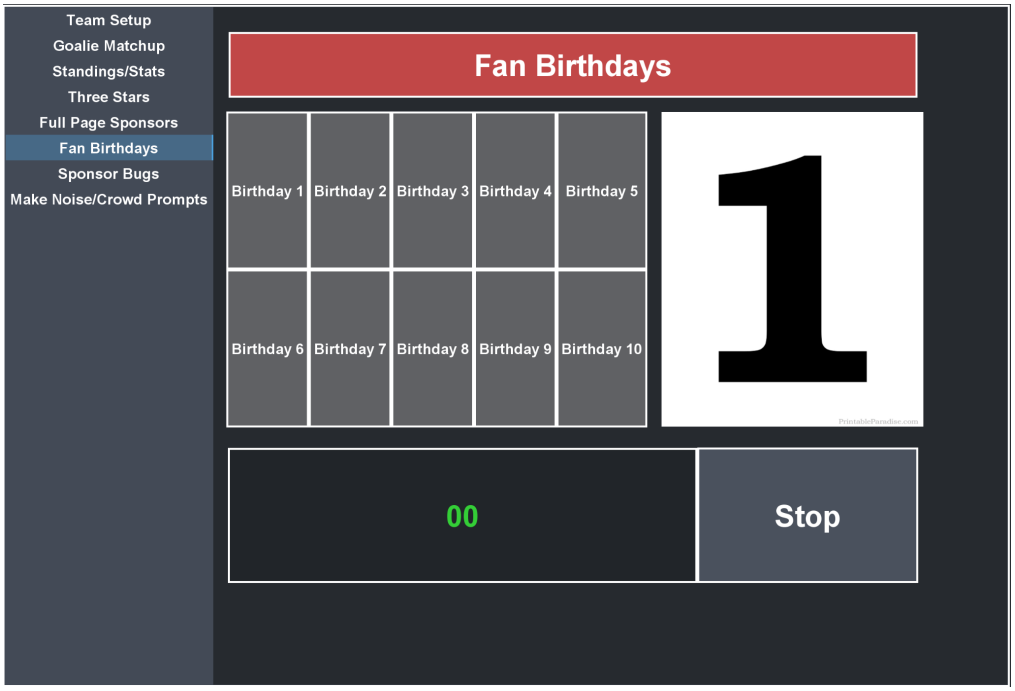

Image 6 - Fan Birthdays

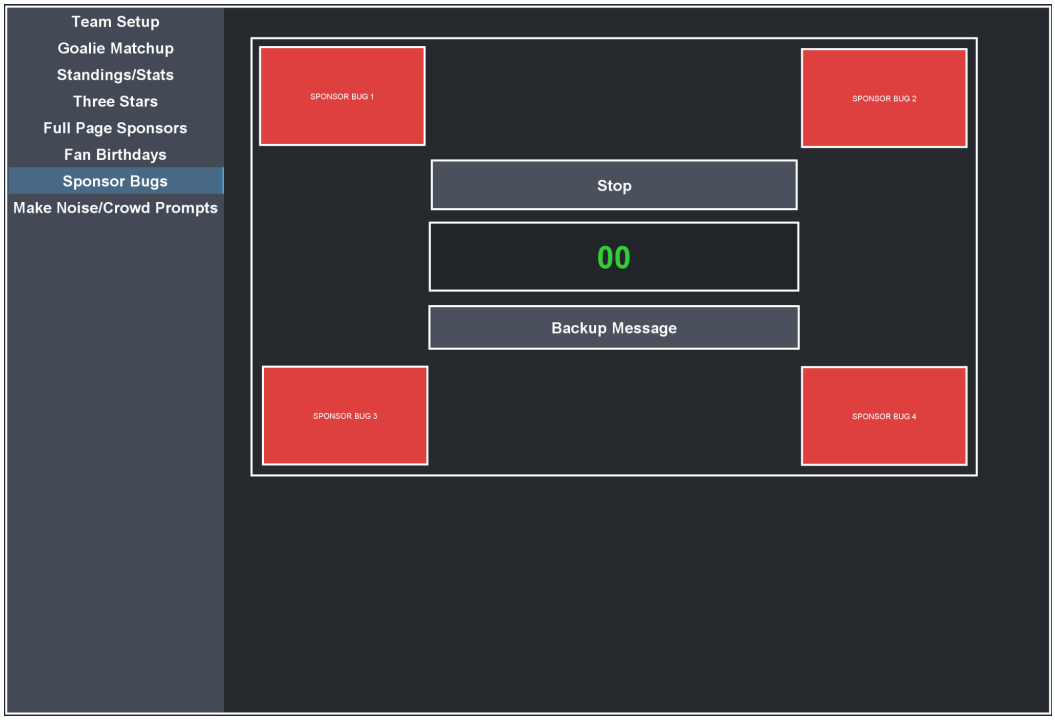

Image 7 - Sponsor Bugs

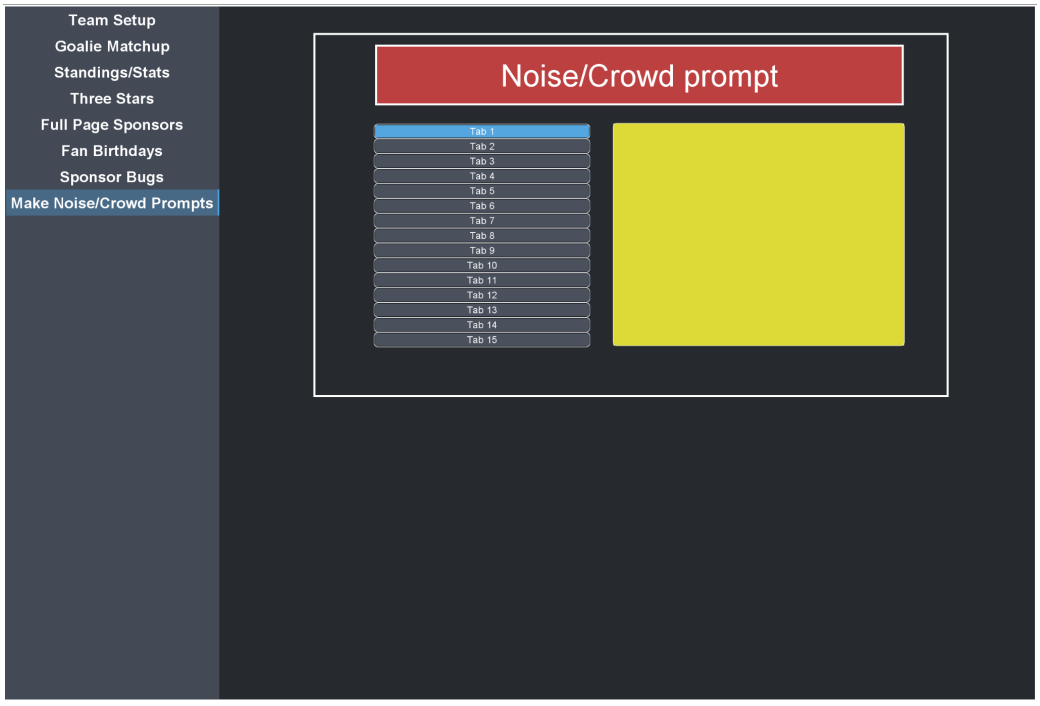

Image 8 - Make Noise/Crowd Prompts

Prototype Test Plans/Analysis/Results

Team Setup (1)

- This tab displays each team's logo, Mascot, and players when their button is pressed. The button will be programmed to have a preset clip ready for when they want to display the team's logo, mascot, or players during transitions or before talking about that team.

Test Plan:

- To test this panel's functionality we asked a friend to try and use it as if they were the panel operator. We made up scenarios where they would be asked to use a certain button and we counted how long it took them to achieve the given task.

Analysis:

- This panel is very simplistic and straightforward because it only has buttons that control specific outputs. They are all labelled and organized to be easy to find so that users will have no trouble with this panel.

Results:

- The testing on this went quite well and the test subjects were able to use the panel easily with minimal mistakes. The feedback was all positive and the test subjects had no specific issues with the panel and were able to complete all trials. We asked them to do tasks such as find the home teams buttons and press the buttons in this order, mascot, logo, players. This kind of test is how we determined if the panel was confusing or too complicated.

Goalie Matchup (2)

- This tab displays the home and away goalies for the game with buttons that when pressed reveals the home teams goalie, and when the other button is pressed it reveals the away teams goalie. Each button also shows the bio and stats of each goalie in their OHL careers.

Test Plan:

- To test this panel we asked a friend to search for stats on a goalie to see how long it took. First we asked questions such as finding the name of the away goalie and timed him. Then we moved to more complex testing such as asking them to find what team the away goalie played for in the 2016 season, and timed him once again. We hoped that it would never take more than 10 seconds to find any stat on the panel.

Analysis:

- We found that the testing went quite well. At first they struggled a bit to locate which goalie was home, and which was away. To fix this problem we added labels to help identify which button displayed which goalies stats and bio. After integrating this we found testing went much smoother

Results:

- The changes we made to the panel helped improve by making the panel work more efficiently. Originally we had the stats in tabs and the tabs on sliders for away and home goalies. However this proved to be ineffective because the slider did not always work properly and sometimes would slide across. With the new updates to the panel and the integration of the labels, we found that the test subjects were able to find stats much faster with an average time of 6 seconds per task. This is well above the 10 seconds we planned to achieve.

Standing/Stats (3)

We considered the client suggestions and we decided to improve the functionality and accessibility of the panel. To accomplish that, we decided to input a box for a csv file so that the panel user can input information directly from online. We also decided to include a clear button , to clear all files when not necessary.

Test Plan: We are testing whether the user can input his csv files inside the box and clear it out in a fraction of a second.To verify the test, we had a friend used the panel and we recorded the time it took him to input csv files in the box and cleared it out. The stopping criteria is ten seconds. When our user could perform the test in 10 seconds , we stopped the test.

Analysis: For now the method of testing works, the time limit is respected to input a file .The panel looks accessible with all the buttons implemented properly. The real problem is to verify feasibility as we can't control technology and we are still thinking of ways to eliminate errors and that would be documented on the next deliverable.

Results: The results for this test plan are positive but we are not fully satisfied about the panel. We are still thinking of ways to improve the accessibility of the panel so that the user has the best experience with the panel .

Three Stars (4)

- This panel shows the top three players of the game regardless of the teams or their scores. It is managed by a third party votes input and it's only task is to show the players name and their stats in an ascending manner.

Test Plan:

We had to scrap the previous idea and start all over again. Instead of using the panel to read csv files, we used it to just input the name of the players and display the names with their respective stars incrementally.

Analysis:

The task has to be completed quickly and the names have to be put together efficiently as the three stars announcement is usually right after the game. So the panel has to have the ability to enter names efficiently and quickly. We wanted around 2-3 clicks to input a name. And then for the name coming on the panel, it has to be incremental. That's why he used a hide button to show the third star, second star and then the first star.

Results:

The user has given the panel to tr. He was able to input the player's name with ease and took 3 clicks. And then he pressed the 'third star' button and the name showed up and that happened for the other two as well. The panel was successful in operation at the end.

Full Page Sponsors (5)

The purpose of the full page sponsor panel is to display the sponsors in a fast and organized fashion. After the initial tests and the client meeting, we decided the addition of a timer to the panel was a good idea. The timer is triggered once someone clicks on a button and can be reset by clicking on a new button or the stop button.

Test Plan:

In addition to the tests done after making the first prototype, another test was performed to examine how well the updated version of the full page sponsors panel can be used by the user. This test is to see if the user can trigger the timer for the buttons and reset the timer within 5 seconds.

Analysis:

The timer on the panel can be started by clicking on one of the buttons. Then it can be reset by either clicking the reset button or by clicking on a new timer to start the timer over. This will allow the user to see how long the image is being displayed for.

Results:

The user was able to trigger the timer and stop the timer within 5 seconds easily. The creation of the timer will definitely be a good addition to the panel and it will make the overall design more organized. We will still continue to adjust the design of the panel to try to make it as organized and user friendly as possible.

Fan Birthdays (6)

The purpose of this panel is to be able to display the birthday message onto the screen. For this prototype, we used the same idea as the full page sponsor panel of adding a timer to the buttons so that the user can track how long the image has been displayed.

Test Plan:

The next test that was performed for this panel was to see if the user could trigger the timer and the stop button within 5 seconds.

Analysis:

The timer on the panel can be started by clicking on one of the buttons. Then it can be reset by either clicking the reset button or by clicking on a new timer to start the timer over. This will allow the user to see how long the image is being displayed for.

Results:

The user was able to complete the task within 5 seconds meaning our design is successful. The timer is a good start to creating our final product and we will continue to see what else we can create to make the panel more accessible.

Sponsor Bugs (7)

The client suggestions were taken into consideration and we decided to improve on the functionality and accessibility of the panel as it is the most time sensitive during the game. To accomplish that we decided to include a timer button to manage the display of sponsor bugs on the screen. As for the prototype 1 , there were buttons that were not needed. So to make it efficient, we decided to remove those buttons. We also decided to use colour coded buttons to make the panel accessible.

Test Plan: for prototype 2 we were testing functionality and accessibility. The plan was to have a potential user that we found online use the panel and verify whether the timer works as planned. So the timer is supposed to run for 20 seconds for each sponsor and then switch to the next automatically.

Analysis: We managed to have the timer work only when we click on the sponsor bug but we want for the next prototype that the timer runs automatically . So the timer has to be programmed before the game such that at a certain time it starts and stops without having the user clicking to facilitate the user experience. We don't know if it's possible but we are going to figure it out.

Results: The result is not positive because what we have planned we were not able to implement . The user was able to use the timer but not as planned. We are struggling with dashboard and we hope that for the next prototype we figure it out. What we are struggling with dashboard is to set up automatic timers connected with each sponsor bug on the screen so that the user gets the best experience.

Make Noise/Crowd Prompts (8)

- The purpose of this panel was to control all the auditory effects during the game like fan birthdays, goals, penalties etc. As the previous prototype did not have any issues with it there was not much changed. We added a little more design effects and made it much easier to use.

Test Plan:

After changing, a user was given to try changing different functions of the tabs in the panel and this task had to be done by the new user with just 2 clicks or less than that.

Analysis:

The user tried changing the functions but it didn't change and it kept having the same colour and changing the function of the tab took longer than expected. So we fixed up the tabs in a numerical order and made the pathway to changing function of the tabs easier

Results:

When the user was given the panel to use again he was able to switch the functions of the tab in 2 clicks or less. Changing the functions of the tab took 6 clicks but he had help. A new user with no experience of dashboard might take longer to change functions of the code.

Test ID	***Test Objective (Why)***	***Description of Prototype used and of Basic Test Method (What)***	***Description of Results to be Recorded and how these results will be used (How)***	***Estimated Test duration and planned start date (When)***
1	For the team setup panel we wanted to test this panel's functionality and how simple it was to use for someone who had never used it beforehand.	We asked a friend to try and use it as if they were the panel operator. We made up scenarios where they would be asked to use a certain button and we counted how long it took them to achieve the given task.	We asked them to do tasks such as find the home teams buttons and press the buttons in this order, mascot, logo, players. This kind of test is how we determined if the panel was confusing or too complicated.	We wanted the test subjects to be able to find the desired button on the first try and within 7 seconds.

2	The changes we made to the panel improved by making the panel more efficient. Originally we had the stats in tabs and the tabs on sliders for away and home goalies. However this proved to be ineffective because the slider did not always work properly	To test this panel we asked a friend to search for stats on a goalie to see how long it took. First we asked questions such as finding the name of the away goalie and timed him. Then we moved to more complex testing such as asking them to find what team the away goalie played for in the 2016 season, and timed him once again.	After integrating labels and buttons, we found that the test subjects were able to find stats much faster. We used the buttons and labels to make the panel more functional. After testing, we found that people had trouble locating which team was home, and which was away which led to us adding labels.	With the new updates to the prototype, we found that the test subjects were able to find stats much faster with an average time of 6 seconds per task. This is well above the 10 seconds we hoped to achieve.
3	For the standing/stats panel we are testing reliability and automatic input of information. This is why the prototype has a box to input csv files , that allows for	The prototype is a physical testing type where the user performs the test. To describe the prototype , we have a table to level each variable and a button to input a csv file and a clear button. Everything on the prototype is	We measured the timing of operations . How much time does it take to input a CSV file and clear it out from the panel screen. The result is measured using a timer and the	The test is supposed to take 10 seconds but since we don't control dashboard we depend on dashboard's functionality to perform the test. The

	statistics to be imputed automatically. The test plan is to have a user input a csv file and clear it out in 10 seconds which is what the user did and for now we can't think of a better way to test our prototype.	labelled so it is easier to be used later. And for the testing plan we focused on the demand of the user which is to have as few manipulations as possible to perform a task which is what we considered by implementing automatic upload of data instead of having it manually. To perform the test there is no material required. Just use the button created to input a CSV file to test whether your information gets uploaded automatically.	information gathered is the number of seconds. We need to know these results because information is updated all the time and the faster we can update these statistics the better.	results are required before building the next prototype. It is important that the test does not exceed a time limit of 10 seconds because the project plan is clear. We want the panel to be used effectively and quickly during the game. We need to do the test, it doesn't take long to do the test and we will have time to do the test.
4	The test is to see if a user could input any given name with ease and bring up the three stars incrementally and without any clogs to the system.	To test the prototype we asked a user to try to use the panel as a real panel operator. His task was to first input names on each of the three star boxes and then use the 'hide' button so that the names cannot be seen.	The test was conducted and he was able to input the player's name and then use the 'three stars' button to access those names. At the end, the names did show up after the user	The panel was supposed to be accessed around in total of 10 clicks or less. But during the test, it was seen that the panels could be accessed by 5 clicks. Inputting

			typed in the buttons and after pressing the ‘hide’ button the names and boxes were gone like expected.	names by the user took 3 clicks and bringing up the names of the players took merely one click.
5	This test is to see if the timer is workable and how easy it can be started by the user. In order for this test to be successful, the user should be able to start and stop the timer within 5 seconds. This is likely the best way to test if the timers are functional and if they can be stopped incase of any glitches. .	For this test, I had asked someone to try to start the timer and see if they could reset it. I then timed how long it took them to do so and recorded it.	The user was successful in completing the task in 5 seconds. This test is a good way to gauge how long it will take in a game setting and that the users will be able to work the panel in a fast manner.	The user will be timed on how long they take on the task at hand. In this scenario, it is projected that they will take 5 seconds to activate the timer and turn it off. The user did in fact complete the task in the estimated time which means we don’t currently need to change how we’ve created the timer.
6	The test for fan birthdays is the same as the full page sponsor panel as they both were	For this test, I had asked someone to try to start the timer and see if they could reset it. I then timed how long it	The user completed the task in 5 seconds which was projected to happen	Since the estimated time for the user to access the timer and they completed the

	updated with timers triggered by buttons. If the test is successful, the user should be able to complete the task in 5 seconds. This test has a good application to what would be done in a game setting and the user would need to be able stop the timer at the end of the birthdays or incase of any glitches.	took them to do so and recorded it.	which means out design is a success. This is a good way to gauge how long it will take for the users to get used to the design and how fast they could start the timers in games.	task in that time, it means that we do not need to alter our way of testing or the design of the panel as a whole.
7	For the sponsor bugs panel we are testing accessibility . This is why the prototype has all the sponsor bugs button on the screen, that allows for easy access during the game. The test plan is to have a user click on the sponsor bug	The prototype is a physical testing type where the user performs the test. To describe the prototype , we have a button for each sponsor bug, a preset timer of 10 seconds and a stop button. Everything on the prototype is labelled so it is easier to be used later. And for the testing plan we	We measured the accessibility of each sponsor bug . How much time does it take the user to find each sponsor bug and use it. The result is measured using a timer and the information gathered is the number of seconds. We	The test is supposed to take 5 seconds and we depend on dashboard's functionality to perform the test. The results are required before building the next prototype. It is important that the test does not

	button he wants to display and a preset timer of 10 seconds begins automatically, the user has to click again to the next sponsor bug for the timer to begin again which is timer consuming considered a game like this where everything happens very quickly. We are thinking of a better way to make our prototype accessible.	focused on the demand of the user which is to have the panel accessible . This is what we considered by implementing all the sponsor bugs on the screen. To perform the test there is no material required. Just use the button that represents each sponsor bug and a timer will begin and end based on the amount of time it was preset to.	need to know these results because information needs to be found very quickly during the game.	exceed a time limit of 5 seconds because the project plan is clear. We want the panel to be easily accessible during the game. We need to do the test, it doesn't take long to do the test and we will have time to do the test.
8	The test for noise/crowd prompt was to see if different functions were being shown on the panel if the tabs are being pressed and if it is easy enough to change the functions of the	The prototype had 15 tabs that were connected to the 'display' panel. By clicking each tab, the display panel supposedly should show different functions of the respective tab(in this instance it was colours). Then the user has to change	The user was told to operate the panel and at first he started with clicking the tabs if the display panel would show different colours or not. It did work and then his next task was to change	The test was supposed to be taking 8 clicks. But to our surprise the panel worked much smoothly then expected. User was able to change different tab functions with

	tab to a user's liking.	the function(colour) of the tab with as few clicks as possible. The team predicted around 8 clicks.	the colour of a tab. He was able to change it smoothly without any problem and when he ran the panel again, it worked.	just a click. For changing the functions of the tab, at first it took him 7 clicks. But when he did the task again he was more efficient and did it in 5 clicks. The panel was successful and good to be operated by a new user.