Project Deliverable F: Prototype 1 and Customer Feedback

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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)
001	Ensure Functionality of each subsystem by testing each button	First prototype designed to test functionality of the subsystem (Test)	Check to see if the subsystem's first prototype can perform the tasks outlined in the design drawings (basic functions and commands).	November 2nd Duration: 2hr per subsection
002	Optimization and debugging of subsystems	Second prototype builds upon the first by improving usability and taking feedback gained during testing into account (Analyze)	Check to see that layout is easy to use, size of buttons is acceptable	November 9th Duration: 2hr per subsection
003	Improve Aesthetics and Finalization of subsystems	Third prototype allows us to develop a clean and final product that will incorporate the original aesthetics and designs (Inspect)	Look through the program and make sure all subsystems are up to the agreed upon standards.	November 21st Duration: 2hr per subsection

Future test plan objectives: Communicating and getting feedback on ideas, checking feasibility, analyzing critical components of subsystems, reducing risk and uncertainty and lowering the number of tasks required to add a new element or edit data (time and task efficiency)

The reason for our first prototype test was to ensure the functionality of each subsystem by testing each button and system. We start off with simple tasks and in our later prototype testing, we will focus specifically on the key aspect of each design and aesthetic. The first prototype designed to test functionality of the subsystem (Test). We will also check to see if the subsystem's first prototype can perform the tasks outlined in the design drawings (basic functions and commands).

Note: No changes were made to the cost plan.
Initial Cost Plan and Estimate:

Material/Hardware/Software	Cost
Dashboard	$0
Total Cost	$0

Prototype 1 Test Results

Subsystem	Buttons perform proper tasks/commands	Panel is organized and easy to use	Time efficient* (time it takes to add new element)	Bug-free, runs smoothly
Crowd prompts	YES	YES	1. YES 2. YES 3. YES 4. YES	YES
Goalies matchup	YES	YES	1. YES 2. YES 3. YES 4. YES	YES
Standings	YES	YES	1.YES 2.YES 3.YES 4.YES	MOST
Sponsor Bugs	YES	YES	1. YES 2. YES 3. YES 4. YES	YES
Birthdays	MOST	YES	1. YES 2. YES 3. YES 4. YES	YES

*Each group member could access the grid, were given a set of instructions by the creator and required to perform a simple task. If the new user could figure out how to perform the command in under a minute then we consider the test a success (each group member performs a test). Given the specific instructions and the creator a maximum time limits to elaborate and answer questions, all group members could successfully add new or edit existing elements to the panel in the amount of time required for the subsystem prototype to be considered a success in this sense.

Our initial problem statement is: a need exists to create an efficient, easily configurable, streamlined service that is both easy to use and enhances the fan experience. The first client meeting allowed us to understand the parameters of the project, and gain a better understanding of certain design specifications. For the next client meeting, we will be receiving feedback on our first prototypes for each subsection. The main points we want to test for our first prototypes are how time efficient they are, how easy information is to manipulate, and how adjustable and reliable the system is overall. In our designs, we will put an emphasis on big, appealing fonts for the display that will increase the entertainment value (but this will be one of our last prototypes to meet the criteria of "new and creative designs"). To succeed, we came up with the prototyping task plan (last deliverable) to make sure that each subsection had an intuitive, easy to use interface.

Prototyping is an important part of the design thinking process, and it is where all of your ideas come to life. By prototyping your designs, you can get a comprehensive idea of what needs to be fixed, what you like about your design, and what it will actually look like to the user. There are multiple stages of prototyping to maximize how efficient the panel is in order to be the best solution for the client.

All panels were very organized and easy to understand. Given the set of instructions from each panel creator, we determined a time frame of 1 minute (which we can shorten as prototypes become more advanced) to see how a new, unfamiliar user can work with the panel. We are assuming that more advanced users who are more familiar with systems will perform better than us. This means that if we can get our designs to work, the users who are more experienced should be able to as well. Each subsection took about 45 minutes to test. We tested over a couple days during reading week. We allowed for much more time to test because we did not want to run out of time. We allocated 2 hours when we were really expecting tasks to take an hour and a half. We made these estimates before we were all familiar with Dashboard, but now that we've had more time and practice this greatly reduced our test time.

The results we collected show that the subsection each group member was responsible for is easy to use and very organized. By determining the time it takes to add new elements (birthdays, sponsor bugs, and crowd prompts…) if they can be added in under a minute (test criteria), this demonstrates that other users can be taught the same way. Our stopping criteria is thus defined as when the minute is up. Group members gave feedback after they tried to add a new component, and this was a good way to gather feedback. We do have to work more on making sure that all buttons perform the correct tasks (add/edit parameters) and make sure that the programs run smoothly in each phase in the prototype testing. We will include specific changes to the layout or

programming before the next prototype test date, so that group members can see the changes and make more comments.

By discussing each subsystem with the group, we can gather feedback based upon everyone's experiences. This feedback can then be used to improve the subsystems to create a second, more detailed prototype.

For our prototype 2 test plan (see plan below), we will similarly all run and ensure our subsystems work smoothly and efficiently, confirming that our prototype can accomplish the required tasks successfully. We will use our results from our first prototype test to improve our efficiency and work on our errors. Likewise, we will communicate and give feedback on each other and finish with the best product possible.

Prototype 2 Test Plan

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)
002	Optimization and debugging of subsystems (Some issues with getting buttons to perform the correct commands and some bugs to work out after prototype 1)	Second prototype builds upon the first by improving usability and taking feedback gained during testing into account (Analyze)	Check to see that layout is easy to use, size and style of buttons is acceptable	November 9th Duration: 1hr per subsection (Over a few days, few subsections per day seemed to work over reading week)

For the following deliverables/tasks we have assigned each other to certain subsystems to complete and we come together to discuss and improve our ideas to come up with a general group solution. Nick will present at the client meet 3 and we have not decided who will be presenting on the design day as of yet. For our presentation we are looking to intrigue and impress the clients with our ideas and designs, and we are hoping they can give us some good feedback as well to help us improve our prototype. They are people who have been working with dashboard for years, so they are the best people to help guide us. During the last client meet we presented our ideas for too long and were left with little time for feedback, so we're hoping to be more concise with our presenting this time around in the hopes of having more time for their feedback to help us improve.

In our previous prototyping stages we were challenged in some cases with efficiency which was something that we had to work on for our next prototyping stage. We have to

use empathy to understand that the people who would use these programs need more than just to have it work, but it needs to be fast and efficient as well. We still believe we have room to improve, but we have accomplished a design that works well and is relatively efficient as well.

[Link to google drive folder containing subsystem prototype screenshots](#)