

**GNG 1103 Project Deliverable G**  
**Prototype II and Customer Feedback**

Group 15

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## Sponsor Elements (Lexy & Paige)

Prototype:

The two main goals of the prototype for the subsystem of the control panel controlling sponsor elements and sponsor bugs are to be as user-friendly and configurable as possible. In order for the user to configure the buttons used to trigger the display of a sponsor graphic, a tab to configure the buttons was created in the interface as seen in the figures below. Using a filepicker widget in Dashboard, the following code is used to make a selected .png file appear on the buttons on the control panel:

```
<task tasktype="ogscript">ogscript.setStyle("button1","bg-u:"+ params.getValue('sponsorimage', 0));</task>
```

As seen below in Figure 1, toggle buttons are used so the user can easily see at a glance which sponsor graphic is selected and currently being displayed on the screen. As per previous client feedback, it is valuable that images are used so the user can very easily tell which sponsor is selected.

As seen in Figure 2 and Figure 4, there is an option on the configuration tab to link the buttons to Xpression, which will allow the selected sponsor graphics to be displayed on screen. Due to technical difficulties with Xpression and IT, it was not possible to link the files in this prototype. The next prototype will include working links to Xpression files for full functionality.

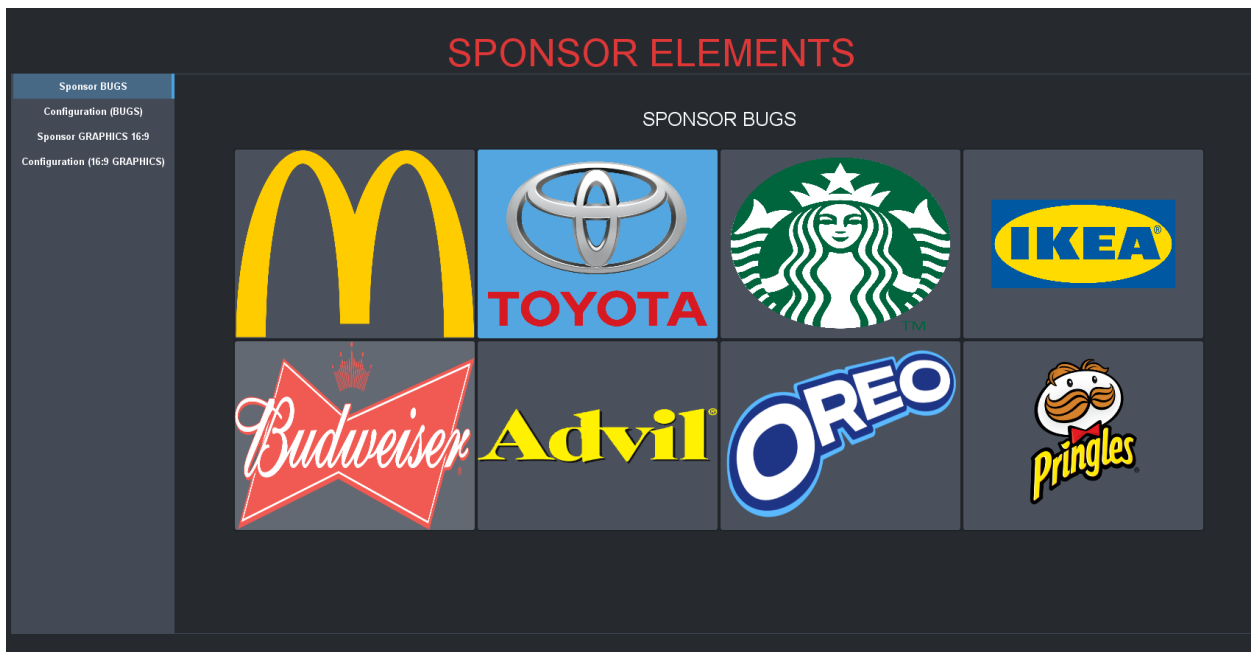


Figure 1. Main user interface with buttons triggering sponsor bug graphics. The Toyota sponsor is selected with a toggle button.

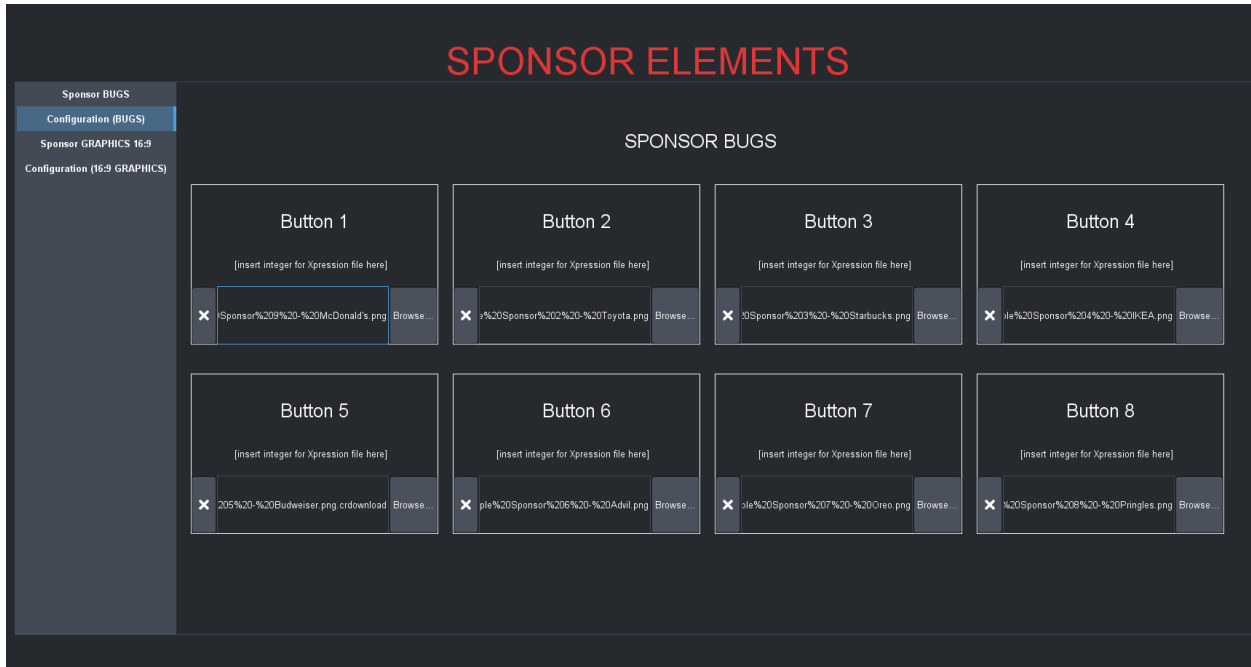


Figure 2. Configuration panel to load sponsor bug buttons with desired sponsors.

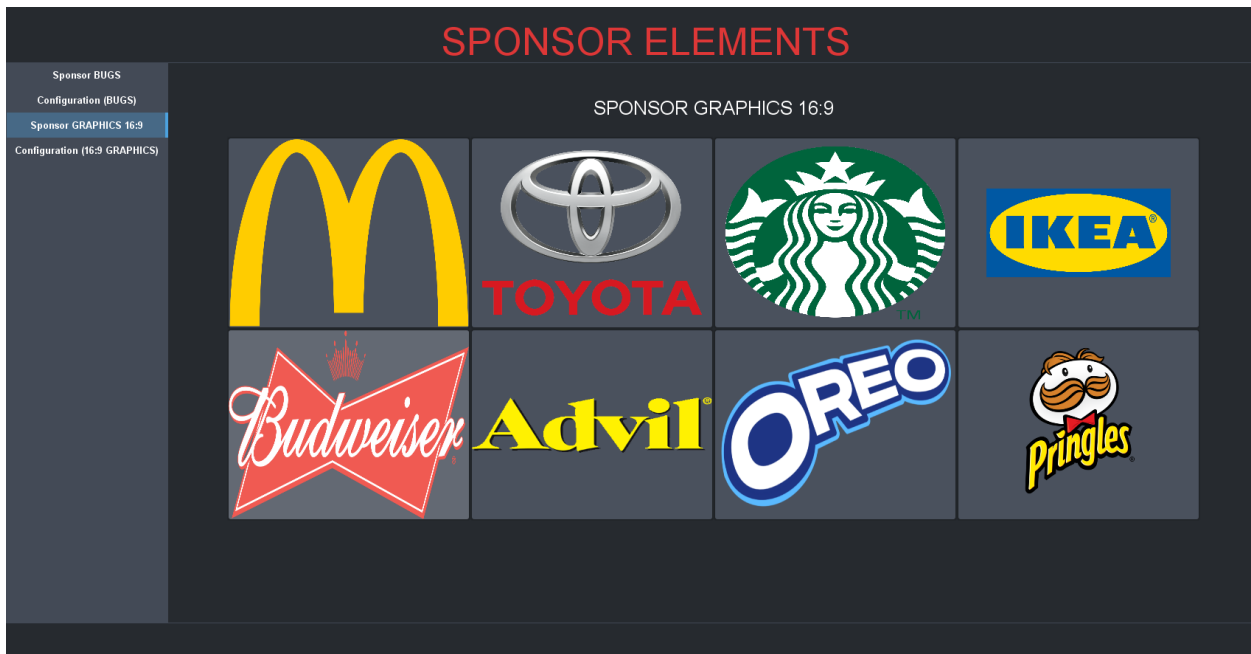


Figure 3. Main user interface with buttons triggering full 16:9 sponsor graphics.

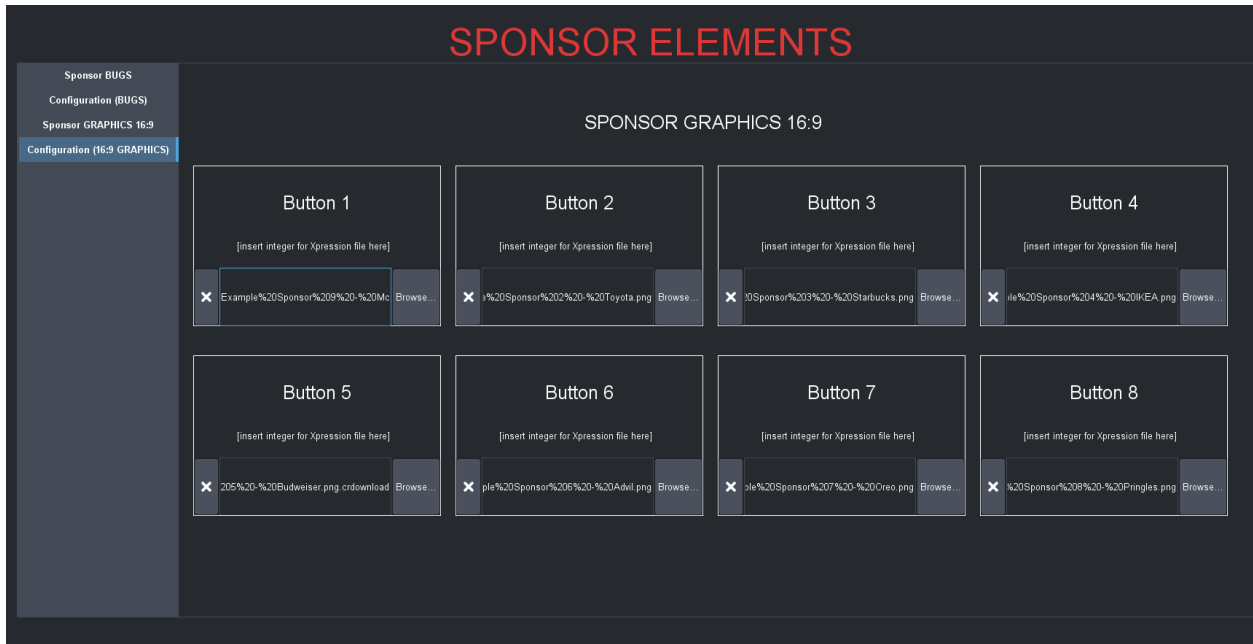


Figure 4. Configuration panel to load full 16:9 sponsor graphic buttons with desired sponsors.

Feedback:

As outlined in previous deliverables and in the next test plan below, user feedback is analyzed as part of the prototyping test plan. Seen below in Table 1 is a summary of user feedback. Ratings out of 10 are the average from a sample size of 5 users.

Table 1. Summary of user feedback for sponsor elements control panel prototype.

Aspect	Rating out of 10	Feedback
Configurability	9.25/10	<ul style="list-style-type: none"> <li>● Button images corresponding to each sponsor are easily changed</li> <li>● Xpression file link needs to be added for full functionality</li> <li>● Very neat &amp; easy to use</li> <li>● The user would easily switch between sponsors at a rapid pace</li> <li>● The user can exchange sponsors during the game if needed</li> </ul>
User-friendliness	10/10	<ul style="list-style-type: none"> <li>● Large buttons that are clearly labelled and easy to click very quickly</li> <li>● Images can be glanced at quickly; faster and more user-friendly than text</li> <li>● Use of toggle buttons allows user to easily</li> </ul>

		<p>see what sponsor is selected</p> <ul style="list-style-type: none"> <li>● Buttons can be configured easily</li> <li>● Tabs are clearly labelled so that user can easily see which element (bug for full graphic) is being controlled</li> <li>● “It was very easy and clear to use (what is expected)”</li> <li>● “Minimal distractions present, clear guidelines for its intended purpose”</li> </ul>
Aesthetics	8.5/10	<ul style="list-style-type: none"> <li>● Neat and clear</li> <li>● Each tab section is clearly labelled</li> <li>● “Making the graphics higher quality would benefit the aesthetic”</li> <li>● “Use of more colour would add a more aesthetic effect”</li> <li>● Tabs on the side would be easier to use/read if bigger</li> </ul>
Functionality	9/10	<ul style="list-style-type: none"> <li>● Buttons are large and clearly labelled so that they can be clicked very quickly</li> <li>● Xpression file link needs to be added for full functionality</li> <li>● “Being able to switch between buttons without clicking and unclicking buttons, instead just selecting between the buttons”</li> <li>● “Adding a timer to distinguish how long a sponsor is projected”</li> </ul>

Testing For Next Prototype:

1) Purpose of the test

The purpose of the testing is to ensure the prototype continues to maintain its functionality as it is refined based on user feedback, as well as optimise its efficiency.

2) Specific design concept

Specifically, this prototype test will ensure the interface is easily used once it is linked to Xpression. At this point, we will be able to time how long it takes a user to trigger a sponsor graphic on-screen. This will act as a measure of the design’s efficiency.

### 3) Testing method

To test its effectiveness the team will put themselves in the user's shoes and analyze its efficiency with a physical prototype test using the control panel designed in Dashboard. We will time how long it takes to trigger a sponsor graphic on-screen once given the cue. Additionally, we will pursue further user and client feedback to ensure all needs are met.

### 4) Test performance

To perform further testing on the prototype, we will use the control panel while watching a sporting event. The time it takes to perform each task successfully (i.e. have the correct graphics display on the stadium screen) within a satisfactory timeframe will be analyzed. It is important that the graphics display on the stadium screen easily and very quickly.

Additional client and user feedback will be obtained. Based on more ratings out of 10, we will be able to analyze the best and worst parts of the design.

### 5) Measuring, observing, and recording results

Using a stopwatch, the time it takes for a number of users to execute each sponsor graphic function at the appropriate time during a sports game will be measured and recorded in a data table. Additionally, user and client feedback will be recorded, analyzed, and implemented in the design (refer to table above for example).

### 6) Interpreting results

The average time it takes for the graphics to appear on the stadium screen must be within 0-3 seconds of the sponsor "trigger" during the game to be satisfactory. If it takes longer than this to display the graphics on-screen, the design must be modified.

Stopping criteria:

- 1) The time it takes for the graphics to appear on the stadium screen must be within 0-3 seconds of the announcement during the game to be satisfactory.
- 2) The average user rating for each aspect (as outlined in Table 1) must be 9/10 or higher.

Fidelity: The testing will be of medium-high fidelity. Under ideal conditions, the team will be able to successfully replicate the conditions under which the operator will be using the Dashboard control panel during a sporting event by using it themselves while watching an actual sporting event.

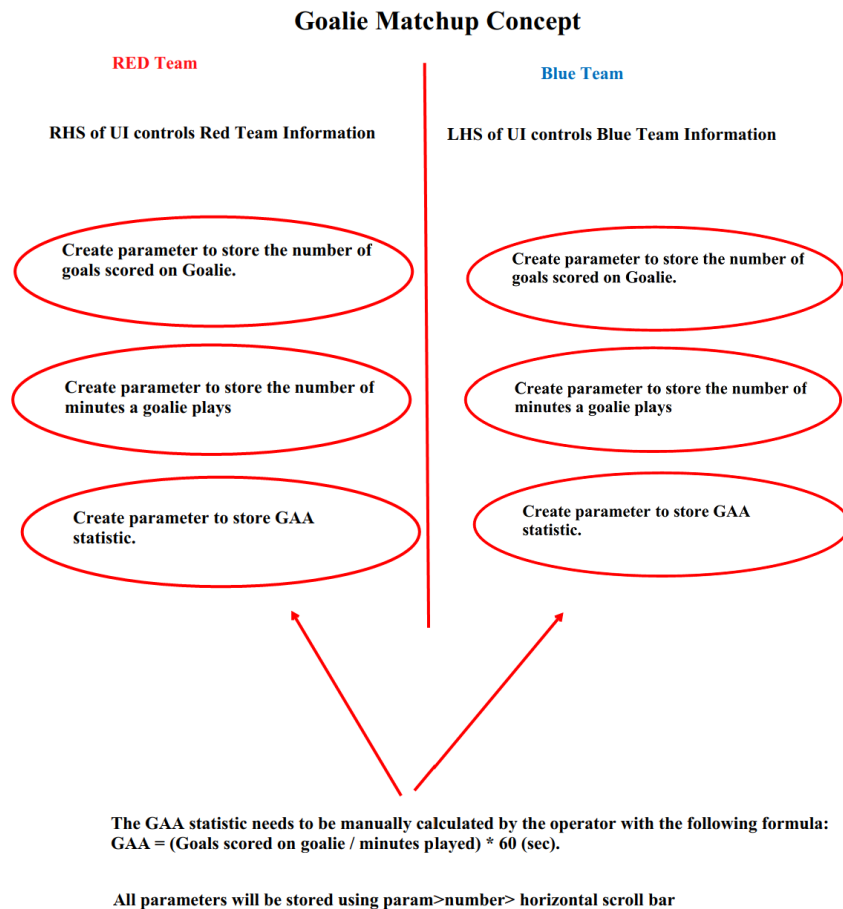
## Goalie Matchup (William & Mirko)

### Objective:

- Organize and store the team's goalie data. With the data the operator can calculate goalie statistics.

### Concept:

- The goalie matchup will be split in two parts by a vertical red line. The left side will contain the red team's information and the right side will contain the blue team's information.
- There will be three numeric parameters for each team. “# goals scored on goalie”, “minutes played by goalie” and “GAA statistic”.
- The operator can calculate the GAA statistic using the formula and the two data parameters.



## Simulation Procedure:

1. Input “# goals scored against goalie” and “minutes played” in the appropriate dashboard parameter.
2. Manually calculate the GAA statistic using the formula:  $GAA = (\text{Goals scored on goalie} / \text{minutes played}) * 60$
3. Input the GAA statistic in the parameter to store the data.

## Simulation Test:

The operator can quickly switch the parameter values and store it in the UI.

For example: If “# goals scored on goalie = 2” and “minutes played = 30 min” for team red and “# goals scored on goalie = 3” and “minutes played = 20 min” for team blue:

1. The operator needs to input these values in the appropriate parameters which will automatically save the value.

The screenshot displays a 'Goalie Matchup' interface with two columns for 'Red Team' and 'Blue Team'. Each team's section contains input fields for 'Goals Against Average', 'Goals Scored On Goalie', 'Minutes Played', and 'Goals Against Average Value'. The Red Team's 'Goals Scored On Goalie' is set to 2 and 'Minutes Played' is 30. The Blue Team's 'Goals Against Goalie2' is set to 3 and 'Minutes Played2' is 20. A yellow box highlights the formula:  $\text{Goals Against Average} = (\text{Goals Scored} / \text{Minutes Played}) * 60$ . A vertical red line separates the two teams, and a 'vs' label is positioned between them.

2. Using the formula the operator needs to calculate the GAA statistic manually.

$$GAA1 = (2/30) * 60 = 3.99$$

$$GAA2 = (3/20) * 60 = 9$$

3. The operator needs to input each team's GAA statistic in the appropriate “GAA parameters”.





### Goalie Matchup Improvements:

- To improve the operator's view, resize the horizontal scroll bars and increase the font.
- One significant improvement can be to program the GAA statistic calculation in the dashboard. At the moment the operator needs to manually calculate the statistic.

### Feedback:

Table 2. Summary of user feedback for goalie setup control panel prototype.

Aspect	Rating out of 10	Feedback
Configurability	/10	<ul style="list-style-type: none"> <li>● Neat and organized</li> <li>● Easy to understand and to know which team is where</li> <li>● Easy and simple to explain to beginners</li> </ul>
User-friendliness	9.5/10	<ul style="list-style-type: none"> <li>● Team colour coded</li> <li>● Buttons all on one</li> </ul>

		side <ul style="list-style-type: none"> <li>● Big, and easy to find buttons would be ideal</li> </ul>
Aesthetics	7/10	<ul style="list-style-type: none"> <li>● Pleasing to look at</li> <li>● Not overly complicated looking</li> <li>● Colour coding adds a touch of interest to keep it appealing to users and viewers of the software</li> </ul>
Functionality	8/10	<ul style="list-style-type: none"> <li>● Would be more efficient if the calculations were performed automatically after inputting data</li> </ul>

1) Purpose of the test

The purpose of the test is to ensure that this prototype maintains its functionality and optimize efficiency, all while taking into consideration user feedback. well as optimise its efficiency.

2) Specific design concept

This prototype test will test the efficiency of retrieving useful information and stats for useful purposes such as display during sports games.

3) Testing method

The testing method for this prototype is a live simulation. This can be done solely using the software and recording its efficiency, or a stadium-wise test taking into consideration electronic transfer between the user’s screen and the stadium screen viewed by the fans.

4) Test performance

To perform further testing on the prototype, we will use the control panel while watching a sporting event. The time it takes to perform each task successfully (i.e. have the correct graphics display on the stadium screen) within a satisfactory timeframe will be analyzed. It is important that the graphics display on the stadium screen easily and very quickly.

Additional client and user feedback will be obtained. Based on more ratings out of 10, we will be able to analyze the best and worst parts of the design.

#### 5) Measuring, observing, and recording results

The results can be checked to see the statistics that are displayed. The measurement taken may be the time taken between entering the statistics and the program displaying the resultant, and also the time taken between the results appearing on the user screen and the fan stadium display screen.

#### 6) Interpreting results

The interpreted needs for this prototype must be within 0-3 seconds after the user allows the content to display on the fan stadium screen. If the criteria is exceeded, the program shall be modified.

Stopping criteria:

- 1) The time it takes for the graphics to appear on the stadium screen must be within 0-3 seconds of the announcement during the game to be satisfactory.
- 2) The average user rating for each aspect (as outlined in Table 1) must be 9/10 or higher.

Fidelity: The testing in this section will also be of medium-high fidelity. The conditions that the operator will be using this control panel during events can be successfully replicated under ideal and otherwise normal conditions.

# Updated Wrike Tasks:

The screenshot displays the Wrike project management interface. On the left, a sidebar shows the project hierarchy: 'G15' (expanded) containing 'Client Meeting', 'Deliverable G', and 'Plan de prototypage 2'. The main area shows a task list for 'G15' with columns for task name, due date, and status. The 'Deliverable G' task is selected, and its details are shown on the right. The details view includes a task title 'Deliverable G', a due date of '4-11 Nov (8d)', and a list of sub-tasks: 'Prototype Design', 'Group Meeting 1', 'Zoom Meet', 'Trial Run', 'Divide Prototype', 'Prototype Parts', and 'Submit Deliverable'. A comment by Mirko Onufrak is visible, stating 'Included task into G15' and 'Assigned task to Mirko Onufrak, William Paltin, Paige Petroskie, Lexy Candler'.


















Task Name	Due Date	Status
Client Meeting		
Deliverable E		New
G15 Deliverable F	4 Nov	New
Deliverable G	11 Nov	New
Prototype Design	5 Nov	New
Group Meeting 1	5 Nov	New
Zoom Meet	8 Nov	New
Trial Run	9 Nov	New
Divide Prototype	11 Nov	New
Prototype Parts	11 Nov	New
Sponsor Setup/Sponsor Bugs		New
Goalie Setup		New
Submit Deliverable		New
Design Day	2 Dec	New
Deliverable K		New
Deliverable J		New
Deliverable I		New

**Deliverable G Details:**

- Task Name: Deliverable G
- Due Date: 4-11 Nov (8d)
- Sub-tasks:
  - Prototype Design (5 Nov, New)
  - Group Meeting 1 (5 Nov, New)
  - Zoom Meet (8 Nov, New)
  - Trial Run (9 Nov, New)
  - Divide Prototype (11 Nov, New)
  - Prototype Parts (11 Nov, New)
  - Submit Deliverable (New)

**Comments:**

- Mirko Onufrak (5:56 PM): Included task into G15. Assigned task to Mirko Onufrak, William Paltin, Paige Petroskie, Lexy Candler.
- Mirko Onufrak (6:09 PM): Add a comment...

	Client Meeting		
>	 Deliverable E		New
	 G15 Deliverable F	4 Nov	New
∨	 Deliverable G	11 Nov	New
	 Prototype Design	5 Nov	New
	 Group Meeting 1	5 Nov	New
	 Zoom Meet	8 Nov	New
	 Trial Run	9 Nov	New
	 Divide Prototype	11 Nov	New
∨	 Prototype Parts	11 Nov	New
	 Sponsor Setup/Sponsor Bugs		New
	 Goalie Setup		New
	 Submit Deliverable		New
	 Design Day	2 Dec	New
	 Deliverable K		New
	 Deliverable J		New
	 Deliverable I		New

# Deliverable G



G15 +

New ▾



#791492605 by Mirko O. at 5:56 PM

4-11 Nov (8d) Approvals 0:00 7 subtasks Attach files 0 6

- Prototype Design 5 Nov New
- Group Meeting 1 5 Nov New
- Zoom Meet 8 Nov New
- Trial Run 9 Nov New
- Divide Prototype 11 Nov New
- >  Prototype Parts 11 Nov New
- Submit Deliverable New

Add  ▾