

## Team Planning Report

The purpose of the Team Planning Report is to help you (meaning collectively your group) organize a team, and to determine your approach to the course, the game and the design problem. The report should be short, probably just one page, certainly less than two pages, but that does not mean it can be done quickly. Your team will need to discuss the various issues and come to consensus; this will take some time and effort. Your report should be a clear and concise summary of your team's decisions, and cover the following topics.

### Identification and Format

The header of every team report should prominently show your team number, the names of team members, and the title of the report. It must be typed. Turn it in on time as instructed in class and/or on the course web site. See the grading rubric for information on how it will be graded.

### Team Goal

How does your team plan to approach the course as a whole? Team members may have different expectations for the course, but you need to agree on a common team goal or approach. This could be a one sentence statement or motto, from "We will spend whatever time and effort it takes to win the contest with the most awesome robot Lego Lab has ever seen," to "We are interested in exploring novel and unique approaches to robot design, and having fun; we want to do well in the contest, but winning is not our primary goal," to "We plan to satisfy the requirements of the course, but we all have other commitments that prevent us from doing much more than that." Many other statements are acceptable, but "We all want to get an A," is not.

### Team Organization

Describe how you are going to allocate team functions, not the specific jobs (programming, navigation, etc.) but the management tasks. A possible division is Coordinator (organizing meetings, setting and monitoring milestones, assigning jobs), Scribe (keeping notes of team meetings and decisions, coordinating and assembling reports and making sure they are submitted), and Quartermaster (organizes and secures supplies, plans breaks and refreshments to lower stress). Your team can have different roles, just describe them, and how you will fill them (permanent assignments or rotating) and who is taking what role when. Describe how your team will resolve differences or make decisions when members differ.

### Game Analysis

Your team should start the process of analyzing the game and the resulting design challenge. Very briefly identify what you see as the easiest part, the hardest part, the most critical task, and maybe the most interesting aspect of the problem. There are several ways to describe a game strategy. You should not pick a strategy now, but start identifying them by composing a one or two sentence description of what a robot might do if it was:

- Defensive, primarily trying to prevent the opponent from scoring;
- Offensive, concentrating on scoring, largely ignoring the opponent;
- Low risk, possibly low scoring (how low?), but virtually certain to get it.
- High score, but high risk. What is the highest score possible; what is the worst case?

Certainly do not describe how you will build your robot; your team should not have decided that yet. Some wild brainstorming of possible features or functions is OK, but do not report them here or make any decisions.

### Team Planning Report Grading Rubric

Aspect	+ Excellent (4)	✓ Acceptable (3)	– Deficient (1)
General	<p>Clear, complete heading. Organized by topics. Concise, well written, and gives a complete picture. Contains no extra or irrelevant material. Clearly the result of team discussion and consensus.</p>	<p>Complete heading information. Organized by topics. Concise with few extra comments. Indications of team discussion and consensus for most items.</p>	<p>Incomplete heading information. Poor organization, difficult to follow. Too long and rambling, with unnecessary material included. Responses seem to be determined by individuals, rather than the result of team discussion.</p>
Team Goal	<p>Provides a simple, clear statement of the team goal. Clever, unique, memorable, or humorous.</p>	<p>Provides a simple, clear statement of the team goal.</p>	<p>Unclear goal, or a trite goal.</p>
Team Organization	<p>Clearly identifies the team management tasks and responsibilities. Unusual, or non-traditional aspects. Identifies members with positions, and how they will be rotated. Specifies clear team decision process highly likely to be successful.</p>	<p>Identifies team management positions and primary responsibilities. Identifies members with positions. Specifies a workable team decision process.</p>	<p>Poorly defined management structure and roles. Responsibilities not clearly identified. No assignment of roles or method to do so. Poorly thought out, or missing, team decision process.</p>
Game Analysis	<p>Comments on all the various aspects of the game. Correctly identifies critical tasks. Identifies interesting aspects and options of the game. Excellent, concise descriptions of strategy options.</p>	<p>Comments on most aspects of the game. Identifies at least one critical design parameter. Correctly describes the strategy options.</p>	<p>Comments on only a few of the game aspects. Poor recognition of critical issues. Poor, incorrect, or incomplete description of strategy options.</p>