

My Wisconsin Idea project was to display the information about FIRST Lego League. I have been a coach of a FLL team for the past two years and this is a great program that gets kids interested in science and technology. This program allows a small team of 4<sup>th</sup>-8<sup>th</sup> graders to build a robot out of Legos and program it to autonomously complete tasks. My goal as a coach is to help them along this process while stepping back and letting the kids figure as much out as they can.

My experience in CS 302 has really helped me understand more about the programming language, and I have been able to translate that into my coaching. For example, there was an instance this year when the team was trying some advanced programming that my CS knowledge helped. The kids were trying to get their robot to follow a line, and to do that, they used a sensor that returned true or false. They also wanted this to repeat for an amount of time. Fortunately, in the programming language the kids use, Lego Mindstorms, the pieces of code were identical to that of JAVA. They needed if statements and a loop to accomplish this. And since they had never used these functions before, I was able to explain how it worked instead of programming it for them.

Another one of my programming techniques that I learned from CS 302 that I was able to apply to my coaching was with commenting of code. In Lego Mindstorms, several blocks of code are placed in sequence in order to execute. And in some of the lengthy programs, there can be many different blocks using different motors, for different purposes. To demonstrate the importance of commenting, I showed the code to one of the kids who primarily built the robot instead of programming. I looked right at him and said, "Have any idea as to what this is doing?" And when he said no, I showed him how to comment the code, and we sat there and commented

all of the programs that day, to avoid future confusion. This simple organizational tool was something that I had completely overlooked before taking CS 302.

I made this website with the intent to share what FLL is all about, from what the kids do, to what the coaches do. I provided several links to important websites, I talked about what I have done as a coach, and I began to talk about some specific things about the Lego robot and its programming. My audience for this website is for anyone that is interested in learning about FLL. Whether that is for starting a team, looking for more information to help a team, or just learning about this amazing program, anyone that finds my website is sure to find some valuable information. Here is the link to the homepage of my website, I hope you enjoy.

<https://sites.google.com/site/firstlegorobotics/home>