

Team 191 Project Plan

Team Organization and Availability

Members	Jobs	Comments	Wednesdays	Saturdays	Spring Break
Justin G	lead		OK	OK	OK
Chris E	documentation		OK	OK	OK
David G			OK	OK	OK
Zeshan T	coding	workshop day 2	OK	OK	OK
Darpan K	builder		OK	no afternoons	OK
Adam H	coding	workshop day 1	OK	OK	OK
Pavleen T	coding		OK	no mornings	OK
Clare L	coding	workshop day 2	OK	no afternoons	OK
Victor Y	coding		OK	no afternoons	OK
Peter G	builder	workshop day 2	?	?	?
Chris H	documentation		OK	?	?
Megan H	ideas		OK	sometimes	sometimes
Brian B	builder		OK	no afternoons	OK
Ben W	coding		OK	sometimes	?
Alex S	documentation		OK	OK	?
Ryan S	documentation		OK	OK	?
Nadav K	builder		OK	OK	?

The building team and coding team work hand in hand to create our working robot. The Documentation team records everything in depth and vast detail to further analyze it in future meetings. The ideas team is the link between the documentation and the robot. We work together as a team, but we delegate tasks enough to get everything done.

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Meeting Schedule						
Week	Day	Date	Time	Length	Task	
0	Wednesday	2/18	6-9pm	3	Plan	
1	Saturday	2/21	9am-5pm	8	Workshop	
1	Sunday	2/22	9am-5pm	8	Workshop	
1	Monday	2/23	7-9pm	2	Plan	
1	Wednesday	2/25	6-9pm	3	Design	
1	Saturday	2/28	9am-noon	3	Experiment	
2	Wednesday	3/4	6-9pm	3	Design	
2	Saturday	3/7	9am-noon	3	Table	
3	Wednesday	3/11	6-9pm	3	Buid	
3	Saturday	3/14	9am-noon	3	Build	
4	Monday	3/16	7-9pm	3	Documentation	
4	Wednesday	3/18	6-9pm	3	Code	
4	Saturday	3/21	9am-noon	3	Code	
5	Wednesday	3/25	6-9pm	3	Redesign	
5	Saturday	3/28	9am-noon	3	Test	
6	Monday	3/30	7-9pm	3	Documentation	
6	Wednesday	4/1	6-9pm	3	Test	
6	Saturday	4/4	9am-noon	3	Test	
7	Wednesday	4/8	6-9pm	3	Test	
7	Saturday	4/11	9am-noon	3	Evaluate	
8	Monday	4/13	6-9pm	3	Presentation	
8	Wednesday	4/15	6-9pm	3	Test	
8	Friday	4/17	6-9pm	3	Prepare	
8	Saturday	4/18	7am-7pm	12	Tournament	

We will clear the task color codes as we move through the schedule.

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Week 1 - February 28				
Goals	People	Milestones	Status	Notes
Develop a game plan	Whole Team	Take notes and finish documenting the plan	Ongoing until rules confirmed	Attack vs. Defense, which is more profitable?
Consider limitations on ideas and parts	Whole Team	Read rules and finalize design	Ongoing until rules confirmed	Lighter bot has proved higher success rate in past botball teams
Assign roles to team members	Whole Team	Fill out excell with names	Completed	Organization can be the key to success, specialization proves to be beneficial, but communications between teams is also crucial
Assign roles to robots	Whole Team	document and design optimum strategy	Completed	Create scores and CBC prevents opponent points

Week 2 - March 7				
Goals	People	Milestones	Status	Notes
Tribble collection process	Whole Team	Roomba will collect tribbles while in cups	In progress	Leave cups over tribbles
Blocking off opponent peak	Whole Team	Handled by CBC bot	Hypothetical	Possible use of extending metal gate or treads
Seeding Strategy	Whole Team	Collect opponent points as well	Should have been finished	Collect Botguy
CBC base stability	CBC Team	Keep base stable but accessible	Completed	fixed stability with fourth wheel
Botguy ideas	Roomba Team	Develop mechanism	In progress	

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Week 3 - March 14				
Goals	People	Milestones	Status	Notes
Frontal bulldozer	Roomba Team	Test whether all cups can fit	Should have been finished	obtains red and green tribbles in cup. Intended to disrupt botguy
Turbine collector	Roomba Team	Test whether turbines can align to cavity	Completed	collects first turbine and testing for other turbines
Botguy collector	Roomba Team	Test if the collector can align and capture botguy	Completed	The collector would sweep botguy off the cups and position botguy between the bulldozer and the collector
CBC Platform	CBC Team	Test if the platform is strong enough to hold the CBC robot	Completed	added a lego base as well as other metal supports to ensure that the platform can support the CBC robot
CBC water collector	CBC Team	Test whether the collector is stable and is able to hold multiple "waters"	Completed	The collector is just a wide open funnel-like shape to create a wide area for collecting the balls
Attached CBC Camera	Roomba Team	See if the Camera could be properly positioned on the CBC robot	Completed	The camera is a color camera and it is used to locate the positions of the water
Started programming CBC	CBC Team	See if the CBC robot could be programmed to work properly	In progress	Programmed the camera on the CBC robot to find where the blue balls are and move toward them
Finish Documentation	Documntation Team	Update schedule/ document failed ideas/ write-up on prototypes	Completed	Documentation is the key to success
Started programming create	Roomba Team	See if all the mechanisms attached to the create could be programmed to work properly	In progress	Programmed the create robot to lower the bulldozer and move forward to get the cups with calls and up the slope to deposit the turbines. Further tuning up on the program is needed

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Week 4 - March 21				
Goals	People	Milestones	Status	Notes
Begin documentation for next period	Documentation Team	Update schedule at each meeting	future	Keeping things up to date and organized will help future things to come
Begin Testing!	Whole Team	Document and record results	future	Record results for all trails. We learn more from our failures than our triumphs

Week 5 - March 28				
Goals	People	Milestones	Status	Notes
Rethink any strategy	Whole Team	record ideas and finalize bot design	Future	This will be the last time to change any major ideas. Testing should take place for at least three weeks
Testing	Whole Team	Record and analyze results	Future	The team should all contribute to the analysis of the two bots performances
Integration of bots	Coding team	Test and record	Future	Our robots won't do much good if they run into each other

Week 6 - April 4				
Goals	People	Milestones	Status	Notes
Finilization of integration testing	Coding Team	Document	Future	The robots need to work together not against one another
Testing	Whole Team	Test and recode for better performance	Future	Just keep testing until its perfect
Test some more	Whole Team	Record and recode	Future	Murphy's Law: What can go wrong, will go wrong

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Week 7 - April 11				
Goals	People	Milestones	Status	Notes
Be as prepared as possible	Whole Team	Running well documented Tests	Future	No interference by "hand of god" It is better to learn from failure than to falsify outcomes
Period 3 documentation finished	Documentation Team	All documents edited and submitted on time	Future	Procrastination is not the awnser. Finish early
Documentation presentation prepared to go	Documentation Team	Practice the oral presentation at least once	Future	Let's look professional
Last minute testing	Whole Team	Agree our robot is the best it will be	Future	Don't change too much the night before the competition

Week 8 - April 18				
Goals	People	Milestones	Status	Notes
Presentation Final	Documentation Team	Bring all materials to present	Future	Look nice and leave an impression on the judges
Win!!	Whole Team	Show up?	Closing fast!	Ready or not here we come