

Period One – Project Plan

Greater DC/Virginia Region: Parkside Middle School 0586

Goals and Tasks for Botball 2019

Game Goals and Tasks	Deadlines
1. Review game rules and documents	1/23/2019
A. Show game reveal video to members B. Distribute game documents packet	1/23/2019
2. Draft our game plan A. Discuss which tasks would be better for each robot B. Assign tasks to the Create and LEGO robots	1/23/2019
3. Assemble game board A. Order Plastic and PVC for build B. Assemble board with mentors	1/25/2019 1/26/2019

Robot Building Goals and Tasks	Deadlines
1. Prototype the Create and LEGO robots	2/05/2019
A. Sketch drawings of the LEGO robot and its mechanisms B. Sketch drawings of the Create and its mechanisms	1/30/2019 1/30/2019
2. Complete Create Robot A. Construct Claw/Arm for grabbing citizens from skybridge B. Construct Shovel-Arm for grabbing water in flood zone C. Construct collection bins for citizens and water D. construct dumping mechanism	3/08/2019 2/05/2019 2/08/2019 2/12/2019 2/22/2019
3. Complete LEGO Robot A. Construct camera mount on servo for scanning B. Construct claw for grabbing firetrucks and injured citizens C. Construct mechanism for storing and dumping of firetrucks and citizens	3/08/2019 1/30/2019 2/05/2019 2/12/2019

Programming Goals and Tasks	Deadlines
1. Write and test proof-of-concept programs	2/22/2019
A. Write line following for the Create and LEGO workshop bot B. Drive to object and tracking of camera	1/30/2019 1/30/2019 2/20/2019

C. Program more efficient drive functions for LEGO and Create	
2. Complete program for Create robot	3/15/2019
A. Write pseudocode with Create build team	1/30/2019
B. Write code for grabbing citizens and water from flood zone simultaneously	2/07/2019
C. Write code for dumping water into the coupler and moving back to utility zone.	2/20/2019
D. Write code for attaching powerlines and moving gas pipeline to utility zone	2/27/2019
E. Test and bugfix for competition	3/15/2019
3. Complete program for LEGO robot	3/15/2019
A. Write pseudocode with LEGO build team	1/30/2019
B. Write code for grabbing first firefighter, scanning for burning medical center with camera, and dropping off the firefighter there.	2/06/2019
C. Write code for grabbing firefighters from fire pole, collecting, then dumping off at burning medical center.	2/06/2019
D. Write code for finding and grabbing injured citizens under skybridge with camera, then dumping at non-burning medical center	2/14/2019

Documentation Goals and Tasks	Deadlines
1. Period 1 Documentation Complete	1/29/2019
A. Meeting to inform members of roles and tasks	1/30/2019
B. Gather info from our programmers and builders on tasks for this year's game.	1/30/2019
2. Period 2 Documentation Complete	2/25/2019
A. Film video of our robot and mechanisms	2/20/2019
B. Edit video of mechanisms	2/21/2019
C. Send our code repository link to KIPR	3/15/2019
3. Period 3 Documentation Complete	4/02/2019
A. Discuss the build season with our teammates and reflect on everything we've done so far	3/19/2019
B. Draft the paper with our build and programming team leaders to make sure information is accurate	3/26/2019

Schedule Conflicts	Deadlines
1. 7 th Grade Orchestra Concert	3/6/19
2. Spring Sports Tryouts	3/26-28/19
3. Vex Qualifier Tournament	2/02/2019
4. School Cancellation due to snow /weather	Cannot be determined

Team Organization

Schedule of Meeting Times

Regional Workshop – Jan 19th and 20th

Regional Tournament – April 6th

Each meeting will run from 3 – 4:30pm on Tuesdays and Thursdays. Meetings on Wednesdays will run from 3 – 5:30pm

Schedule for January – 22nd, 23rd, 24th, 29th, 30th, 31st

Schedule for February – 5th, 6th, 7th, 12th, 13th, 14th, 19th, 20th, 21st, 26th, 27th, 28th

Schedule for March – 5th, 6th, 7th, 12th, 13th, 14th, 19th, 20th, 21st, 26th, 27th, 28th

Schedule for April – 2nd, 3rd, 4th

Division of Labor

Mentors – Marieta Soma, Stefan Salanski, Natasha Moore, John Vaikasas Sr., Angela Purdy

Team A - Main LEGO: Andrew Schineller¹, Logan Brown, Michael Bryson, Jack Raymer, Tyler Mitchel

Team B - Main Create: Patrick James¹, John Vaikasas, Abdiel Flores, Destin Danqua, Ryan Dinardo

Team C - LEGO Build: Rowan Potts¹, Jake Gaston, Brody Barton, Abby Paik

Team D - Create Build: Mohammad Samad¹, Rathul Raihan, Kaegan Biggins, Marlon Todd

Team E - Documentation Team: Sarah Purdy and Brandon Kile

Student Team Leader: Andrew Schineller

Conflict Resolution

1. Disputes will be resolved the following way:
 1. Let the original members of a specific team settle arguments among themselves within 10 minutes.
 2. If the argument gets out of hand, off topic, tribal, or wastes too much time, then the team leader will list options and the team will vote.
 3. If a compromise can still not be made, then a mentor will be called for their opinion and advice. What the mentor says is final, and work will resume immediately.

¹ Programmer