

Team Name: Atoms  
 Team Number: 0274  
 Region: Greater DC/Virginia

### **Period One - Project Plan**

#### Goals and Tasks for Botball 2019

<b><i>Game Goals and Tasks</i></b>	<b><i>Deadlines</i></b>
1. Examine the game rules and game documents	1/7/19
a. Have project and screen ready to display materials	1/7/19
b. Print out game rules to distribute	1/7/19
2. Brainstorm and discuss strategies	1/9/19
a. Ideas will be recorded on smartboard	1/9/19
b. Teacher will initiate the discussion as members will vote	1/9/19
3. Build practice board	2/2/19
a. Build team will assemble the list of supplies for Teacher to purchase	1/17/19
b. Build team would work with Teacher to assemble game board in classroom	2/2/19

#### Robot Building Goals and Tasks for Botball 2019

<b><i>Robot Building Goals and Tasks</i></b>	<b><i>Deadlines</i></b>
1. Complete construction of Demobot	1/29/19
a. Add claw and figure out best way to maximize points to get a better idea for design	1/27/19
b. Create a concept and design for the bot	1/29/19
2. Complete construction of iCreate bot	1/30/19
a. Add servos to control claw; motors for lifting and adjusting claw.	1/28/19
b. Add working wheels and sensors to receive external input and react to	1/30/19

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3. Build stable supporting structures for claws and the body of demobot	2/28/19
a. Add more mounting points to iCreate robot.	2/21/19
b. Secure cables and loose wires with ties, and tighten screws and nuts	2/28/19

#### Programming Goals and Tasks for Botball 2019

<b><i>Programming Goals and Tasks</i></b>	<b><i>Deadlines</i></b>
1. Complete program for iCreate bot	2/16/19
a. Program claw arm to raise and lower	2/1/19
b. Program claw to open and close	2/16/19
2. Create program for Demo bot	2/15/19
a. Program simple turns and forwards/backwards movement	1/31/19
b. Program Camera to sense colors and move towards certain ones.	2/15/19
3. Run and fine tune programs	3/21/19
a. Run iCreate program, adjusting to make movements more accurate	3/20/19
b. Run Demo bot program, calibrate and adjust camera and wheels for accuracy.	3/21/19

#### Documentation Goals and Tasks for Botball 2019

<b><i>Documentation Goals and Tasks</i></b>	<b><i>Deadlines</i></b>
1. First Period Documentation Complete	2/5/19
a. Class meeting to set the general schedule	1/24/19
b. Collect info from building and programming teams to establish goals and tasks	1/29/19
2. Second Period Documentation Complete	2/27/19

a. Collect data from build team	2/13/19
b. Collect data from programming team	2/15/19
3. Third Period Documentation Complete	4/3/19
a. Create Google form to conduct survey	3/13/19
b. Analyze results for lessons learned	3/13/19

#### Schedule Conflicts for Botball 2019

<i><b>Schedule Conflicts</b></i>	<i><b>Deadlines</b></i>
1. Teacher Work Day	2/4/19
2. FBLA Meeting - Many members will be absent	2/13/19
3. Unexpected Snow Days	---

#### Team Organization

##### ***Schedule of Meeting Times:***

Regional Workshop - January 19th and 20th

Regional Tournament - April 6th

Schedule for January - 22nd, 24th, 29th, 31st

Schedule for February - 5th, 7th, 11th, 13th, 15th, 20th, 22nd, 26th, 28th

Schedule for March - 4th, 6th, 8th, 12th, 14th, 18th, 20th, 22nd, 26th, 28th

***Division of Labor:*** Nathan Tyler Ong, Nathan Sale, John Osipchak, Jack Honor, Mazin Iqbal, Nicholas Noranbrock

Adult Team Leader - Mr. Harris

Robot Building Team for Demobot: Nathan Tyler Ong, Nathan Sale

Robot Building Team for iCreate bot: Mazin Iqbal

Programmers for Demobot: John Osipchak, Jack Honor

Programmers for iCreate bot: Nicholas Noranbrock

Documentation Team: Nathan Tyler Ong, Nathan Sale, John Osipchak, Jack Honor, Mazin Iqbal, Nicholas Noranbrock

**Conflict Resolution:**

The team has agreed that if disagreements occur we will handle them in the following way:

1. Team members who disagree will first attempt to work out their difference together.  
Team members will agree to allow every member to express their opinions and thoughts one at a time and attempt to reach resolution
2. If resolution cannot be reached, the team members will bring their problem to John, the student team leader
3. If a resolution is still not reached, it will be brought to Mr. Harris, the adult team leader, Mr. Harris will either decide how to resolve the conflict or will bring it to the team for discussion and a team vote. Mr. Harris's decision or the team vote will be final