

# BotBall Documentation Period 1

## C1v1l B0ts, Team 940, New York City

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### 1 Preamble:

Bronx Academy For Software Engineering, henceforth designated BASE, has revitalized its Robotics Club and announced its ambitious participation in the BotBall competition under the team name 'C1v1l B0ts'. Seeking to leverage its specialized knowledge in software engineering, BASE aims to achieve significant success within BotBall, thereby elevating the profile of this emerging institution and its newly invigorated club.

### 2 List of All members:

- John Murphy (TEACHER)
- Magnificat Godonou (President)
- Vatsala Seeram (Vice-President)
- Anthony Ramos (Secretary)
- Victor Duarte (Minister of Inventory)
- Lex Andrew Delos Santos (Relief member)
- Juan Morales (General member)
- Josue Vazquez (General member)
- Brian Medina (General member)
- Oscar Chen (General member)
- Daniel Cabrera (General member)
- Jayvion Vicioso (General member)
- Ronald Munford li (General member)
- Robert Rodriguez (General member)
- Samantha Mendez (General member)
- Alex Santoni (General member)
- Vincent Rodriguez (General member)
- Malakai Farrell (General member)
- Fatou Tounkara (Social Media Manager)

## 3 Organization and Planning:

### 3.1 Organizer

- On 3/12/25 **this** draft will be due
- On 3/14/25 we will deliver the documentation to K.I.S.S
- On ~ 4/6/25 we will be finished with building the board
- On ~ 4/21/25 we will be finished building the first draft of the robot

#### 3.1.1 Any known conflicts:

- On 3/11/25 a pause day will make members unable to attend club.
- On 3/13/25 some juniors will be unavailable for the fourth period meeting due to an overnight junior trip.
- On 4/14/25 to 4/18/25 there will be Spring Recess and all members will be unable to attend.

#### 3.1.2 Attend A Game Review:

We have attended the Botball workshop on March 8 and 9, respectively. Not everyone has attended the workshop on both days, but most of us have attended one day or another. We also attended a virtual Botball workshop on February 5th.

## 3.2 Team Organization: Division of Labour:

### 3.2.1 Members dedicated to building the game board:

Currently the following members are dedicated to building the game board and all other involved processes:

1. Juan Morales
2. Josue Vazquez
3. Brian Medina
4. Daniel Cabrera

Thus, these members will be marking and cutting the PVC, marking and clearing the area where the board will be housed and lastly selected members will be kept in a permanent position for general board upkeep.

### 3.2.2 Members dedicated to documentation

currently these members are dedicated to documentation

1. Anthony Ramos
2. Vatsala Seeram

Anthony compiles the data and Vatsala will transcribe into L<sup>A</sup>T<sub>E</sub>X for final submission

### 3.2.3 Members currently on logo making:

the following members are dedicated to logo making

1. Ronald Munford li
2. Jayvion Vicioso
3. Robert Rodriguez
4. Victor Duarte (when not keeping inventory in check)

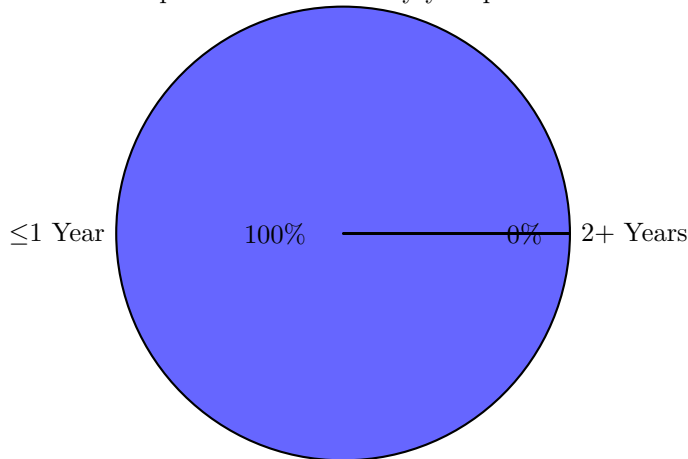
(Upon completion of the logo they will be reassigned to other areas)

### 3.2.4 Strategy making

Any remaining members along with the entire leadership team(President, Vice-President, Secretary, and Minister of inventory) will be dedicated to creating a strategy and will later be assigned to building the Bot. We will aim to score a minimum of 70 points in the tournament

### 3.3 Demographic Graphic:

Amount of experience in Botball by year per member:



All members have never participated in BotBall in the past thus for every member this will be a new experience.

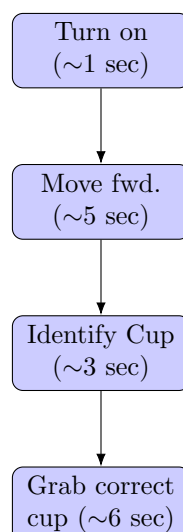
### 3.4 Conflict Resolution:

We have established a safe and respectful environment for the team that encourages active listening and open communication. The outlined steps for when a conflict arises we will be that the issue(s) between parties will be discussed and recorded. If possible, work will continue (given our tight schedule) and the conflict can be discussed during the next leadership meeting (every Tuesday) and parties (not on the leadership team) will be included to discuss. After a resolution has been reached, the team will continue in respect to that resolution. Additional comments from the team will be considered in the next leadership meeting.

## 4 Game Goals and Tasks:

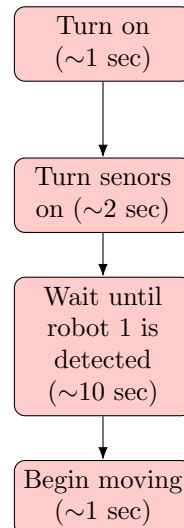
### 4.1 Desired Outcomes and Required Actions:

#### 4.1.1 Robot 1:



To succeed in the above tasks, we will require the Robot to move forward, identify the correct cup, and grab it. Thus, we will need a working arm to keep the cup and the sensors to identify the correct cup and thus guide the arm to the cup. These tasks can be rated a maximum of 3 and 4 respectively. using a rough estimate it will take 1 week to code and debug this program.

#### 4.1.2 Robot 2:



To succeed in the above tasks, the Robot will need front and/or side facing sensors to identify the passing Robot 1 and thus begin its sequence. this can be achieved with a loop what will stop the code until the sensors breaks out if the loop. These tasks can be rated a 2 and 3 respectively. using a rough estimate it will take 1 week to code and debug this program.

#### 4.2 In the scenario these tasks take longer than estimated:

In this scenario we will consider the importance of this program and section, if it of high importance we will seek to dedicate more time max 2 weeks but if it is considered low we will seek to abandon the task in favour of a faster alternative.

## 5 Documentation Goals:

### 5.1 Documentation Objectives:

To keep documentation consistent we will ensure to keep records of all actions and changes made to the bots and all other things related. This will be achieved through various means by keeping any code iterations we make into a google drive (or other permanent off site solution) to stay in perpetuity. This shall be shared to all present and future members. Doing this will assist in future documentation and presentations.

### 5.2 Knowledge Transfer Protocol:

We will seek to make any files and code we create be made publicly available to assist those also starting anew or seeking to replicate what we have done.

## 6 Team meetings:

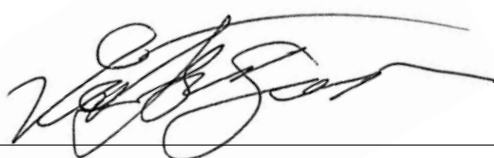
The leadership team (President, Vice-President, Secretary, and Minister of inventory) must meet every Tuesday during 4th period (10:44 - 11:27 am). Every member of the team is required to meet Wednesday and Thursday during 4th period. And there is one additional meeting day during Wednesday after-school where we do activities that can't be done during the time frame of 4th period. These additional meetings are optional but we heavily recommend coming to them.

## 7 Outreach and Voluntarism:

### 7.1 Recruiting Middle school Students to B.A.S.E and BotBall

In the coming months we plan to do both virtual and in-person events for middle school students to not only recruit them to our school but to also gain interest in BotBall.

Approved: \_\_\_\_\_

  
Vatsala Seeram  
Vice-President of C1v1l B0ts

Approved: \_\_\_\_\_

  
Edwin "Anthony" Ramos  
Secretary of C1v1l B0ts