P1 Project Plan

Innovation Academy Charter School 19-0176

Goals and Tasks for Botball 2019

Game Goals and Tasks

- ➢ Review rules (1/25)
 - Read through rules and understand how to get each point. (1/21)
 - Ask any questions about how to obtain specific points. (1/24)
 - Discuss as class easier goals and more challenging goals. (1/25)
- ➢ Build a practice board (2/7)
 - Assign everyone a task. (1/28)
 - Construct buildings. (2/4)
 - Lay down tape. (2/5)
 - Build a pipe structure. (2/7)
- > Dole out pieces (2/25)
 - Decide who gets the metal chassis and who gets the create. (2/11)
 - Sort out which sensors each group will need in order of necessity. (2/12)
 - Keep an updated list of which pieces each group is using to make their robot. (2/25)

Robot Building Goals and Tasks

- > Build plow (by 3/1)
 - Check that pieces are compliant. (by 3/1)
 - Test functionality of plow. (by 2/26)
- ➢ Build arm to reach botguy (by 3/1)
 - Figure out how to make servo cord reach. (by 2/26)
 - Build counterweight. (by 3/1)
- ➢ Build claw (by 3/1)
 - Make sure pieces are compliant. (by 3/1)
 - See if claw can grab people. (by 2/26)

Programming Goals and Tasks

- ➢ Get Botguy (3/21)
 - Program arm to extend upwards. (3/7)
 - Drive towards each tower buildings. (3/14)
 - Turn robot to swing arm over each tower. (3/21)
- > Push firemen into fire station (3/21)
 - Drive to firemen. (3/7)
 - Use claw as an arm to push all the firemen into the fire station. (3/14)
 - Plow objects on the middle line into disaster relief zone. (3/21)
 - \circ Drive towards the line. (3/7)
 - Follow line. (3/14)
 - Head back towards disaster relief zone. (3/21)

Documentation Goals and Tasks

- Turn in the documentation on time (The due date for documentation, would change for each one)
 - Check due date. (Same day next documentation task is assigned)
 - Plan to have it done before just in case. (2 days before the due date)
- Make documentation through (2 days before the due date)
 - Double check requirements. (2 days before the due date)

- Check spelling and grammar. (2 days before the due date)
- Evenly divide work (When documentation is assigned)
 - Figure system for dividing it. (Same day next documentation task is assigned)
 - \circ $\;$ Help each other. (Same day next documentation task is assigned)

Schedule Conflicts

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- ➢ February break (2/18-2/22)
- > April break (4/22-4/26)
- > Potential snow days
- Long weekends due to holidays

Team Organization

- > When we meet:
 - 30 meetings, not accounting for vacations, long weekends, and snow days.
 - One 80 meeting every Monday, Tuesday, and Thursday with the exception of non-school days.
- ➤ Team set up:
 - Two sister groups that each build a robot that will work together to make to robots that work seamlessly together to compete in botball.
 - Each member of the group will have an assigned a task each day.
 - Each group will have a goal for the week of what they want to complete.
- Conflict resolution:
 - Consider the other person's side.
 - Don't disregard others ideas.
 - Find common ground.
 - Vote on what to do, majority rules.