- Hawaii Region

Goals and Tasks for Botball 2019

1) Game Goals and Task

   a. Get Botguy and the green (uninjured) and red (injured) people on our side of the table, 3/10/19

      i. Grab BotGuy from the sky scraper, 3/10/19
      ii. Save injured and uninjured people and bringing them to the disaster relief zone, 3/10/19

   b. Put out burning fires 3/10/19

      i. Bring firetruck to burning medical center, 3/10/19
      ii. Bring firefighters to burning medical centers, 3/10/19

   c. Build Botball game board 2/28/19

      i. Get sections of board made 2/26/19
      ii. Assemble the board 2/28/19

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2) Robot Building Goals and Tasks

   a. Build robot claws to gather Botguy and injured and uninjured people , 3/12/19

      i. has to be able to pick up the small people and the medical, food and water supplies, 3/10/19
      ii. has to fit on robot(not too heavy, or too small), 3/12/19

   b. Using sensors, 3/20/19

      i. The sensor has to be the right one for the situation for example the camera to find the color of the wounded people, 3/15/19
      ii. Use the color sensor to pick up the right color figures for the situation, 3/20/19

   c. Building best design, 3/13/19

      i. Gather materials to build the appropriate size, 3/8/19
      ii. Build a robot that can successfully drive and turn, 3/15/19

    d. Testing design, 3/10/19

      i. Test robot on game board to practice the real situations, 3/3/19
      ii. Identify problems and make changes to the robot, 3/7/19

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3)   *Programming Goals and Tasks*

    a. *We need to program the robot 2/22/19*
        i. Program robot to go straight
           1.Type out a program 2/16/19
           2. Make the deadlines 2/16/19

        ii.Program robot to make a u-turn 3/16/19
           1.Make the turn 3/14/19
           2. Extend turn 3/14/19

        iii. Program robot to pick up cubes, 3/23/19
           1.extend existing program, 3/23/19
           2.find ticks per sec on robot arm, 3/23/19

    b. Learn how to program the light sensor, *3/3/19*
        i. Program light sensor to activate motors when light is detected, *3/3/19*
        ii. Calibrate light sensor to ambient light, *3/3/19*

    c. Program camera, *3/3/19*
        i. Learn how to program the camera, *3/5/19*
        ii. Use camera to detect colors, *3/3/19*

    d. Program motor and servos, *3/3/19*
      *i.*Learn how to program motor and servos, *3/3/19*
       *ii.*Program motors and servos to do different rotation, *3/6/19*

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4) *Documentation Goals and Tasks*

    a. Complete first period documentation, 2/13/19

        i. Complete Game Goals, Robot Building, and Programming tasks/goals, 2/13/19
        ii. Discuss Schedule Conflict, 2/8/19

    b. Complete second period documentation, 3/19/19
        i. Gather Data about robot design from teammates, 3/5/19
        ii. ii. Gather Data about program of robot from teammates, 3/12/19

    c. Complete third period documentation, 4/25/19
        i. Gather information from team and lessons learned, 4/23/19
        ii. Discuss things we gain/learned from doing the Botball robotics, 4/23/19

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5) *Schedule Conflicts*

    a. Feb 11, Teacher Institute Day, no school

    b. Feb 18, President Day, no school

    c. Mar 19, Good Friday, no school

    d. March 18-22, Spring Break, no school

    d. Mar 26, Kuhio Day, no school

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6) Team Organization

    a. Schedule of Meeting Times:

        i. Meet every class period (3x's a week)
        ii. Monday and Tuesday (after school)
        iii.1x during spring break

b. *Division of Labor:*

    i. Mr. Anderson: Adult Team Leader
    ii. Maya Brown: Student Team Leader, Programmer, and builder
    iii. Raven Q, Tristan M, Brian S : Programer and builder
    iv. Charles W, Joshua S, Sean H, Leilani Phan: Builder
    ix. Leilani P, Isabelle D, Kathleen Y, Maya B : Documentation Team

c. *Conflict Resolution:*

If we have any disagreement we will handle it in the following ways:

    i. Present our views with our team members. Then we will try to make a compromise.

    ii. Ask student team leader to make final decision

    iii. If we still can't solve our disagreement, then we will talk to our adult team leader to how to solve