

# Robot Strategy

**All Teams**

*Important for Rookie and Veteran*





# Robot Strategy

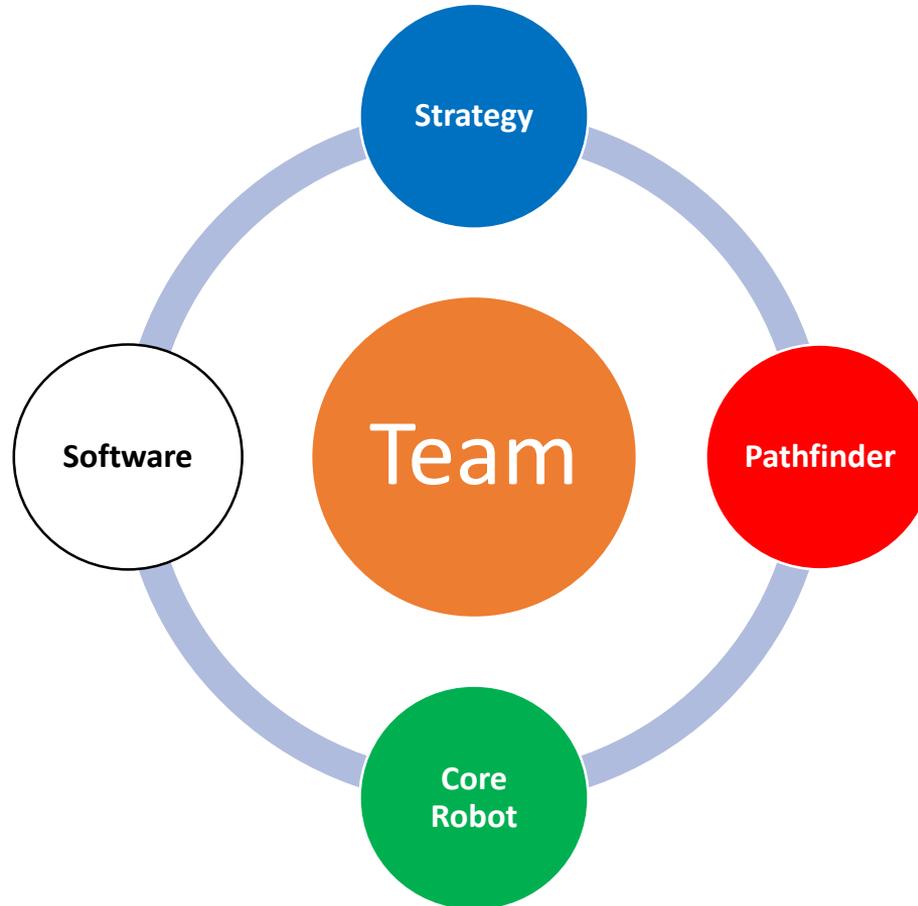
## Design Process

## Robot Development Roles

*Keeping everyone busy...*



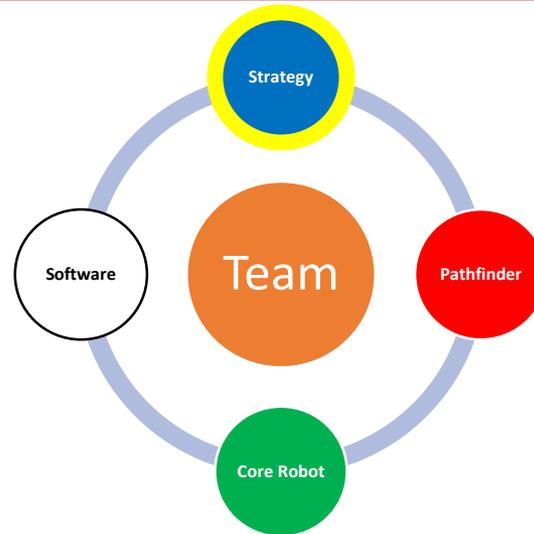
# Robot Strategy: Team Roles



We use these roles in our team and the teams we mentor.

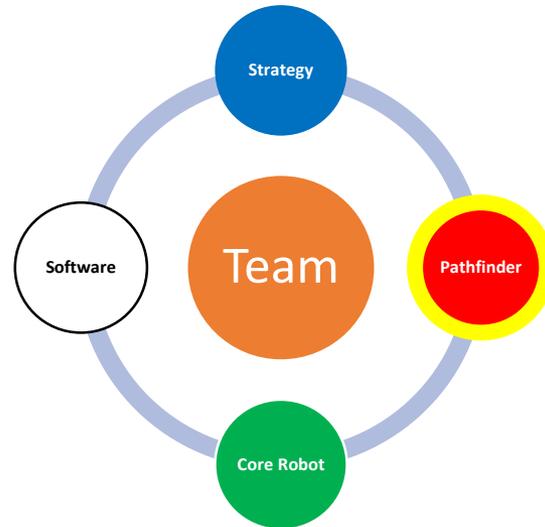
They are suggestions only!

# Robot Strategy: Team Roles



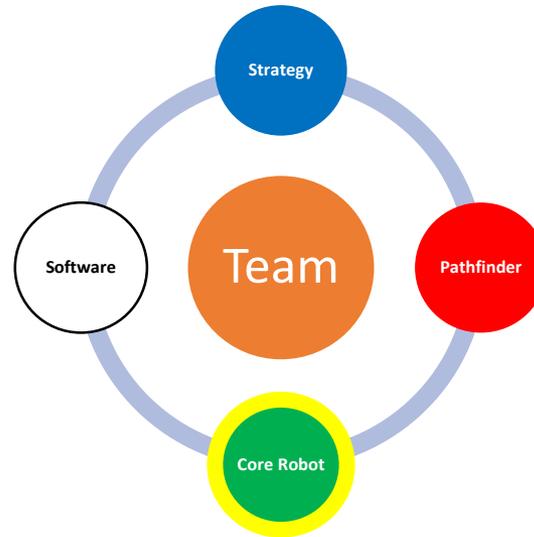
- Fully plan and document each run from base (Path Taken, Motors used, Missions achieved etc.).
- Identify needed sensors and robot design requirements.
- Analyse Missions and design attachments.
- Give locations to **Pathfinder**, design specs to **Core Robot**, and special code tasks to **Software**.

# Robot Strategy: Team Roles



- Build a simple robot (Riley Rover?) with similar sensors to your Core Robot. Wheel size, elevation etc. are irrelevant.
- Program the robot to reach areas of the board as picked by **Strategy**, or that you think are important/likely.
- **Don't do the missions.** This comes later.
- Give code requests to **Software**.
- Once Core Robot is finished, adapt Pathfinder code.

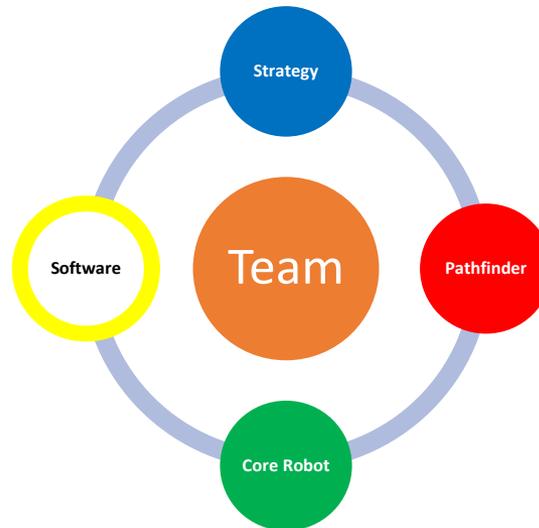
# Robot Strategy: Team Roles



- Work with **Strategy** to Identify build requirements: Sensors, Height, Length, Width etc.
- Design attachment template.
- Design/Build/Improve the team robot.
- Test robot performance with repeatable turns, movement etc.
- Test **Pathfinder** code and identify differences.

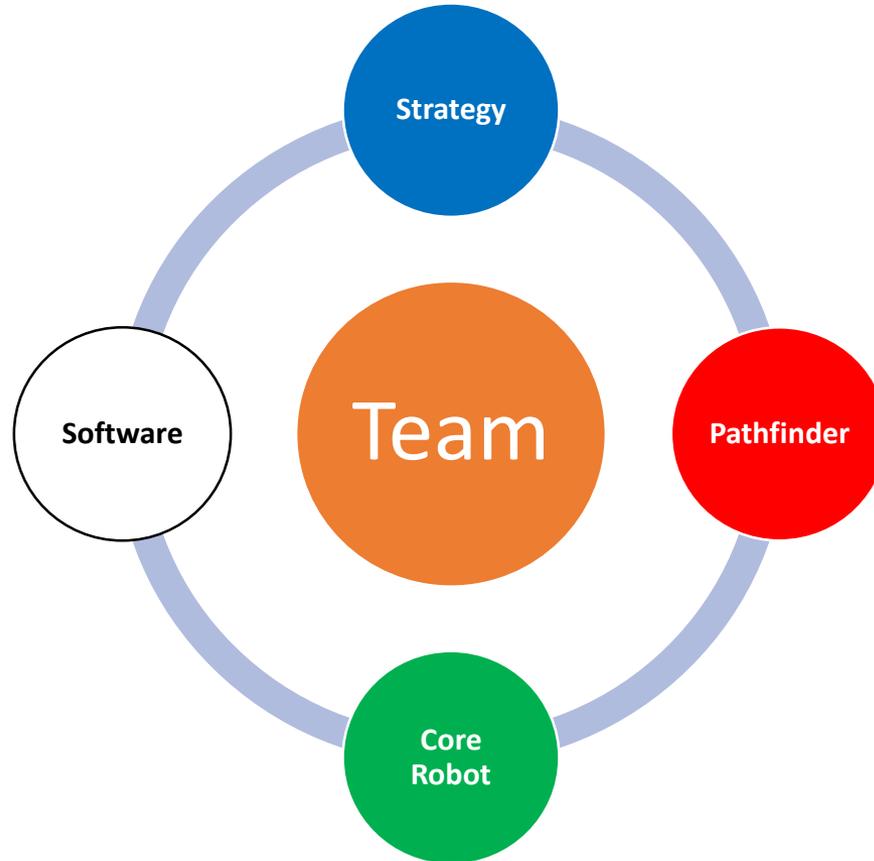


# Robot Strategy: Team Roles



- Identify common programming Tasks (DriveToTouch etc.)
- Identify Parameters and functions to make the code flexible, reusable, and useful.
- Write a MyBlock Library for your team
- Share code with **Pathfinder** and identify further common tasks.
- Test Code with **Pathfinder** and/or **Core Robot** (or yourself!)

# Robot Strategy: Team Roles



Team members can move between roles, or even finish a role!  
Make sure everyone is useful and busy