RoboCupJunior Rescue A – Rules 2014

RoboCupJunior Rescue - Technical Committee 2014

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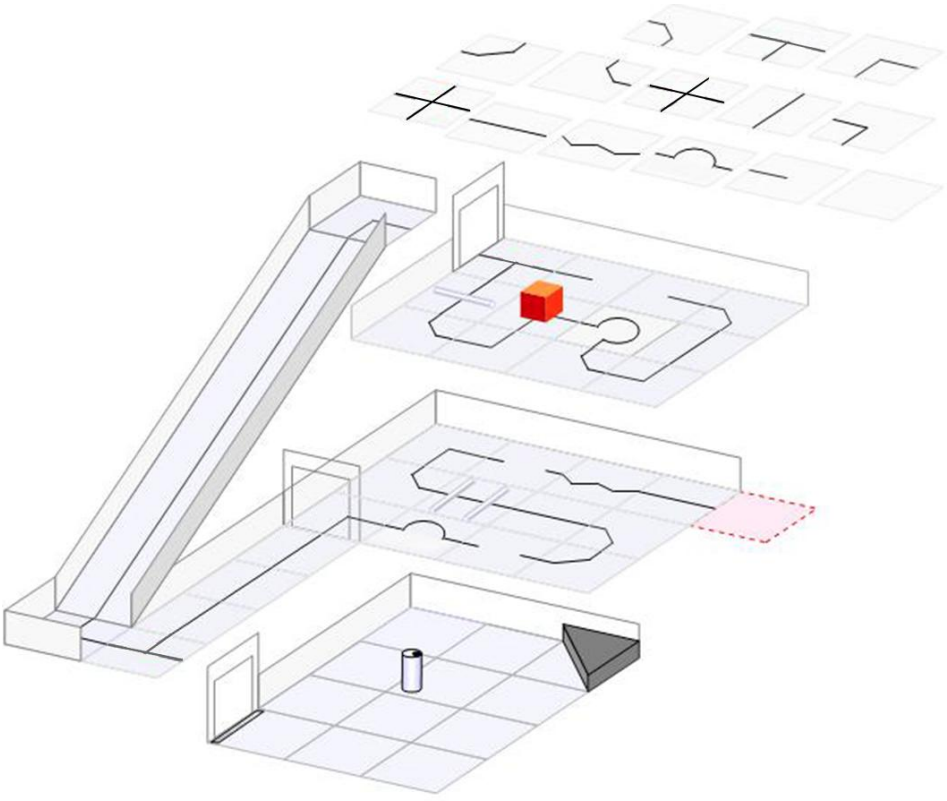
These are the official rules for RoboCupJunior 2014. They are released by the RoboCupJunior Rescue Technical Committee for Rescue. These rules have priority over any translations. **Changes from the 2013 rules are highlighted in red.**

Preface

The land is simply too dangerous for human to reach the victim! Your team has been given the most difficult tasks. It must be able to carry out the rescue mission in fully autonomous mode with no human assistance. The robot must be strong and smart enough to navigate through a treacherous terrain with hills, uneven lands and rubbles without getting stuck. When the robot finally finds the victim, it has to gently and carefully transport the victim to the safe evacuation point where humans can take over.

Time and technical skills are the essential! Come and prepare to be the most successful Rescue Response Team.



Contents

1. Arena

1.1 Description

1.1.1 The arena is modular. Each module can be considered to be a room in a building. Rooms may be placed adjacent to each other (on the same level horizontally) or may be stacked vertically.
1.1.2 Rooms on the same level may be connected by hallways.
1.1.3 Rooms on different levels are connected with a ramp. A ramp does not exceed an incline of 25 degrees from the horizontal surface, and must have walls at least 10 cm high.
1.1.4 The Ramp area (hereafter known as the Ramp) consists of the ramp itself and the top and bottom platforms that connect it to other rooms.
1.1.5 Building plans can be found at the official RCJ website under Rescue rules.

1.2 Dimensions

1.2.1 Each room is approximately 120 cm by 90 cm, with walls that are at least 10 cm high.
1.2.2 Hallways and the Ramp should also have walls at least 10 cm high, and approximately 30 cm wide with +-2cm variation.
1.2.3 Each room has one or two doorways. Robots may enter and exit through the same doorway if intersections are used. Doorways are 25 cm x 25 cm in size with +-2cm variation.
1.2.4 The First room in the arena may or may not have an entrance doorway. The evacuation zone does not have an exit door.

1.3 Floor

1.3.1 The floor of each room has a white or close to white tone. The floor may be either smooth or textured (like linoleum or carpet), and may have steps of up to 3 mm height at joins between rooms.
1.3.2 The arena should be placed in the way that the floors are leveled.

1.4 Line

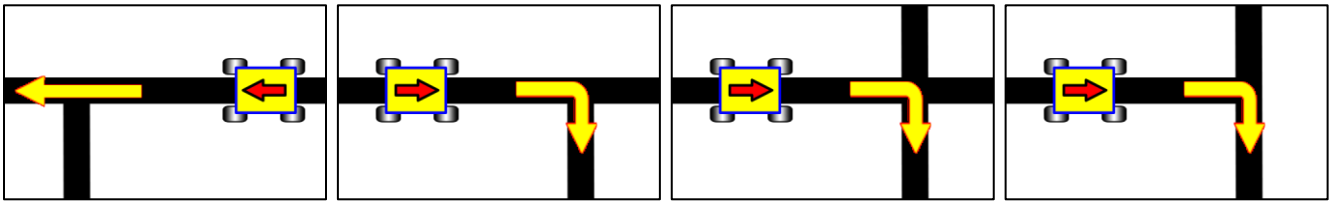
1.4.1 The floor of each room is composed of 30 cm x 30 cm tiles with a black line for a robot to follow. The black line, 1-2 cm wide, may be made with standard electrical (insulating) tape or printed onto paper or other materials. The black line forms a path on the floor. (The grid lines indicated in the drawings are for reference only.)
1.4.2 The line is always at least 10 cm from the nearest wall.
1.4.3 Where the black line is used, it will enter and exit each room through the standard doorways. Straight sections of the black line may have gaps with at least 5 cm of straight line before each gap. The gap is 20 cm at most. If a gap is running along a wall, it is 30 cm at most.
1.4.4 The arrangement of the tiles within each room may vary between rounds.
1.4.5 Due to the nature of the tiles, there may be a step and/or gap in the construction of the arena. These are not intentional and will be minimized as much as possible by the organizers.
1.4.6 A robot is allowed to follow the wall if the line is straight along the wall.

1.5 Debris and Obstacles

1.5.1 Speed bumps are maximum height of 1cm. They are white and fixed on the floor. They may be angled.
1.5.2 Debris are maximum height of 3mm, and will not be fixed on the floor. They are small materials such as toothpicks or small wooden dowel, etc.
1.5.3 Debris may be spread towards or adjacent to walls.
1.5.4 Obstacles may consist of bricks, blocks, weights and other large, heavy items. Obstacles will NOT be located in hallways, nor on the ramp.
1.5.5 An obstacle does not occupy more than one line.
1.5.6 A Robot is expected to navigate around obstacles. Obstacles that are moved in any way will remain where they are moved to, even when it ends up prohibiting your robot from proceeding. After the team decides to go on to the next room, if an obstacle was pushed to completely leave the room, it will be returned to its original position. If you have any doubt on any scenario, consult at the International RCJ Community Forum (http://www.rcjcommunity.org/)

1.6 Intersections

1.6.1 Intersections can be placed anywhere except in the evacuation room. For example, there may be intersections leading up to or down from the ramp.
1.6.2 A robot is required to take either the rightmost or leftmost path which will be defined before competition begins.
1.6.3 The intersections are always perpendicular, but may have 3 or 4 branches.



* **NOTE:** These diagrams illustrate the case of taking the rightmost path. If a round is designated to be all left preference, it will take the opposite turns at the intersection.

1.7 Evacuation Zone

1.7.1 The black line ends at the entrance to the last room (the evacuation zone), and robots are required to utilize some form of search strategy to locate the victim.
1.7.2 At the entrance to the evacuation room, there is a 25 mm x 250 mm strip of reflective silver tape on the floor.
1.7.3 For the primary competition, an Evacuation Point tile is placed at one corner of the evacuation room. The Evacuation Point tile is a right angled triangle with sides of 30 cm x 30 cm, and it is painted in black.
1.7.4 For the Secondary competition, the Evacuation Point tile is a right angled triangle, sides of 30 cm x 30 cm and elevated by 6 cm, and it is painted in black.

1.8 Victims

1.8.1 A Victim may be located anywhere on the floor of the evacuation room, but will be at least 10 cm from the nearest speed bump or Obstacle.

1.8.2 The victim takes the form of a soft drink can, internally weighted to approximately 150 grams. The dimensions of the can are similar to those readily available in the country in which the competition is being held (i.e. Australia 375 ml, US 12 fl. oz., Europe 330 ml etc.). Teams need to be prepared for minor variations.
1.8.3 The victim will be electrically conductive. Its surface is silver and reflects light.

1.9 Environmental Conditions

1.9.1 Teams must come prepared to adjust their robots to the lighting conditions at the venue.
1.9.2 Lighting and magnetic conditions may vary along the course in the rescue arena.
1.9.3 The arena may be affected by magnetic fields (e.g. generated by under floor wiring and metallic objects).
1.9.4 Teams should prepare their robots to handle expected lightning interference. While the organizers and referees will try their best to minimize external lighting interference, it is not possible for them to foresee all unexpected ones such as camera flash from spectators.

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2. Robots

2.1 Control

2.1.1 Robots must be controlled autonomously. The use of a remote control or manual control, or passing information (by sensors, cables, other interference, etc.) to the robot is not allowed.
2.1.2 Robots must be started manually by the team captain.
2.1.3 Pre-mapped type of dead reckoning is prohibited. (Movements predefined based on known locations).
2.1.4 Robots must not damage any part of the arena in any way.

2.2 Construction

2.2.1 Any robot kit or building blocks, either available on the market or built from raw hardware, may be used, as long as the design and construction of the robot are primarily and substantially the original work of the students (see section 2.5 below).
2.2.2 Any commercially produced robot kits or sensor components that are specifically marketed to complete any single major task of RoboCupJunior Rescue will be disqualified. For example, pre-programmed sensors with special features for line-following or obstacle tracing are not allowed. If there is any doubt, teams should consult the Technical Committee (TC) at the International RCJ Community Forum *http://www.rcjcommunity.org*
2.2.3 For the safety of participants and spectators, no lasers are allowed on any robot.
2.2.4 Bluetooth Class 2, 3 and ZigBee communications are the only wireless communication types allowed in RoboCupJunior. Robots that have other types of wireless communications on board will need to be either removed or disabled for possible interference with other leagues competing in RoboCup. If the robot has equipment for other forms of wireless communication, they must prove that they have disabled them. Robots that do not comply may face immediate disqualification from the tournament.

2.3 Team

2.3.1 Each team must have only one robot in the field. (This rule can be modified in a Super Team Competition such that two or more robots are deployed together and have to cooperate in completing given tasks.)
2.3.2 Each team must have a minimum of 2 members.
2.3.3 The number of team members per a team is not limited but team should choose their team size in a way that the learning experience of each member is maximized. Mentors/parents are not allowed to be with the students during the competition. The students will have to self-govern themselves (without mentor's supervision) during the long stretch of hours at the competition.

2.4 Inspection

2.4.1 The robots will be examined by a panel of referees before the start of the tournament and at other times during the competition to ensure that they meet the constraints described above.
2.4.2 It is the responsibility of teams to have their robots re-inspected, if their robots are modified at any time during the tournament.
2.4.3 Students will be asked to explain the operation of their robot, in order to verify that the construction and programming of the robot is their own work.
2.4.4 Students will be asked questions about their preparation efforts, and may be requested to answer surveys and participate in video-taped interviews for research purposes.
2.4.5 All teams will need to email a technical document containing the major list of hardware and software components at least 1 week prior to the competition. The purpose of this document is to allow judges to be more prepared for the interviews. For sample documentation, please refer to the "Bills of Materials Sample" at the official RCJ website under Rescue rules. Information about how to submit your document will be announced prior to the competition to the teams.
2.4.6 All teams have to submit their codes prior to the competition. The code is never shared with other teams without the team's permission.

2.5 Violations

2.5.1 Any violations of the inspection rules will prevent that robot from competing until modifications are applied.
2.5.2 However, modifications must be made within the time schedule of the tournament and teams must not delay tournament play while making modifications.
2.5.3 If a robot fails to meet all specifications (even with modification), it will be disqualified from that round (but not from the tournament).
2.5.4 No mentor assistance during the competition is allowed. See 6. Code of Conduct.

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3. Play

3.1 Pre-round Practice

3.1.1 Where possible, competitors will have access to practice arenas for calibration, testing and tuning throughout the competition.

3.1.2 Whenever there are dedicated arenas for competition and practice, it is at the organizers' discretion if testing is allowed on the competition arena.

3.2 Humans

3.2.1 Teams should designate one team member who acts as the captain and is allowed to move the robot, based on the stated rules and/or as directed by a referee. Only the captain will be allowed to interact with the robot during a scoring run.
3.2.2 The captain can move the robot only when s/he is told to do so by a referee.
3.2.3 Other team members (and any spectators) within the vicinity of the rescue arena are to stand at least 150 cm away from the arena while their robot is active, unless otherwise directed by a referee.
3.2.4 No one is allowed to touch the arenas intentionally during a scoring round.

3.3 Start of Play

3.3.1 A run begins at the scheduled starting time whether or not the team is present/ready. Start times will be posted prominently around the venue.
3.3.2 Once the run has begun, the robot playing is not permitted to leave the competition area for any reason.
3.3.3 A robot will be given a maximum time of 8 minutes to both calibrate their robot and complete the course. The time for each run will be kept by the referee.
3.3.4 Calibration is defined as taking sensor readings and modifying the robot's programming to accommodate such sensor readings. Any and all pre-mapping activities will result in immediate disqualification of the robot for the round.
3.3.5 Teams may calibrate their robot in as many locations as desired on the arena, but the clock will continue to count down. Robots are not permitted to move under power while calibrating.
3.3.6 Once a team is ready to perform a scoring run, they must notify the referee. To begin a scoring run, the robot is placed on the starting tile in the first room as indicated by the referee. Once a scoring run has begun, no more calibration is permitted.

3.4 Game Play

3.4.1 Modifying the robot during a run is prohibited; which includes remounting parts that have fallen off.
3.4.2 All parts that the robot is losing intentionally or unintentionally are left in the arena until the run is over. Neither the team nor a judge is allowed to remove parts from the arena during a run or LOP.
3.4.3 Teams are not allowed to give their robot any advance information about the field. A robot is supposed to recognize the field by itself.

3.5 Scoring

3.5.1 A robot is awarded points for successfully negotiating rooms, hallways, ramps and each hazard (gaps in the line, speed bumps, intersections and obstacles).
3.5.2 Successfully negotiating is defined as entering through one doorway, completely following the line, negotiating all line gaps, intersections, speed bumps, obstacles, and exiting through a doorway without human interaction.
3.5.3 Failed attempts at negotiating elements of the arena are defined as "Lack of Progress" (see 3.6).

3.5.4 Points available for successfully negotiating rooms:

- 1st Attempt = 60 points
- 2nd Attempt = 40 points
- 3rd Attempt= 20 points

3.5.5 Points available for successfully negotiating hallways and ramps:

- 1st Attempt= 30 points
- 2nd Attempt = 20 points
- 3rd Attempt = 10 points

3.5.6 If intersections are used, the path may go to the opposite direction through a room/hallway/ramp (going back to the path that a robot already took). The points will be awarded as if it was a new room/hallway/ramp.
3.5.7 There are no points available for negotiating rooms/hallways/ramps beyond the third attempt in each.
3.5.8 Points available for successfully negotiating each gap in the black line. 10 points per gap.
3.5.9 Points available for successfully avoiding each obstacle blocking the black line. 10 points per obstacle.
3.5.10 A robot is considered to have successfully negotiated an obstacle when it moved through the tile where an obstacle was placed.
3.5.11 Points available for successfully completing a tile that has speed bumps. 5 points per speed bump tile.
3.5.12 Points available for successfully completing a tile that has an intersection. 10 points per direction through intersection tile.
3.5.13 Each gap, obstacle, speed bump and intersection tile can only be scored once per direction through the room, not each attempt through the room.
3.5.14 Reaching a victim: a robots is awarded 20 pts for a successful reach. "Successful reach" means that the robot has touched the victim with any part of the robot.
3.5.15 Successful rescue of a victim: Robots are also awarded points for successfully rescuing victims. A successful victim rescue occurs when the victim is moved to the evacuation point (it needs to be completely inside of the evacuation point for Primary/free-standing for Secondary), in its original upright orientation, and no part of the robot is in contact with the victim (see figures below). Team captains may declare either a "Lack of Progress" or "End of Round" when a failed attempt at a victim rescue occurs (see 3.6).
Points available for a successful rescue:

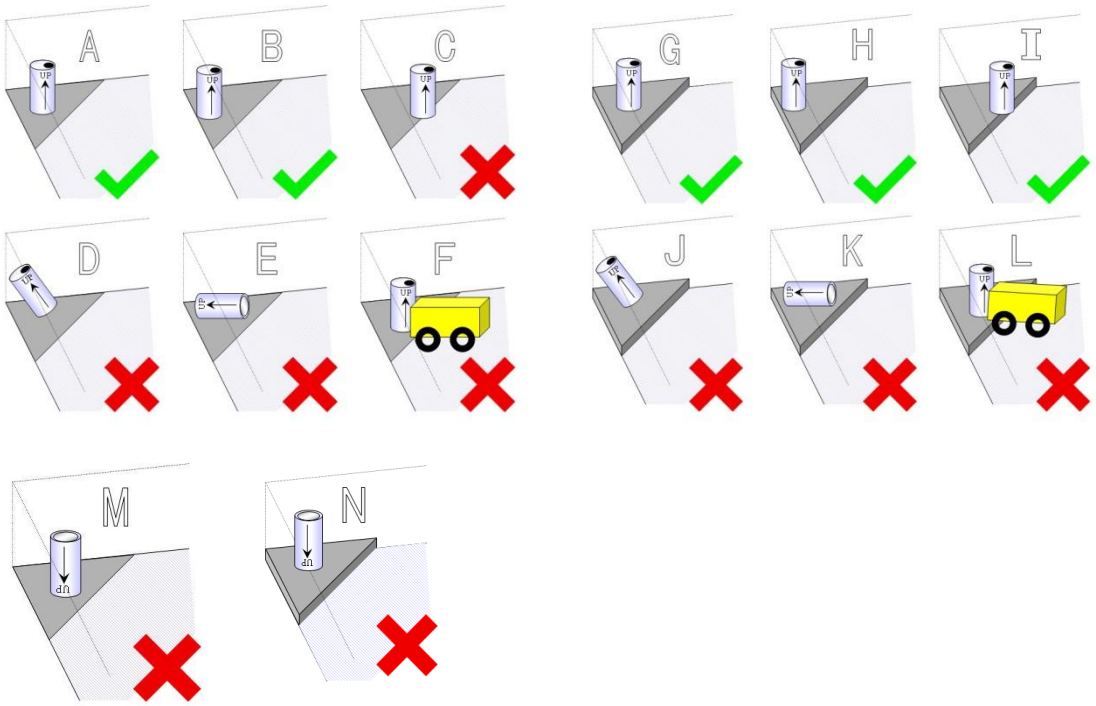
- 1st Attempt = 60 points
- 2nd Attempt = 40 points
- 3rd Attempt= 20 points
- *No points scored for rescue attempts beyond the third attempt.

3.5.16 Secondary Division Only - Additional Points for lifting the victim:

- Lifted victim, with no part of the victim touching the floor = 20 points

3.5.17 Ties in scoring will be resolved on the basis of the time taken by each robot (or team of robots) to complete the course (this includes calibration time).
3.5.18 Check RoboCupJunior official website for a score sheet template.

Primary Rescue A - A,B,C,D,E,F,M
Secondary Rescue A - G,H,I,J,K,L,N

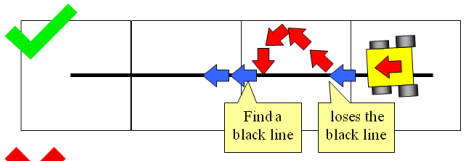


3.6 Lack of progress:

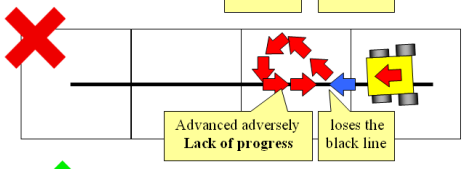
3.6.1 A robot must follow the black line where it is present. Failure to follow the line is considered a Lack of Progress.
3.6.2 A Lack of Progress occurs if the robot is stuck in the same place or loses the black line without regaining it by the next tile in the sequence (see figures below).
3.6.3 A Lack of Progress occurs if the robot does not follow the correct path after an intersection tile.
3.6.4 The team captain can also call for a Lack of Progress at any time (s)he wants (for example if the robot is in danger).
3.6.5 If a Lack of Progress happens in the first room, a robot will be placed on the starting tile. For other rooms, the robot will be placed on the last tile of the former room and re-enter the room/hallway/ramp once again. Only the team captain is allowed to restart the robot without changing programs and/or modifying the robot.

3.6.6 A team is not allowed to restart a robot in other room/hallway/ramp than the one where a Lack of Progress occurred. However a team is allowed to restart a robot in a room/hallway/ramp where the Lack of Progress occurred as many times as they want.
3.6.7 A robot is allowed to proceed to the next module ONLY after completing the current module without a Lack of Progress. Module includes room, hallway, and ramp. If the robot fails to negotiate the current module after the third failed attempt, the team captain may choose to move the robot to the end of the current module to continue on.

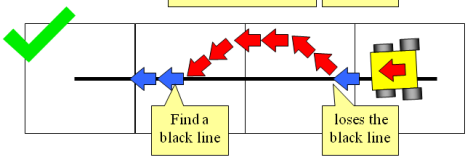
3.6.8 The team captain may also choose to make further attempts at the failed room to earn the additional points available for overcoming obstacles, gaps in the line, and speed bump points that have not already been earned in the previous attempts at the room.



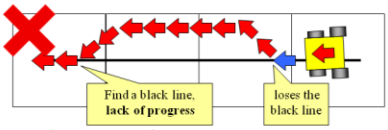
The robot loses the black line.
But, the robot finds the black line in same tile.



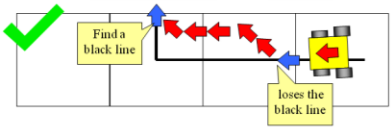
The robot loses the black line.
And the robot advanced adversely.
It is lack of progress.
And return the entrance.



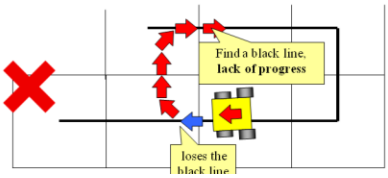
The robot loses the black line.
But, the robot finds the black line in next tile.



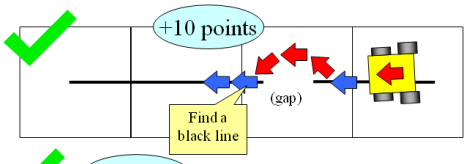
The robot loses the black line.
But, the robot finds the black line in next tile.
It is Lack of progress.



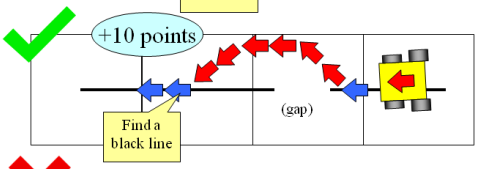
The robot loses the black line.
But, the robot finds the black line in next tile.



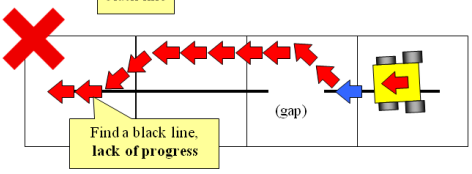
The robot loses the black line.
But, the robot finds the black line where robot went.
It is Lack of progress.



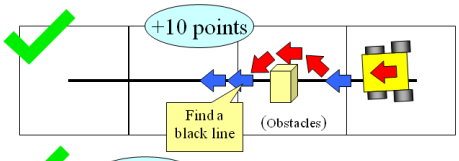
The robot came to a gap.
And , the robot finds the black line in same tile.



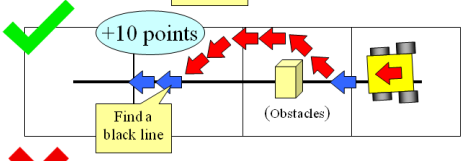
The robot came to a gap.
And , the robot finds the black line in next tile.



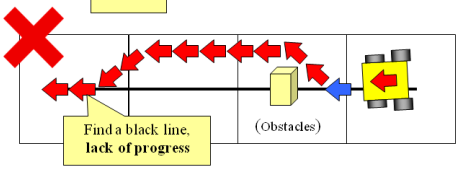
The robot came to a gap.
And , the robot finds the black line in next tile.
It is Lack of progress.
And return the entrance.



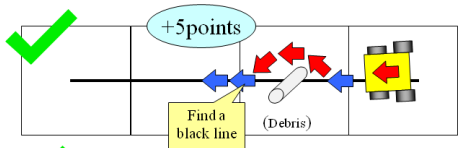
The robot found the Obstacles.
And , the robot finds the black line in same tile.



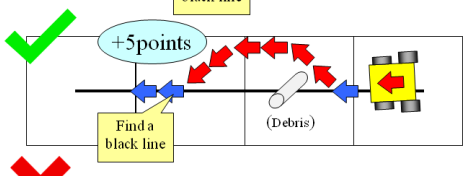
The robot found the Obstacles.
And , the robot finds the black line in next tile.



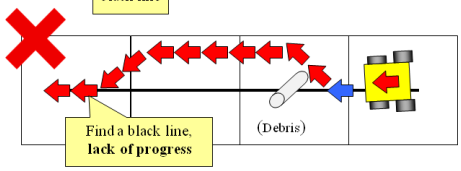
The robot found the Obstacles.
And , the robot finds the black line in next tile.
It is Lack of progress.
And return the entrance.



The robot negotiated the Debris.
And , the robot finds the black line in same tile.



The robot negotiated the Debris.
And , the robot finds the black line in next tile.



The robot negotiated the Debris.
And , the robot finds the black line in next tile.
It is Lack of progress.
And return the entrance.

3.7 Victim Placement

3.7.1 Six different victim Placement Areas are in the evacuation room, each one approximately 30 cm x 30 cm in size, will be designated on the day of the competition.
3.7.2 The location of each area will be made known on the day of the competition but will not be marked on the field. No Placement Area will come within 10 cm of a wall or the evacuation point.
3.7.3 Only 1 victim will be used in a round.
3.7.4 Once a robot begins its scoring round and has entered the Arena, the referee will roll a standard 6 sided dice to determine which Placement Area the victim will be located. The referee will place the victim randomly within the chosen 30 cm x 30 cm Placement Area.
3.7.5 If the victim is moved from its spot by a robot attempting a rescue, and the robot subsequently requires a restart, the victim will remain where it moved to. If it has been knocked over, it will remain knocked over.
3.7.6 If the robot is in contact with the victim and the team captain calls for a Lack of Progress, the referee may roll the dice once more and place the victim at a new location.

3.8 Evacuation Point Placement

3.8.1 The Evacuation Point is placed in any of the non-entry corners in the evacuation room.
3.8.2 Once a robot begins its scoring round and has entered the Arena, the referee will roll a standard 6 sided dice to determine in which corner the Evacuation Point will be located.
3.8.3 After a Lack of Progress happened in any room, the referee may roll the dice once more and place the Evacuation Point at a new corner.
3.8.4 The RoboCupJunior Organizing Committee (OC) will try their best to secure the Evacuation Point down, but you should expect slight shift at times.

3.9 End of Play

3.9.1 A team may elect to stop the round early at any time. In this case, the team captain must indicate to the referee the team's desire to terminate. The team will be awarded all points achieved up to the call for end of round.
3.9.2 The round ends when the time expires, when the team captain calls the end of the round or when the victim is successfully rescued.

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4. Open Technical Evaluation

4.1 Description

4.1.1 Your technical innovation will be evaluated during a dedicated time frame. All teams need to prepare for an open display during this time frame. This will be set up prior to the starts of the field competitions.
4.1.2 Judges will go around interacting with teams. It will be set up as more like a casual conversation or "questions and answers" atmosphere.
4.1.3 The main objective of the Open Technical Evaluation is to emphasize the ingenuity of innovation. Being innovative may mean technical advance as compared to the existing knowledge, or an out-of-the-ordinary simple but clever solution to existing task.

4.2 Evaluation Aspects

4.2.1 A standardized rubric system is used focusing on:
a) creativity
b) cleverness
c) originality
d) simplicity
e) functionality
4.2.2 "Your work" can include (but is not limited to) one of the following aspects:
a) creation of your own sensor instead of a pre-built sensor
b) creation of a "sensor module" which comprises of various electronics to provide a self-contained module to provide a certain special functionality
c) creation of a mechanic module which is functional, but out of the ordinary
d) creation of a new software algorithm to a solution
4.2.3 Teams must provide documents that explain their work. Each invention must be supported by concise but clear documentation. The documents must show concise inventive steps.
4.2.4 Documents must include one poster and one engineering journal (see the Engineering Journal document for more details). Teams are expected to be readily prepared to explain about their work.
4.2.5 Engineering Journal should demonstrate your best practice in your development process.
4.2.6 The poster must include:
- Identification of your team such as team name, league, country, etc.
- Important aspects of your hardware/software design

You may also include additional information of your interest, such as:
- Interesting or unusual features of the robot;
- Images throughout your teams development, etc.

4.2.7 Guidelines may be provided at the official RCJ website under Rescue rules (Engineering Journal document).

4.3 Awards

4.3.1 Awards may be divided into several categories.
a) Innovation:
- Mechanical innovation
- Electronic innovation
- Algorithm innovation

b) Robust Design:
- Mechanical design
- Electronic design
- Algorithm design

c) Team work – demonstration of great collaborations within the team.
d) Best Practice (in development) – demonstration of the best development practice from brainstorming, designing, prototyping, development, test plan, quality assurance plan, etc.
4.3.2 Awards will be given in the form of a certification.

4.4 Sharing

4.4.1 Teams are encouraged to review other's posters and presentations.
4.4.2 The awarded teams are required to post their documents and presentation at the International RCJ Community Forum (http://www.rcjcommunity.org/)

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5. Conflict Resolution

5.1 Referee

5.1.1 During game play, the referee's decisions are final.

5.2 Rule Clarification

5.2.1 If any rule clarification is needed, please contact the International RoboCupJunior Rescue technical Committee through the International RCJ Community Forum (*http://www.rcjcommunity.org/*)
5.2.2 If necessary even during a tournament, a rule clarification may be made by members of the RoboCupJunior Rescue Technical Committee and Organizing Committee.

5.3 Special Circumstances

5.3.1 Specific modifications to the rules for accommodating special circumstances, such as unforeseen problems and/or capabilities of a team's robot, may be agreed upon at the time of the tournament, when a majority of the contestants agree.
5.3.2 If any of team captains/mentors do not show up to the teams meeting to discuss the problems and the modification to the rules, it is considered as an agreement.

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6. Code of Conduct

6.1 Fair Play

6.1.1 Robots that cause deliberate or repeated damage to the arena will be disqualified.
6.1.2 Humans that cause deliberate interference with robots or damage to the arena will be disqualified.
6.1.3 It is expected that the aim of all teams is to participate fairly.

6.2 Behavior

6.2.1 Participants should be mindful of other people and their robots when moving around the tournament venue.
6.2.2 Participants are not to enter setup areas of other leagues or other teams, unless explicitly invited to do so by team members.
6.2.3 Participants who misbehave may be asked to leave the building and risk being disqualified from the tournament.

6.2.4 These rules will be enforced at the discretion of the referees, officials, tournament organizers and local law enforcement authorities.

6.3 Mentors

6.3.1 Mentors (teachers, parents, chaperons, translators and other adult team members) are not allowed in the student work area.
6.3.2 Sufficient seating will be supplied for mentors to remain in a supervisory capacity close to the student work area.
6.3.3 Mentors are not permitted to repair robots or be involved in programming of their team's robots.
6.3.4 Mentor interference with robots or referee decisions will result in a warning in the first instance. If this recurs, the team will risk being disqualified.
6.3.5 Robots have to be principally students' own work. Any robot that appears to be identical to another robot may be prompted for re-inspection.

6.4 Ethics and Integrity

6.4.1 Fraud and misconduct are not condoned. Fraudulent acts may include the following:

a) Mentors working on the software or hardware of students' robot(s) during the competition.

b) "Higher league group" and/or more advanced group of students may provide advice, but should not do the work for "Lower league group". For example, a secondary group helped to fix its peer primary group's work, software or hardware prior to and/or during the competition. This may risk the secondary group to be disqualified as well. See "Code of Conduct, 6.3.3 & 6.3.5". This applies not just to mentors, but also to higher league (advanced) group of students as well.

6.4.2 RoboCupJunior reserves the right to revoke an award if fraudulent behavior can be proven after the awarding ceremony took place.
6.4.3 If it is clear that a mentor intentionally violates the code of conduct, and repeatedly modifies and works on the students' robot(s) during the competition, the mentor will be banned from future participation in RoboCupJunior competitions.
6.4.4 Teams that violate the code of conduct can be disqualified from the tournament. It is also possible to disqualify only a single team member from further participation in the tournament.
6.4.5 In less severe cases of violations of the code of conduct, a team will be given a warning. In severe or repeated cases of violations of the code of conduct, a team can be disqualified immediately without a warning.

6.5 Sharing

6.5.1 The spirit of world RoboCup competitions is that any technological and curricular developments should be shared with other participants after the tournament.
6.5.2 Any developments may be published on the RoboCupJunior website after the event.
6.5.3 This furthers the mission of RoboCupJunior as an educational initiative.

6.6 Spirit

6.6.1 It is expected that all participants (students and mentors alike) will respect the RoboCupJunior mission.
6.6.2 The referees and officials will act within the spirit of the event.
6.6.3 ***It is not whether you win or lose, but how much you learn that counts!***