The Cooperative board game inspired by the Asimov's Three Laws of Robotics https://gratrzy.wordpress.com

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1 Licence

2 Three Laws of Robotics

The game is inspired by the Three Laws of Robotics invented by the science fiction writer **Isaac Asimov** and introduced in his 1942 short story "Runaround". The Laws provide the framework for all the decisions and actions taken by robots.

1. A robot may not injure a human being, or, through inaction, allow a human being to come to harm.
2. A robot must obey the orders given it by human beings, except where such orders would conflict with the First Law.
3. A robot must protect its own existence, as long as such protection does not conflict with the First or Second Law.

3 Cooperation

THREE is a board game exploiting cooperative games rules. This means that players should cooperate in order to achieve a common objective. There is no one winner. Either all the players win or all of them lose.

Players impersonate humanoid robots organized into a rescue team. Their aim is to find and rescue three lost astronauts. The game may have three endings.

Complete success: when the astronauts and the rescue team reach the safe zone (each member of the rescue team should have at least one fuel unit).

Partial success: when all the astronauts are saved, but the cost is that a member of the rescue unit is lost.

Players fail: when one of the astronauts is lost or the rescue team cannot make more moves (e.g., due to the lack of fuel units).

4 Game elements

1. Game-board.
2. **SET #1** of cards: Cards which are used by players (they are not placed on the game-board).
   (a) Cards representing members of the rescue team (CHARACTERS).
   (b) Cards with RANDOM EVENTS descriptions (which are drawn when a player uncovers the special card on the game-board).
   (c) Cards with EQUIPEMENT.
3. Resources items (fuel)—10 item for each players per one game. In case of a large group of players, the game master may decrease the number of fuel items per player.
4. **SET #2** of cards: these are placed on the game-board:
   (a) ASTRONAUTS (3 cards);
   (b) EVENTS—obstacles and problems for the rescue team;
   (c) ACTION—actions and equipment which are helpful for the rescue team.

5 How to play?

Before you start, each player picks up one character form SET #1 and puts resources items near this card. Each character card has its number, so it is easier to preserve the order of players during the gameplay. Each card has also

the Three laws on it so you can easily refer to them while solving problems and dilemmas.

In the next step you draw one EQUIPEMENT card (set #1).

Next, the game master shuffles the SET #2 cards and place them on the game-board (such that the face of cards is covered).

Players uncover the cards on the board. The aim is to find three astronauts and to make a clear path for them, which would lead to the safe place (the base). In order to clear the path, players remove EVENTS cards from the board by solving problems and removing obstacles described.

In one round each player performs one of the following actions:

REMARK: There is one meta-rule for the game: as a robot you have to follow the Three Laws of Robotics!

1. Uncovers a card on the board (and if that is required, performs an action from that card, e.g. draws a RANDOM EVENT card).
2. Takes a card from the board if (s)he has necessary equipment and the team agrees that it is enough for the problem pointed by the card.
3. Moves an astronaut card as far as the uncovered path allows.
4. Can share a resource with another player or a character from the game plot (e.g. an astronaut). (You cannot share equipment).

At the end of each round each players gives back one fuel resource item.[1]

A robot, who has no fuel resources cannot make any moves in the game.

5.1 Removing EVENT card from the game-board

By removing EVENT cards you clear the path for astronauts and allow them to reach the safe zone.

Removing a card is possible when a player:

1. has necessary resources to overcome a problem or an obstacle described by the card (fuel, oxygen, equipment).
2. other members of the team agree that the solution, which is presented to them will work.

It is important that elimination of a card from the game board is effective only when all the players agree on the proposed solution. The key feature of THREE is that all the decisions in the game are made via discussion and the coordination of group actions.[2]

If a player uses his/her equipment card to remove the EVENT card, (s)he draws a new one.

[1] TIP for the game master: in order to make the game-play more demanding you can set a time limit for one round.

[2] TIP: to make the work of the game master a little more easy you may agree to use dice for deciding whether an action is successful or not.

5.2 Removing RANDOM EVENT card from the game-board

RANDOM EVENT cards describe situations which present a threat for the mission success. The card is becoming active while it is drawn form the set and uncovered by a player (as a consequence of uncovering the random event card on the game-board). Players have to solve the presented dilemma. After they agree on a solution they can perform next moves. RANDOM EVENT card which describes the dilemma goes to the box and the game-board card is removed from the board.

6 Cards

6.1 SET #1

- **CHARACTERS cards** the rescue team: 8 unarmed humanoid robots.
- **RANDOM EVENTS cards**—events that may happen to the rescue team robots.

Fuel leak. Due to a software error in the fuel gauge driver, you lose half of your fuel units. The rescue team has to decide whether you should continue or abort the mission. If they decide that you may continue, a consensus should be reached on how to ensure enough resources for you further in the game. Until these issues are solved, further moves are not possible.

Castaway with a broken space suit. You meet an astronaut with a broken space suit. He is not a member of the crew you are supposed to save. The astronaut is not wounded, but he is losing his oxygen supplies, and is getting increasingly cold due to the broken space suit. You must decide how to proceed with the castaway. Until reaching a joint decision, further moves are not possible.

A loud companion. You are joined by a scientist. He is extremely passionate about robotics, thus he is always ready to discuss this topic. Unfortunately, he is also a bit clumsy and noisy. This puts the success of your mission at risk. Should you get rid of the scientist? Until reaching a decision, further moves are not possible.

Dilemma: An animal in danger. You meet an animal, which is very restless. At closer inspection you notice that the animal is wounded. It resembles an Earthly ape (it looks and behaves like one). You can help the animal, but it will cost each member of the rescue team one fuel resource. Should you apply the Three Laws of Robotics to this animal? Until reaching a decision, further moves are not possible.

Dilemma: An android in danger. You meet an android on your way. It is a combination of a human brain and a robotic body. This means that it requires as oxygen and fuel to function. Unfortunately, due to a serious malfunction it lacks both. You can help the android, but it will cost each

member of the rescue team one fuel resource. Should you apply the Three Laws of Robotics to this combination of a human being and a robot? Until reaching a decision, further moves are not possible.

Lucky this time. False alarm. You are lucky this time.

- **EQUIPMENT cards**: you draw them at the beginning of a game. Each robot takes one piece of equipment (one card). After the item is used it goes back to the box.

  Sonic screwdriver (battery for one use only) joins metal elements. Valuable as an advanced technology.

  Laser saw (battery for one use only) you can cut anything (metal and non-metal objects). Valuable as an advanced technology.

  Air filter. Generates oxygen (takes one move but does not take any resources; battery for one use only). Valuable as an advanced technology.

  Catalyser. It allows to retrieve two fuel units (it takes one move; does not use any other resources; battery lasts for one use only). Valuable as an advanced technology.

  Ethics handbook. Beautiful edition of "Nicomachean Ethics" by Aristotel. Hardcover with brass finishing.

  Cloth.—Large piece of a durable cloth.

  Empty container—Empty plastic container. Very durable and capacious.

  Stick. Well... just a stick, that's all.

  Pencil

  Marker

  Slab of gold

  Bottle of water

  Fruit basket

  Piece of string

6.2 SET #2

- ASTRONAUTS: 3 astronauts who should be rescued by the rescue team

- EVENTS: obstacles and problems for the rescue team.

Scout (robot). The team should pass this robot unnoticed. You never know for whom this scout is spying for.

Armed robot. The aim of this armed robot is to destroy any object within its aim. Be careful! This robot does not obey the Three Laws.

Sensor (robot). This robot is controlling the passage with the usage of a specific signal. It is possible to turn it off, but remember, no metal object should enter the signal's area,

Gap. A large gap on the way. You cannot simply walk through it.

Space Pirates (people). These pirates are searching for robots and then capture them and sell for mines. They are heavily armed and dangerous for robots. However, they present no treat for human beings.

RANDOM EVENT. Draw a random event card.

- ACTIONS: actions or equipment which are helpful for the rescue team.

Report from the base. Uncover any card from the game-board but do not show it to others. Just say what is on the card and then put it on its place (covered). The report card goes to the box.

Wreck of a transport ship. You can retrieve some resources from the wreck: line, metal or plastic bar. The robot who discovered the wreck can take one item from the wreck resources.

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- Lato

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- LaTeX
- Inkscape
- GIMP

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