STEM FEST

MANARAT STEM FEST 2021

ROBO-SOCCER RULEBOOK

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ROBO SOCCER RULEBOOK

General Rules

•The tournament will be managed by the Manarat Science Club, hereafter called the "Organizer." The rules have been enacted and enforced to ensure the competition's integrity and smooth flow of rounds and matches.

•All participants are required to read the competition rules and regulations. Participation in the competition signifies that the participant agrees to abide by all the rules and participate in this competition.

•Any participant who violates the rules will be subject to due consequences at the of the organizing body.

•Compliance with the code of conduct of Manarat Dhaka International School and College is required.

Eligibility and Registration

•To be eligible to participate in the competition, participants must have:

1. completed their registration in their respective category as provided .
2. participant must be a student of an institution. as well as legal residents of Bangladesh.
3. To be certified as a student by the Organizer, participants must provide their student ID.

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Bot Specifications

- Dimensions: Maximum 30 cm x 30 cm x 20 cm
- Weight:Up to 2.5 kg (Each 100g above incurs a one-goal penalty)
- Power Source: On-board power supply only (maximum 12V)
- No external or wired power allowed
- Control: Wireless only (RF, NRF, Bluetooth, Joystick, or mobile app)
- Mechanics: Bots may push or kick the ball but cannot grab or enclose it.
- Servo-based kicking and rubber pads for ball bouncing are prohibited.
- Bracket : Bracket lengths 8 cm, widths 20 cm; must remain open-type.
- Material: Permissible materials: SS, acrylic, wood, PVC, or cardboard.
- No sharp, damaging, or hazardous parts allowed.

Scoring Rules

•Each valid goal:	+3 points
•Each foul:	-1 point
•Arena damage:	-1 point
•Bot overweight penalty:	-1 goal per 100g
•Repair penalty:	-1 per 30 seconds used
•Final Score:	(Goals x 3) - (Repair Penalty + Foul Penalty)

Gameplay

•Match Duration:	620 seconds
•First Half:	300 seconds
•Break:	20 seconds
•Second Half:	300 seconds

Fouls & Penalties

- Touching the bot during play.
- Continuous entanglement (10 sec) --> Reset to initial positions.
- Intentional obstruction or defensive stalling.
- Exceeding restart limits or causing arena damage.
- 3 fouls kick --> Opponent gets a penalty
- Offensive behavior towards officials --> Immediate Disqualification

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Penalty Shootout Rules

- If a bot is inactive for 30 sec Opponent receives a penalty shot.
- 15-second limit per penalty attempt (clock paused).
- Each team gets 3 penalty attempts in tiebreakers.
- Team with more goals wins.
- If still tied team with fewer fouls wins.

Inspection & Compliance

- All bots undergo inspection 30 minutes before matches.
- Size, weight, and voltage compliance required.
- Battery safety and mechanical structure checked.
- No grabbing or restricted mechanisms allowed.
- Failure to comply results in disqualification.

Code of Conduct

- Teams must report within 2 minutes of call.
- Late arrivals forfeit matches.
- Any act of misconduct or false identity leads to disqualification.
- The decision of the judges is final and binding.
- Authority can change rules without prior notice.