

**NOTE: This document is
subject to change!**

LIMITATIONS, SETTINGS, AND DATA:

- MIN AI PLAYERS PER TEAM: 3
- MAX AI PLAYERS PER TEAM: 5
- MAX AI PLAYERS ON FIELD: 3

- MAX TIMEOUTS PER MATCH: 3
- MAX TIMEOUT DURATION: 10 minutes
- MAX MATCH DURATION: 120 minutes
- HALF-TIME DURATION: 15 minutes
- MAX OVERTIME DURATION: 15 minutes

- STALL VELOCITY CEILING: 100 u/s
- STALL MAX DURATION: 15

COMPETITION RULES:

COMPETITION ORDER:

| | | | | |
|---------|-------------------------------------|--|-----------------------------------|-------------------------|
| STAGE 1 | Competition Announcement | Registration Period | Registration Deadline | Coach Evaluation Period |
| STAGE 2 | Team Building and Submission Period | Team Submission Deadline | Team Evaluation Period | |
| STAGE 3 | Seeding | Tournament Style Decision [†] | Match Order Decision [†] | |
| STAGE 4 | Tourneys [†] | Wrap-up [†] | | |

[†] *These stages will be streamed.*

Competition Script Requirements

- All scripts must be compiled into PC code before being submitted.
- The compiled script mustn't contain any more than two-hundred fifty six (256) operations.

Competition Interpreter Limitations

- The stack will have sixteen (16) pointers.
- The ram will have no more than eight (8) variables at once.
- The memory will have at most two-hundred fifty six (256) bytes of data stored at once.
- Each script will process, at most, one-thousand five-hundred (1500) operations per simulation second.

Registration

Each team needs one human coach that is identified by their Steam account, their email address, and a third piece of id that ties them to the Steam account and the email address. A coach must be registered and evaluated first before they can submit a team.

Coach Evaluation

Coaches will begin to be evaluated immediately after submission for registration.

A coach will be considered uncooperative if they fail to be confirmed within seven (7) days of any reply given to their submission for registration. Once marked uncooperative, they will lose priority and will not be fully evaluated if the date is past the deadline. For this reason, the initial submission for registration should meet every requirement the first time it's submitted or else it runs the risk of not becoming confirmed at all.

Every new submission made for the same account will be ignored - only the first one will be used. It's important to edit the original submission.

If there are fewer than eight (8) evaluated and confirmed coaches after the final coach evaluation period, the coach registration period will be extended.

Team Evaluation

A team must be submitted by a confirmed coach before the team submission deadline for it to be queued for consideration.

Each team needs to meet these conditions before they can be added to the list of competing teams:

- The team needs to consist of at least three (3) AI players, but no more than five (5).
- The script for each AI player must meet the competition script requirements.
- Their team's name, the AI player's names, the skins, the flags, the goal horns, etc... must meet the following conditions:
 - It mustn't be considered too offensive or vulgar.
 - It mustn't contain any gore, nudity, or explicit content.
 - It mustn't contain any copyrighted or trademarked content. If it does contain such material, permission must be explicitly provided and proof of this permission must be provided as well.

A team queued for consideration will then be checked that they meet the above conditions. Any team that doesn't meet those conditions will be removed from the queue and the coach will be informed of this. Any team that does meet the above conditions will be added to the list of competitors and the coach will be informed of this.

A team can be re-submitted even if they've already had their team evaluated and confirmed, but this must be done before the submission deadline. A re-submitted team will overshadow any previous submissions for that team. Resubmit wisely.

If there are fewer than eight (8) evaluated and confirmed teams after the final team evaluation period, the coach registration period will be extended.

Seeding

Once the team evaluation deadline has passed, each competing team will be seeded. This means each team will be tested to determine how likely they are to win the competition. They will be given a seed based on the team's aptitude and skill. The seed is determined through the following method:

1. Each possible permutation of three (3) AI players will be tested for each team.
 - a. The permutation will be pinned against three (3) mid-difficulty Lua bots for ten (10) simulation minutes.
 - b. The score for that permutation will be the difference between their score minus the AI team's score.
- c. The final score for a team will be the calculated using the given formula:

$$\frac{(\text{average of all scores} \times 2) + \text{maximum score}}{3}$$

This final score determines that team's seed.

Did You Know?

Because a team can have a maximum of five (5) AI players, there can be, at most, sixty (60) possible permutations for a team, combined to make six-hundred (600) minutes or ten (10) hours of possible simulation time for a given team.

Once all teams have been seeded, they will be organized from highest to lowest seed.

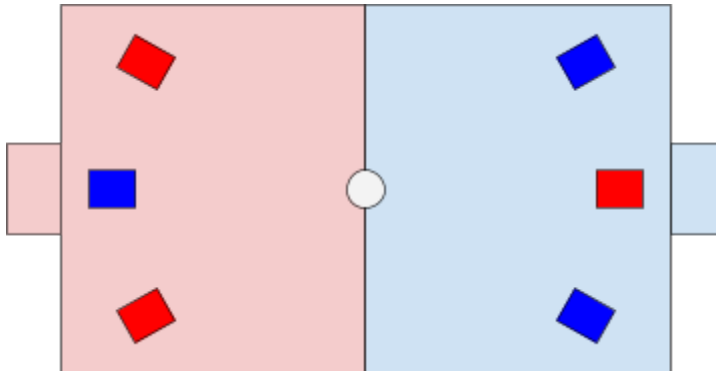
Tournament Style Decision

The style of the tournament will depend on the number of competing teams. A lower number of teams will result in a double-elimination tournament, while a higher number will result in a single-elimination tournament.

MATCH RULES:

SETUP

At the start of each round, the two teams will be setup as shown below:



A coin will be tossed before a match starts. For the team that wins the coin toss, that team's coach will get to decide who their first AI player will be and where they will be placed on the field. From there the coaches alternate picking AI players and their placements until all positions are filled.

In the event that a coach isn't present to decide their team's order, the order will be randomly picked for them.

The vehicles will be placed so that their front is facing at the center of the field. They will be equidistant from the center of the field, which is where the ball will be dropped.

MATCH ORDER

| | | | | |
|---------|-------------|---------------|------------|--------------|
| STAGE A | MATCH INTRO | TEAM INTROS | PRE-MATCH | |
| STAGE B | [PRE-ROUND | ROUND | POST-ROUND | (TIME-OUT):] |
| STAGE C | HALF-TIME | | | |
| STAGE D | [PRE-ROUND | ROUND | POST-ROUND | (TIME-OUT):] |
| STAGE E | OVERTIME | (COIN-FLIP) | | |
| STAGE F | END MATCH | MATCH ROUNDUP | | |

PRE-ROUND

The AI players will be placed onto the field before a round starts. They will have their engines enabled but their brakes will be engaged until the round starts. Their code will begin running at this point in time. Each car will have their boost fuel filled during this time.

HALF-TIME

When the time reaches exactly half of the match's duration, half-time will be called and the current round will end. The timer will then be set to fifteen (15) minutes and begin counting down. No rounds will happen during this time. Only after half-time is over will the timer be set to half of the matches time again, and then the next pre-round can begin.

GOALS

A goal is counted while a round is active and a ball is entirely contained inside of a goal. When a goal occurs, a point is given to the team who doesn't own that goal and that round will immediately end.

STALLS

If the ball doesn't exceed one-hundred (100) units per second velocity for fifteen (15) continuous seconds, the round will be considered stalled. When a round is stalled, the round will end early.

MATCH TIME

The timer is set to one-hundred twenty (120) minutes at the start of the match. Only while a round is active will the timer count down. When the timer reaches zero (0), the match will either end or go into overtime.

TIMEOUT

Each coach has 3 timeouts per match. A coach can call a timeout any time, but it will only take effect between rounds. During a coach's timeout, the coach has the option to change out AI players and/or change where their AI players are placed on the field. After a coach is done with their timeout, or if their timeout exceeds ten (10) minutes, the next pre-round will begin.

OVERTIME

In the event that the scores are tied when the match time runs out, the match goes into overtime. The AI players are reset and the timer is set to fifteen (15) minutes. The first team to score a goal during overtime wins the match. If no one scores a goal before the time runs out, then the game is decided on a coin flip.