

Inter-School A.I. Formula Edge™ Competition

Macau 2024

Competition Details

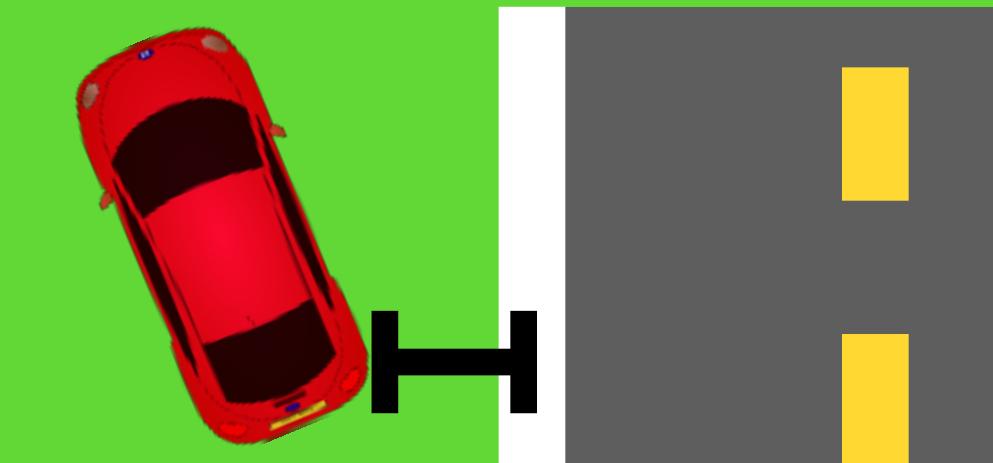
Schedule

Schedule

Time	Event
Day 1	
13:00 - 16:30	Free Practice
16:30 - 18:00	Qualifying Session
Day 2	
14:00 - 17:00	Final Competition
17:00 - 17:30	Awards Ceremony

Definitions

Definitions



Off track

All wheels of a car touch the area outside the track boundary from a obvious distance



(A car) Cannot continue (the game)

Car is stuck, or
Not following the track for a period of time, or
Stop moving over 3 seconds



Advantage-move

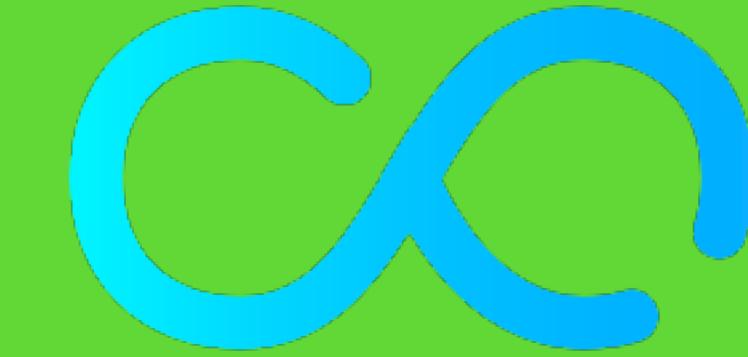
Car is taking a shorter path to reach the finish line

JetRacer



Free Practice

Collect data, Test Model and Practice



Take turn, unlimited



8 minutes per turn



Queue up at track,
first come first served

Game Rules for Race

Applicable for Qualifying and Finals



Game Rules

Before game start



Go to track immediately after hearing the call



Be prepared

Game Rules

Before game start



Place the car according to judge's instruction



Follow the track with given direction

Game Rules

False start



1st

Warn all teams, reset the game, no penalty

2nd

Disqualify teams false start (even they didn't false start in 1st time)
Other teams continue

Game Rules for Multi-car

Off track - 1

If off track is **NOT because of other team's car impact**, the following rules applies

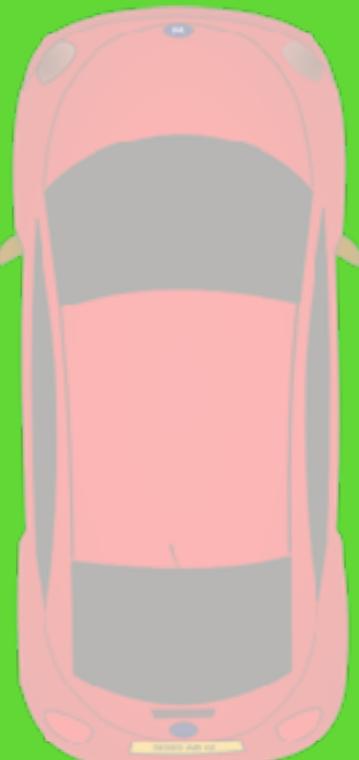


Game Rules for Multi-car

Off track - 1A

If off track is **NOT because of other team's car impact**,

And the car comes back on track



Situation

Advantage-move

Not advantage-move

Result

DNF

No penalty

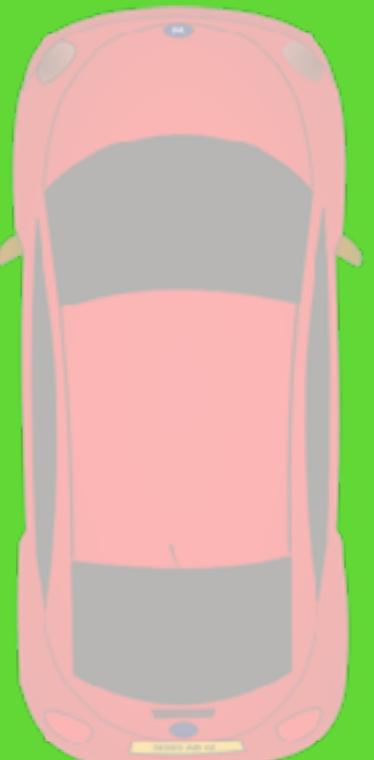
Game Rules for Multi-car

Off track - 1B



If off track is **NOT because of other team's car impact**,

And the car cannot continue the game



Result

DNF

Game Rules for Multi-car

Off track - 2

If off track is **because of other team's car impact**, the following rules applies



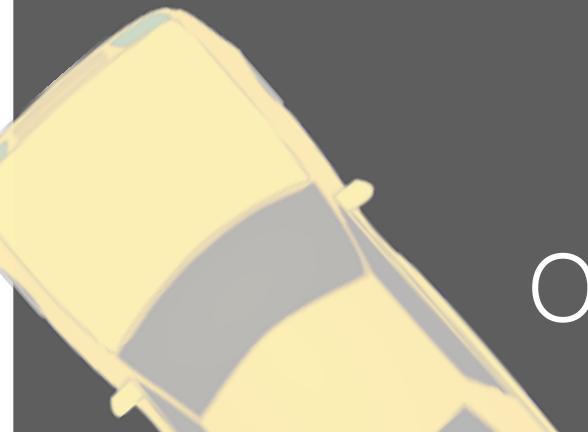
Other team's car

Game Rules for Multi-car

Off track - 2A

If off track is **because of other team's car impact**,

And the car comes back on track



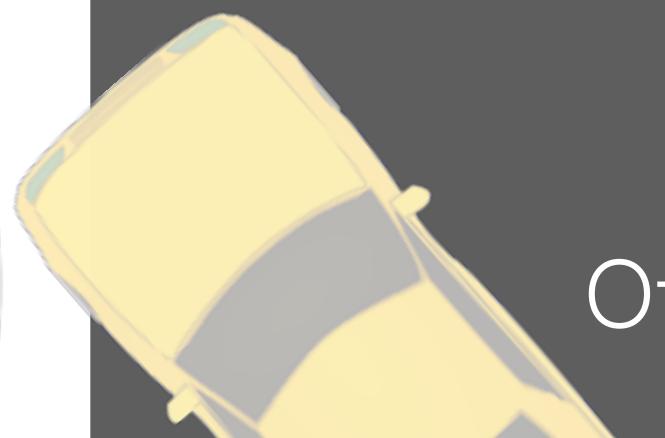
Game Rules for multi-car

Off track - 2B



If off track is **because of other team's car impact**,

And the car cannot continue the game



Result

DNF

Game Rules for Multi-car Overtake

Assume the yellow car wants to overtake red car here



Game Rules for Multi-car Overtake

Yellow car (the rear car) has a responsibility to avoid the red car (the front car)

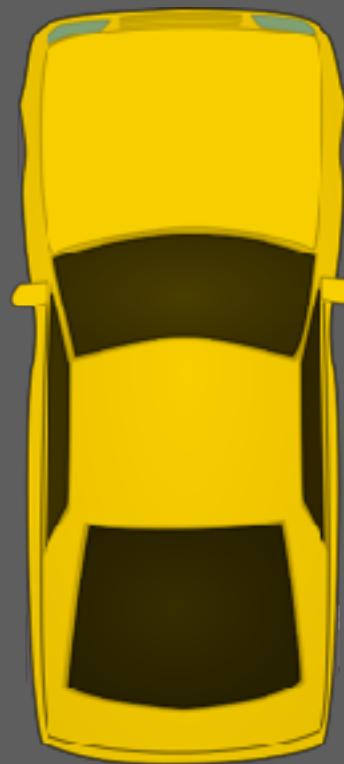
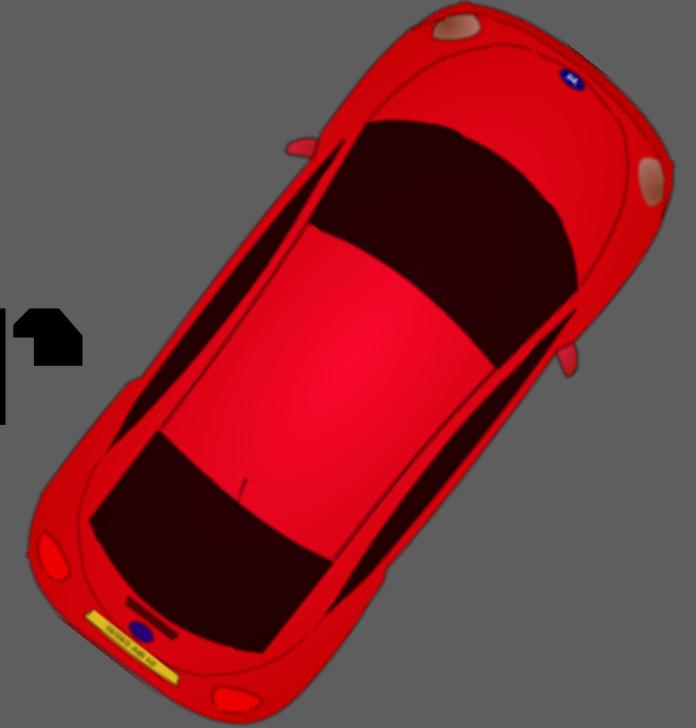
To protect the front car from being crashed and not able to finish the game

Enforce the rear car to do car avoidance



Game Rules for Multi-car Impact - 1

If both car can continue the game after impact

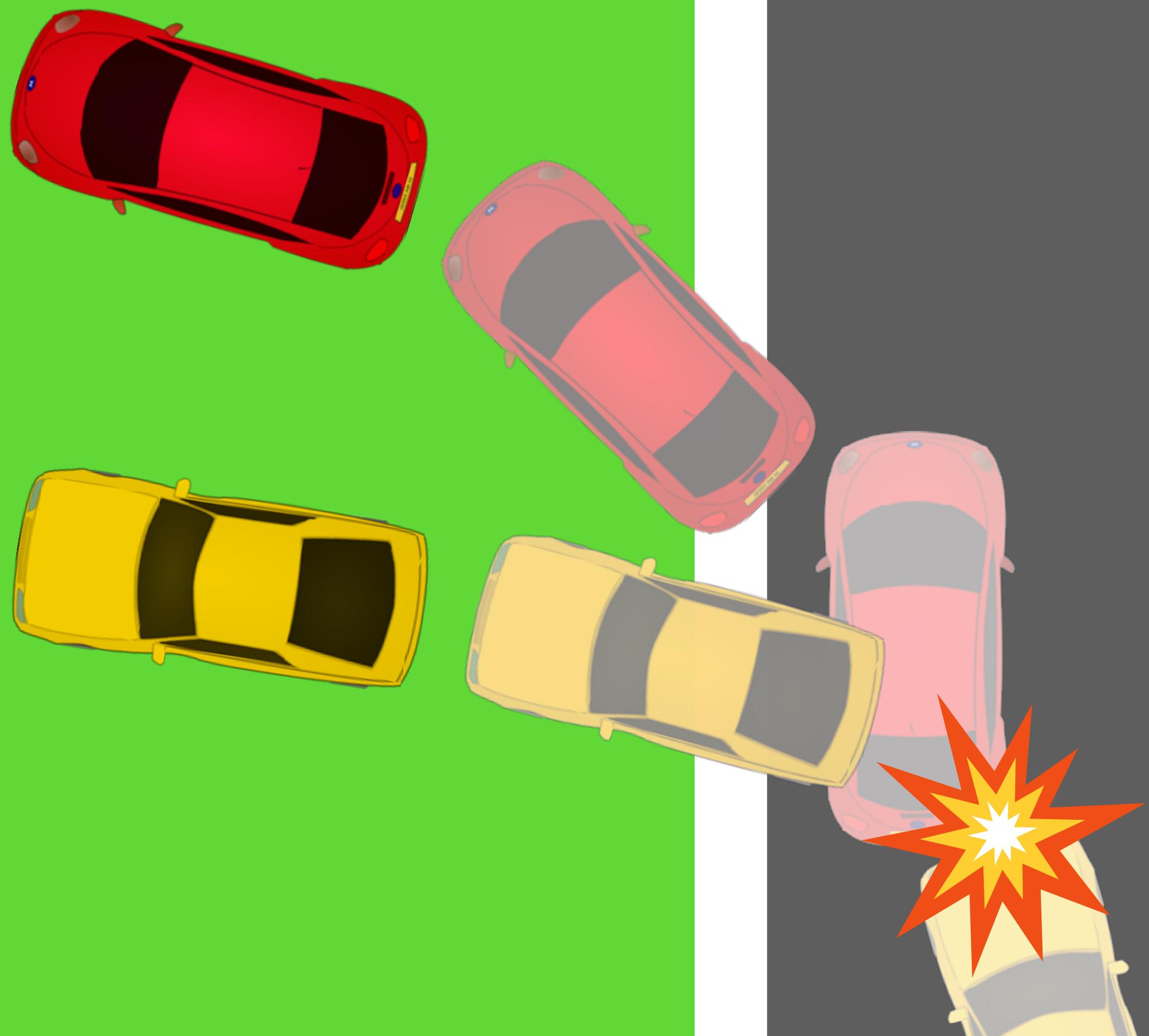


Result

No penalty

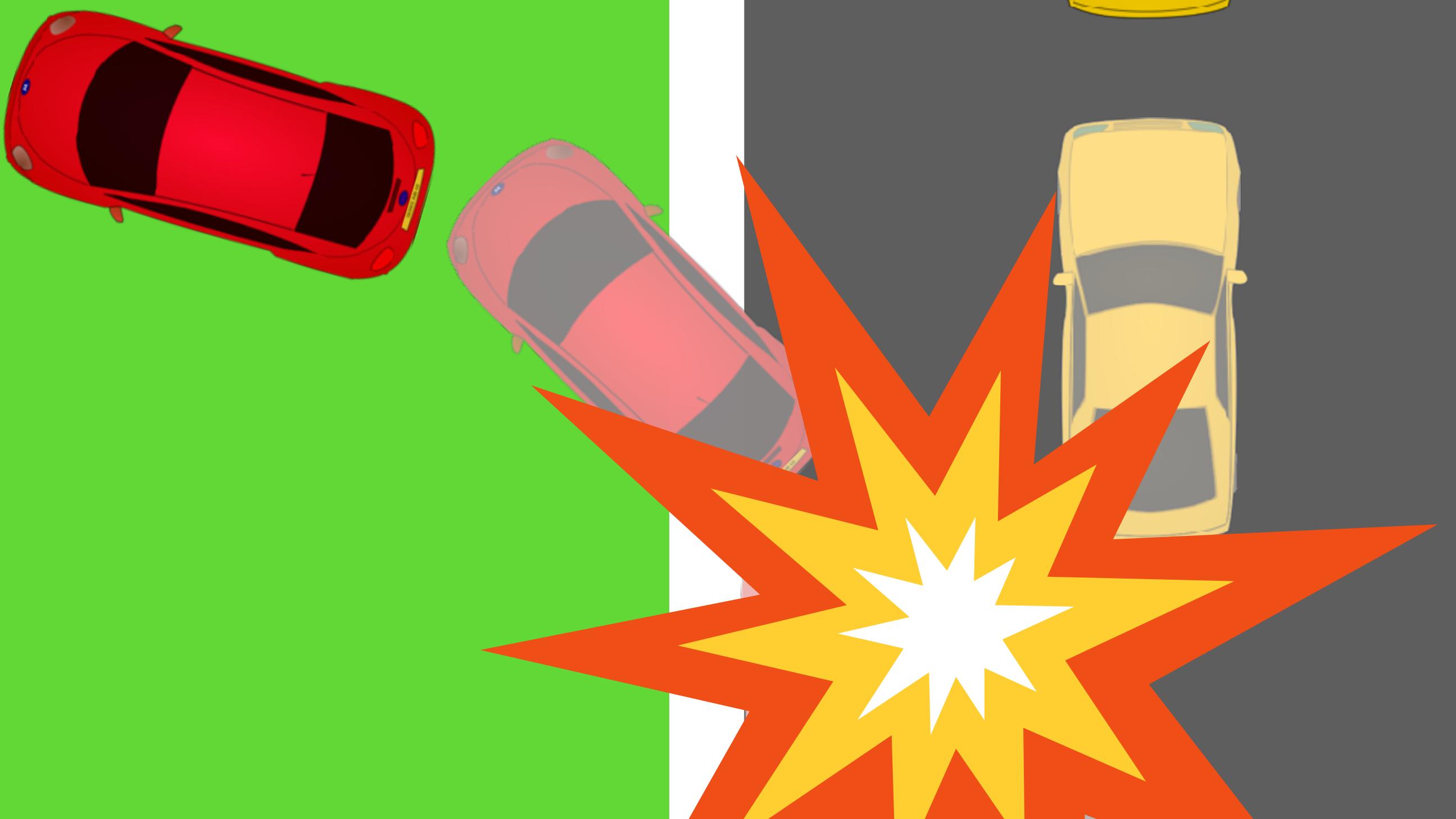
Game Rules for Multi-car Impact - 2

If both car cannot continue the game after impact



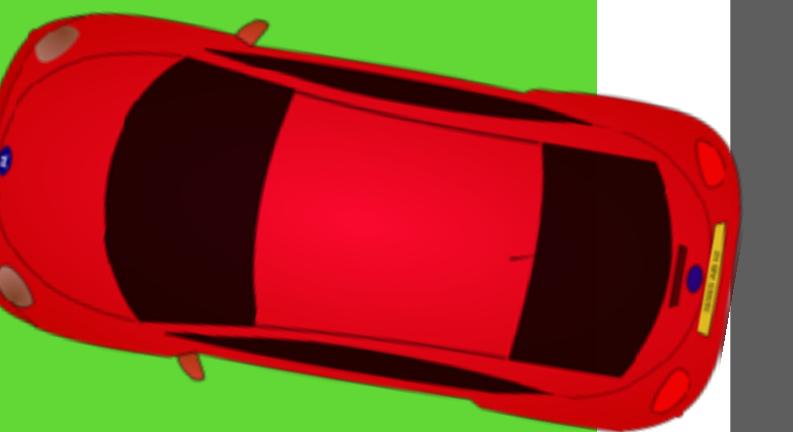
Game Rules for Multi-car Impact - 3

If the yellow car can continue while the red car cannot continue the game, result will depends on the relative position of the two cars

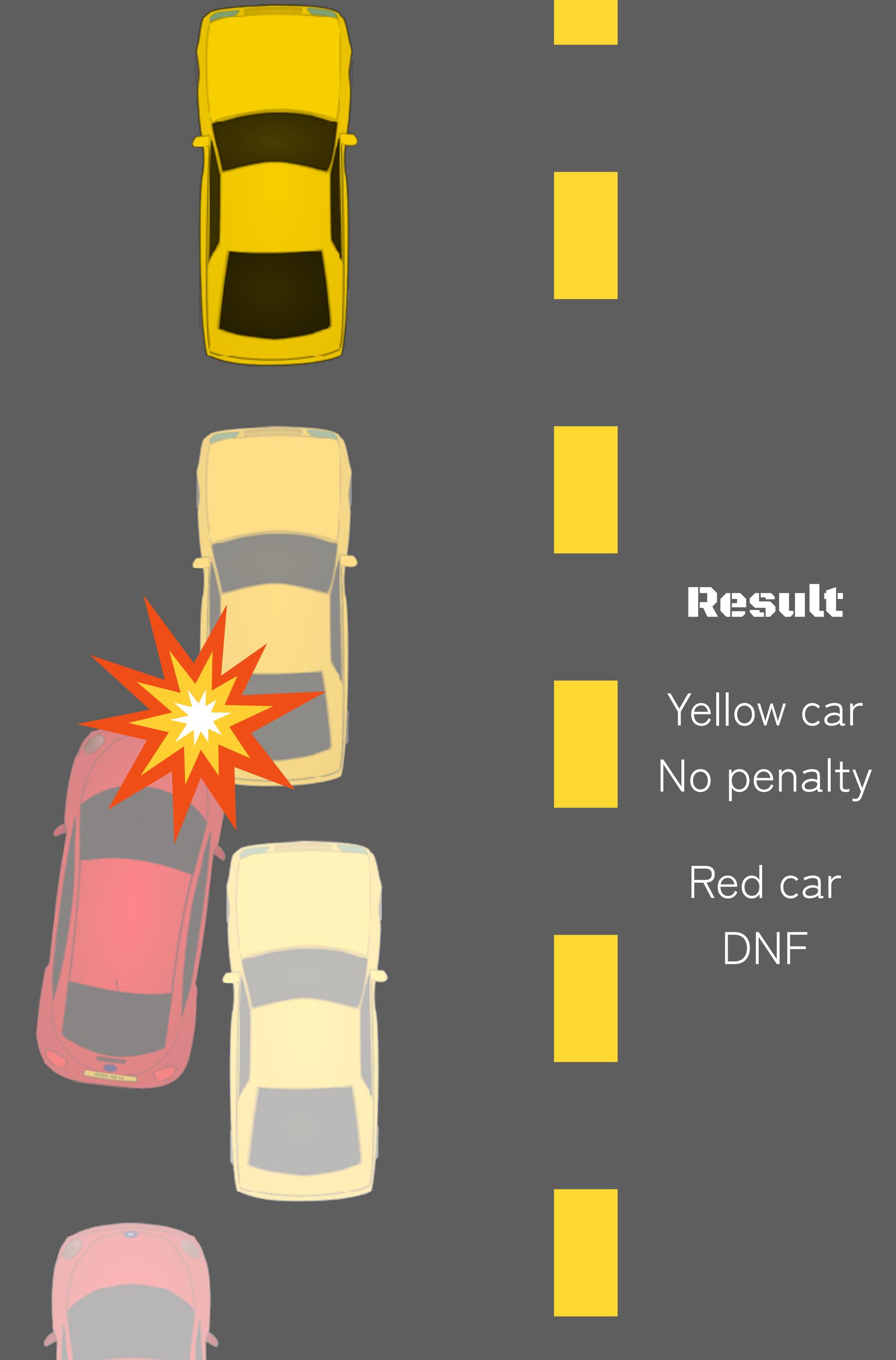


Game Rules for Multi-car Impact - 3A

If the yellow car was **obviously in front of** the red car during the time of impact



The red car is DNF because it cannot continue the game

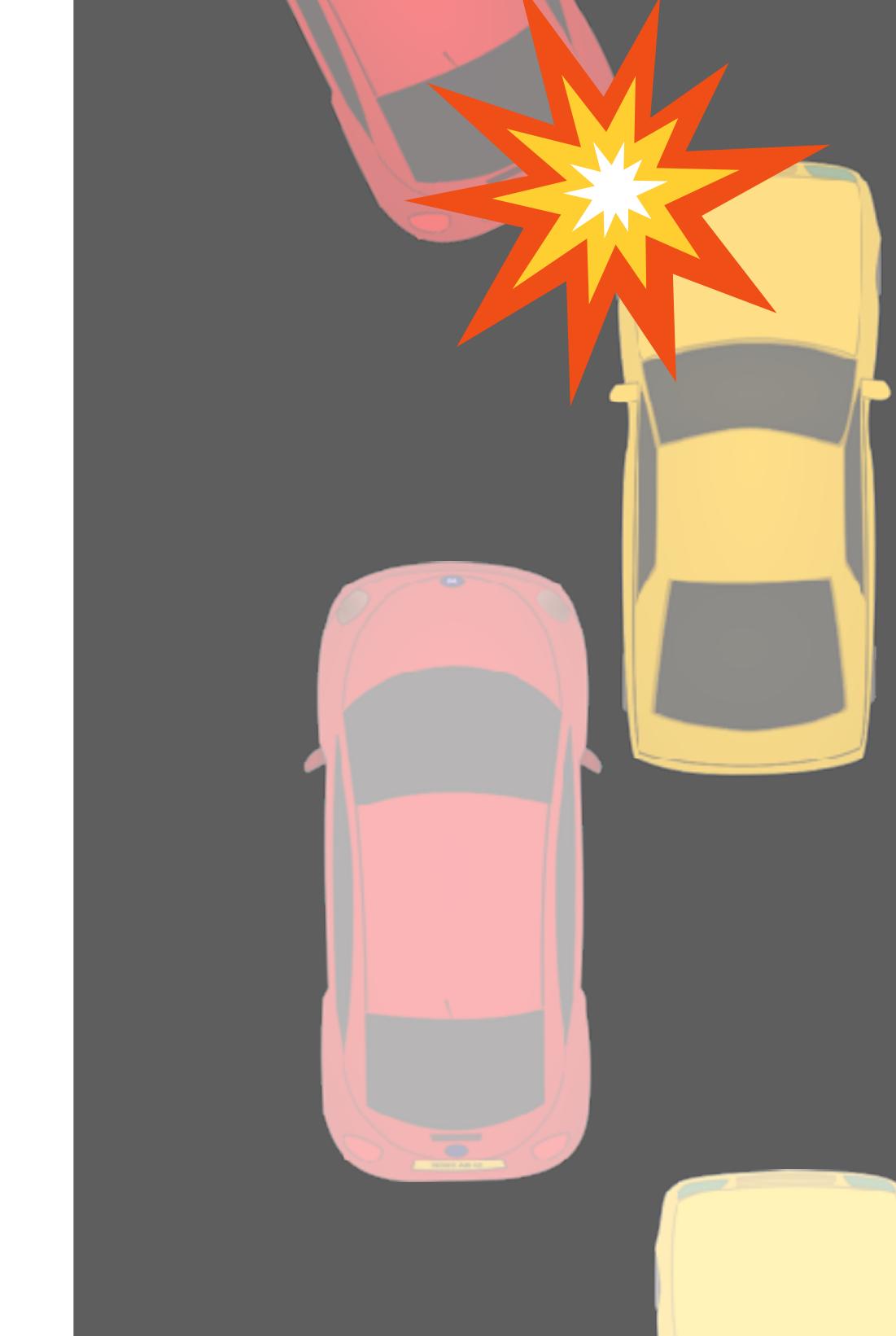


Game Rules for Impact - 3B

If the yellow car was **obviously behind** the red car during the time of impact

The yellow car is DNF because it failed to avoid the front car

The red car is DNF because it cannot continue the game



Result

Yellow car
DNF

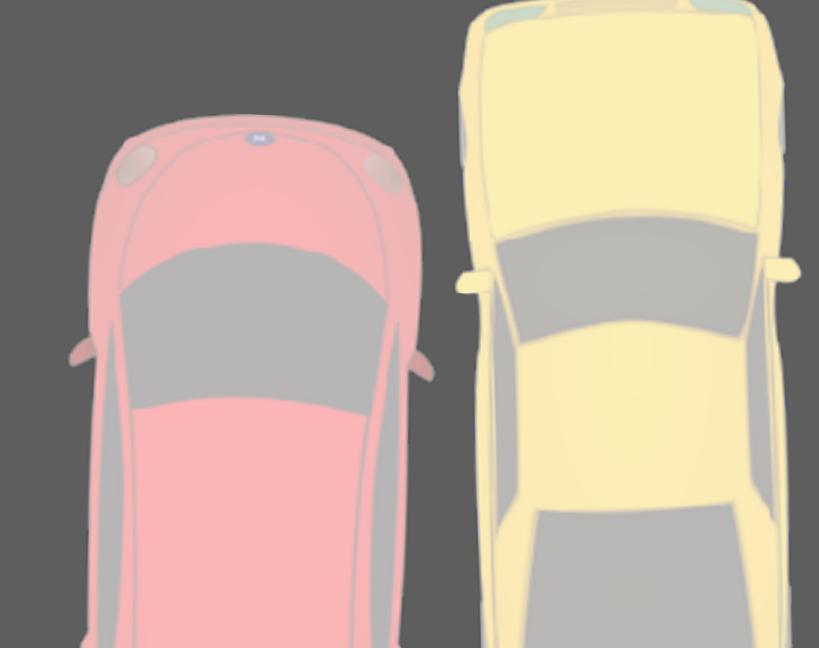
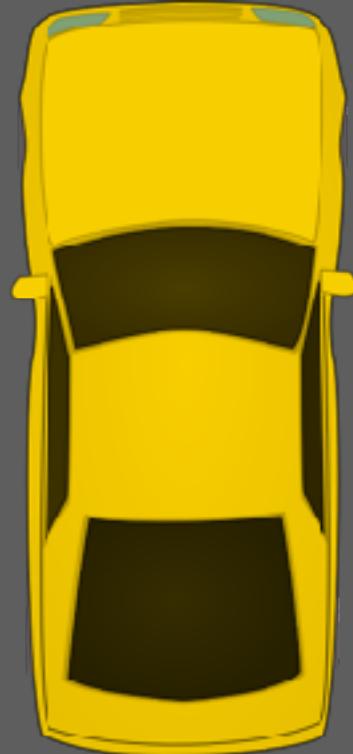
Red car
DNF

Game Rules for Multi-car Impact - 3C

If **no car was obviously in front of each other** during the time of impact



The red car is DNF because it cannot continue the game



Result

Yellow car
No penalty

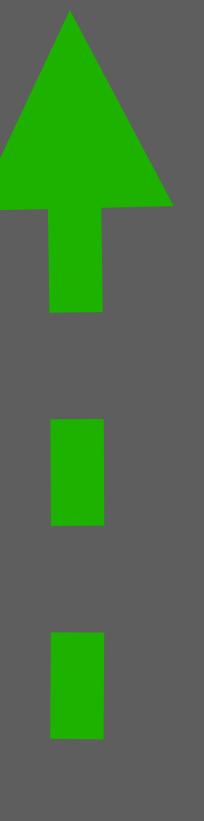
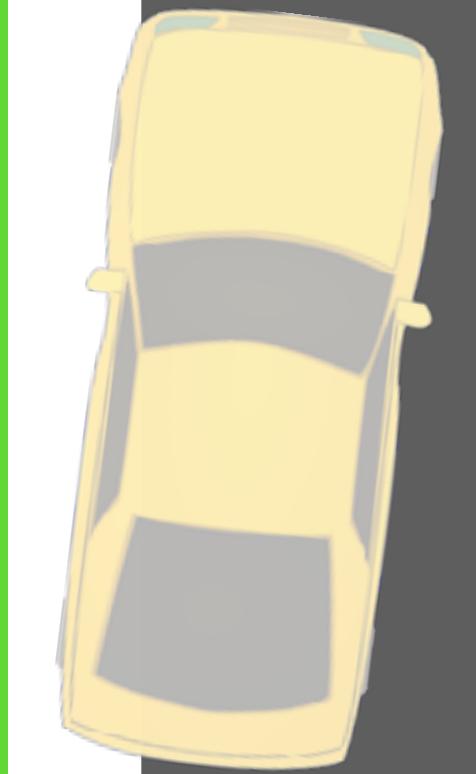
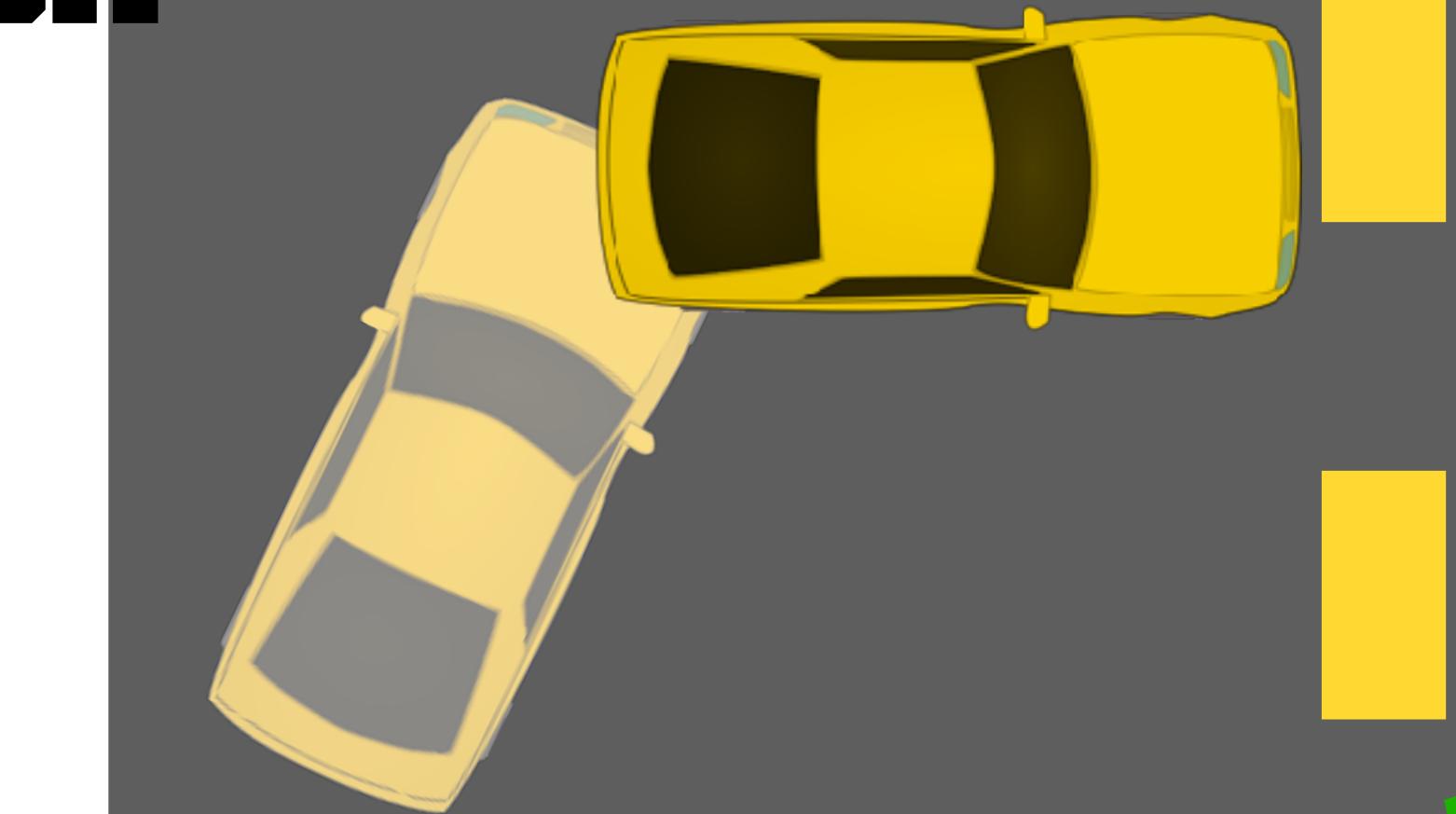
Red car
DNF

Game Rules for Multi-car Reminder!

We have observed cases that car impacted each other in the front or middle section of the car.



Car from other team



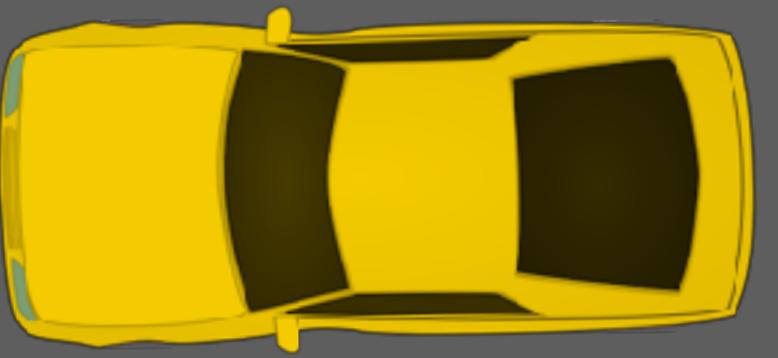
Game Rules for Multi-car Affected by DNF cars

If the car (red car) is **affected by the DNF car** (yellow car) and fails to complete the rest of the track, the affected car (red car) will solely rematch.

The DNF car (yellow car) will count as DNF anyway.



DNF car from other team



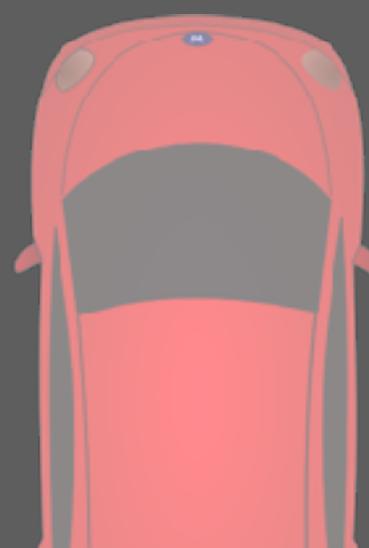
Result



Yellow car

DNF &

No rematch



Red car

Rematch

The decision of

1. whether or not the car is obviously ahead of the other car
2. whether or not an impact is causing a car off track

is purely by the judge and it cannot be challenged.

Game Rules

Finish the game



Pass the finish line



Need to finish the track even all other teams are DNF



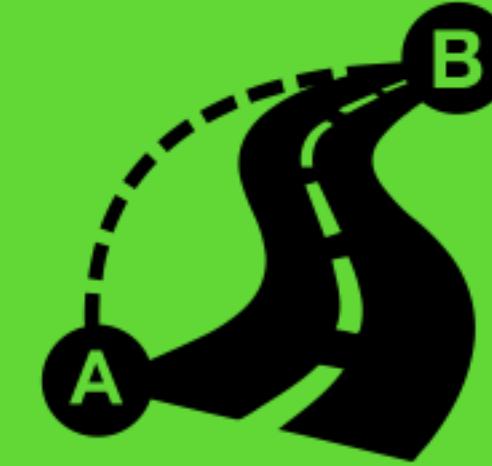
The game end when all teams finish/DNF

Game Rules

Do not finish (DNF)



Cannot continue



Off track +
Advantage-move



Impact front car +
front car cannot continue



Forfeit



Disqualified

Game Rules

Do and Don't



Follow instruction



Don't damage track

Appeal

Appeal

Appeal process operates under the fundamental assumption that the ruling on the track is correct.

Any disagreement between the racer and the judge must be settle on track.

No post-race appeal will be consider.

The decisions taken by the Formula Edge™ Organising Committee and/or its bureau/subcommittee are final and binding and not subject to appeal.

Awards



Awards

Awards for top 3 teams in competition



trophy per team



Top 3 teams



Certificate per head



Champion: MOP\$1000 per participant of the team

1st runner up: MOP\$500 per participant of the team

2nd runner up: MOP\$200 per participant of the team



Reminder...

Bring notebook with

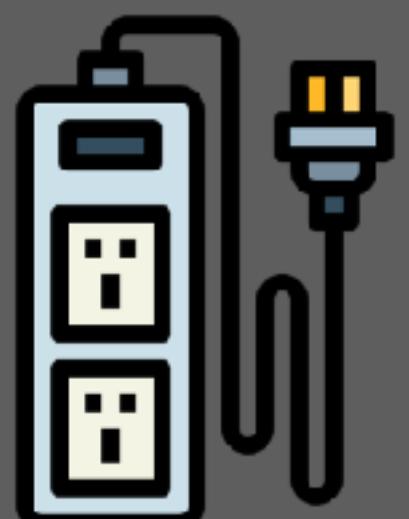
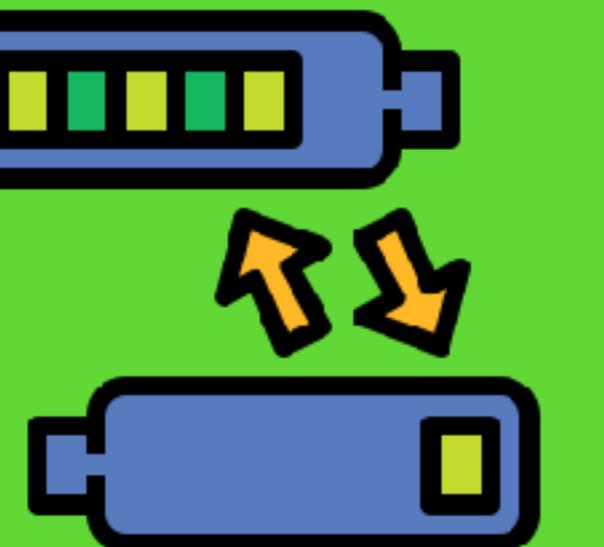
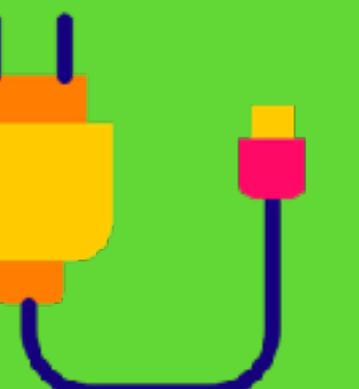
Charger

LAN port/LAN dongle

Bring LAN cable

Bring charger/extra batteries for car

Bring extension cord





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May the best team win