# TS Advanced: Regular Exam - 18.01.20

# Problem 1. Racers

export class Racers {  
 *// TODO: implement this class...*  
}

### Your Task

### Write a Racers class, which supports the described functionality below. First import the Racer interface.

### Functionality

#### constructor()

Receives no parameters at initialization of the class, but should have 1 property:

* **allRacers** - initially an **empty array** of type **Racer**

#### createRacer({firstName}, {lastName}, {dateOfBirth}, {id})

This function should create a new racer and add it to the racers array with all the data passed as arguments in an object.

* Check if the racer is already in the array you should throw an error:

"{firstName} {lastName} already exists on the grid”

* Also keep in mind that there might be maximum 20 racers on the grid. If that number is exceeded, throw an error:

"You have exceeded the maximum number of racers on the grid"

#### signContract({id}, {racingTeam}, {salary}, {terms})

* Check if the given id corresponds to any in the racers array, if not throw a new error:

"There is not such racer on the grid"

* Otherwise you should set the **hasContract** property of the racer to **true** and add the other passed arguments to the given racer object and return the following message:

"{firstName} {lastName} has just signed a contract with {racingTeam} for {terms} years"

#### renewContract({id}, {salary}, {terms})

* Check if the given id corresponds to any racer in the array and if he has a valid contract, if not throw a new error:

"There is no racer who meets the criteria"

* Otherwise update the properties of the given racer with the arguments passed to this method and return the following message:

#### "{firstName} {lastName} has renewed his contract with {racingTeam} for {terms} years."

#### signWithNewTeam({id}, {racingTeam}, {salary}, {terms})

* Check if the given id corresponds to any racer in the array and if the team passed as an argument to the method is different to his current team, if not throw a new error:

#### "There is no racer who meets the criteria or he is currently in the same team"

* Otherwise update the properties of the given racer with the arguments passed to this method and return the following message:

**"{firstName} {lastName} has renewed his contract with his new team -{racingTeam} for {terms} years."**

### Examples

|  |
| --- |
| Sample code usage |
| **let racers = new Racers();**  **racers.createRacer('Lewis', 'Hamilton', '11.12.1988', 44);**  **racers.signContract(44, 'Mercedes', 10000000, 4);**  **racers.createRacer('Sebastian', 'Vettel', '11.11.1986', 5);**  **racers.signContract(5, 'Ferrari', 4899990, 2);**  **racers.createRacer('Valteri', 'Bottas', '11.11.1986', 22);**  **racers.signContract(22, 'Mercedes', 900000, 2);**  **racers.createRacer('Max', 'Verstappen', '11.11.1986', 33);**  **console.log(racers.signContract(33, 'Redbull', 900100, 3));**  **console.log(racers.renewContract(33, 98765, 4));**  **console.log(racers.signWithNewTeam(5, 'Redbull', 1234567, 2));** |
| Corresponding output |
| Max Verstappen has just signed a contract with Redbull for 3 years  Max Verstappen has renewed his contract with Redbull for 4 years  Sebastian Vettel has signed a new contract with his new team Redbull for 2 years |