1. <https://github.com/rvsp/typescript-oops/blob/master/Practice/Movie.md>

var film=[];

class Movie

{

constructor(title,studio,rating="PG")**//Set Default Rating PG if argument not passed**

{

this.title=title;

this.studio=studio;

this.rating=rating;

film.push([title,studio,rating]);/**/Default push all data in to film array**

}

getPG(arr**)//Filter the Array Based On rating is equal to PG**

{

var PG\_arr=arr.filter((el)=>el[2]=="PG");

return PG\_arr;

}

get\_All\_MovieDetails(arr**)//Display the all the Movie Details**

{

var str="";

for(var i in arr)

{

str+="</br>.....Movie "+(parseInt(i)+1)+"..........</br>Title:"+arr[i][0]+"</br>Studio:"+arr[i][1]+"</br>Rating:"+arr[i][2]+"</br>";

}

return (str);

}

}

var movie1=new Movie("Bala Leela","avmstudio","PG13");

var movie2=new Movie("Madanakamarajan","jeministudion","R");

**//insert new object data in to class without rating.it is set default rating =PG.**

var movie3=new Movie("Puducherry","KOLLYWOOD FILM STUDIO");

**//instance of the class Movie with the title “Casino Royale”, the studio “Eon Productions”, and the rating “PG­13**”

var movie4=new Movie("Casino Royale","Eon Productions","PG13");

var movie5=new Movie("ABC","Indian Film Studio");

**//call the get\_All\_MovieDetails() method**

console.log(movie5.get\_All\_MovieDetails(film));

**//call the getPG() method**

console.log(movie5.getPG(film));

##### Output:

.....Movie 1..........  
Title:Bala Leela  
Studio:avmstudio  
Rating:PG13  
  
.....Movie 2..........  
Title:Madanakamarajan  
Studio:jeministudion  
Rating:R  
  
.....Movie 3..........  
Title:Puducherry  
Studio:KOLLYWOOD FILM STUDIO  
Rating:PG  
  
.....Movie 4..........  
Title:Casino Royale  
Studio:Eon Productions  
Rating:PG13  
  
.....Movie 5..........  
Title:ABC  
Studio:Indian Film Studio  
Rating:PG

[ [ 'Puducherry', 'KOLLYWOOD FILM STUDIO', 'PG' ],

[ 'ABC', 'Indian Film Studio', 'PG' ] ]

##### Execution Time:

0.067s

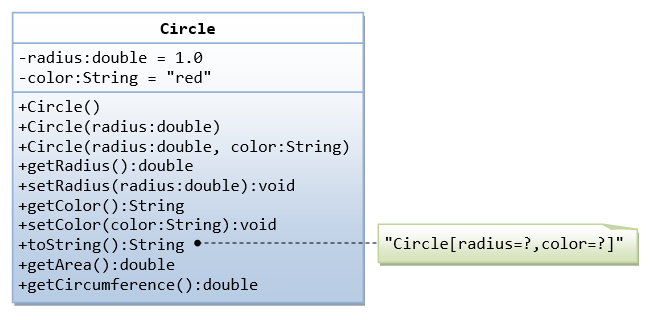
##### Memory Used:

8124kb

1. <https://github.com/rvsp/typescript-oops/blob/master/Practice/class-circle.md>

# **Circle - Class**

**Convert the UML diagram to Typescript class. - use number for double**

[](https://github.com/rvsp/typescript-oops/blob/master/images/ClassDiagram_Circle.png)

const pi=3.14159265;

class Circle

{

constructor(radius,color)

{

this.radius=radius;

this.color=color;

}

getRadius()

{

return "Radius: "+this.radius;

}

setRadius(radius)

{

this.radius=radius;

return "Radius Updated to "+radius;

}

toString()

{

return "Circle[radius="+ this.radius +",color="+ this.color +"]";

}

getArea()

{

let r=this.radius;

return "Area of Circle:"+(pi\*r\*r).toFixed(2);

}

getCircumference()

{

let r=this.radius;

return "Circumference of Circle:"+(2\*pi\*r).toFixed(2);

}

}

let s1=new Circle(4,"red");

console.log(s1.setRadius(5));

console.log(s1.getRadius());

console.log(s1.toString());

console.log(s1.getArea());

console.log(s1.getCircumference());

##### Output:

Radius Updated to 5

Radius: 5

Circle[radius=5,color=red]

Area of Circle:78.54

Circumference of Circle:31.42

##### Execution Time:

0.065s

##### Memory Used:

8248kb

1. Write a “person” class to hold all the details.

//Class

class person {

constructor(first\_name,last\_name,gender,mobile\_No,email\_Id)

{

this.first\_name=first\_name;

this.last\_name=last\_name;

this.gender=gender;

this.mobile\_No=mobile\_No;

this.email\_Id=email\_Id;

}

person\_name()

{

return "Person name :"+this.first\_name;

}

get\_person\_details()

{

let details="...........................</br>First Name:"+this.first\_name+"</br>" + "Last Name :"+this.last\_name+"</br>"+

"Gender :"+this.gender+"</br>"+

"Mobile NO :"+this.mobile\_No+"</br>"+

"email\_Id :"+this.email\_Id+"</br>\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_";

return details;

}

}

//object

const Person1 = new person('Madhumidha','Anbazhagan','female','2563148975','madhu@gmail.com');

const Person2 = new person('Boopalan','Murugesan','Male','256564888','boo@gmail.com');

console.log(Person1.person\_name());

console.log(Person1.get\_person\_details());

console.log(Person2.person\_name());

console.log(Person2.get\_person\_details());

##### Output:

Person name :Madhumidha

...........................  
First Name:Madhumidha  
Last Name :Anbazhagan  
Gender :female  
Mobile NO :2563148975  
email\_Id :madhu@gmail.com  
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Person name :Boopalan

...........................  
First Name:Boopalan  
Last Name :Murugesan  
Gender :Male  
Mobile NO :256564888  
email\_Id :boo@gmail.com  
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

##### Execution Time:

0.065s

##### Memory Used:

8168kb

1. write a class to calculate uber price.

class Uber\_Price\_Calculator

{

constructor(base\_fare,booking\_fee,cost\_per\_minute,time\_in\_ride,cost\_per\_mile,ride\_distance)

{

this.base\_fare=base\_fare;

this.booking\_fee=booking\_fee;

this.cost\_per\_minute=cost\_per\_minute;

this.time\_in\_ride=time\_in\_ride;

this.cost\_per\_mile=cost\_per\_mile;

this.ride\_distance=ride\_distance;

}

getprice()

{

return "Your Uber Fare Rs:"+(this.base\_fare + (this.cost\_per\_minute \* this.time\_in\_ride) + (this.cost\_per\_mile \* this.time\_in\_ride) + this.booking\_fee)+"<br>\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*";

}

setprice(baseF,bookF,CostPM,timIR,CPMile,rideD)

{

this.base\_fare=baseF;

this.booking\_fee=bookF;

this.cost\_per\_minute=CostPM;

this.time\_in\_ride=timIR;

this.cost\_per\_mile=CPMile;

this.ride\_distance=rideD;

return 'Your Riding Details</br>\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*</br>'+

"Base Fare:"+baseF+"</br>Booking Fees:"+bookF+"</br>Cost Per Minute:"+CostPM+

"</br>Time In Ride:"+timIR+"</br>Cost Per Mile:"+CPMile+"</br>Ride In Distane:"+rideD+"</br>\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*"

}

}

var cost1=new Uber\_Price\_Calculator(20,10,20,15,10,2);

console.log(cost1.setprice(30,15,22,26,45,3));

console.log(cost1.getprice());

##### Output:

Your Riding Details  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
Base Fare:30  
Booking Fees:15  
Cost Per Minute:22  
Time In Ride:26  
Cost Per Mile:45  
Ride In Distane:3  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Your Uber Fare Rs:1787  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

##### Execution Time:

0.065s

##### Memory Used:

8108kb

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