Classes & Objects

Objects, Classes, Constructor, Inheritance, Super, error handling



Prototypes in JS

A javaScript object is an entity having state and behavior (properties and method).

JS objects have a special property called prototype.

We can set prototype using _ _ proto _

reference to an object

*If object & prototype have same method, object's method will be used.

Classes in JS

Class is a program-code template for creating objects.

Those objects will have some state (variables) & some behaviour (functions) inside it.

```
class MyClass {
  constructor() { ... }
  myMethod() { ... }
}
let myObj = new MyClass();
```

Classes in JS

Constructor() method is:

- automatically invoked by new
- initializes object

```
class MyClass {
  constructor() { ... }
  myMethod() { ... }
```

Inheritance in JS

inheritance is passing down properties & methods from parent class to child class.

```
class Parent {

class Child extends Parent {
}
```

*If Child & Parent have same method, child's method will be used. [Method Overriding]

super Keyword

The super keyword is used to call the constructor of its parent class to access the parent's properties and methods.

super(args) // calls Parent's constructor

super.parentMethod(args)

Let's Practice

Qs. You are creating a website for your college. Create a class <u>User</u> with 2 properties, name & email. It also has a method called viewData() that allows user to view website data.

Os. Create a new class called <u>Admin</u> which inherits from <u>User</u>. Add a new method called editData to Admin that allows it to edit website data.

Error Handling

try-catch

```
try {
    ... normal code
} catch ( err ) { //err is error object
    ... handling error
}
```