



JavaScript Algorithms and Data Structures

Presented by Gagan Singh
(00996302817)

JavaScript

- Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web.
- JavaScript supports dynamic typing which means types of the variable are defined based on the stored value.
- It is a portable language.
- Unlike using classes to define objects, it uses object prototype to create objects.





Features of JavaScript

- Object-oriented Programming
- Functional Style
- Async Processing
- Client-side Validations
- More control in browser



Applications

Web Development

Web Applications

Server Applications

Mobile Applications

```
... object to mirror  
mirror_mod.mirror_object
```

```
operation == "MIRROR_X":  
    mirror_mod.use_x = True  
    mirror_mod.use_y = False  
    mirror_mod.use_z = False  
operation == "MIRROR_Y":  
    mirror_mod.use_x = False  
    mirror_mod.use_y = True  
    mirror_mod.use_z = False  
operation == "MIRROR_Z":  
    mirror_mod.use_x = False  
    mirror_mod.use_y = False  
    mirror_mod.use_z = True
```

```
selection at the end -add  
mirror_ob.select= 1  
mirror_ob.select=1  
context.scene.objects.active  
("Selected" + str(modifier_name))  
mirror_ob.select = 0  
= bpy.context.selected_objects  
data.objects[one.name].select  
print("please select exactly
```

```
-- OPERATOR CLASSES -----
```

```
types.Operator):  
    X mirror to the selected  
    object.mirror_mirror_x"  
    mirror X"
```

Project

Sudoku Solver

Sudoku

- It is a game involving a grid of 81 squares divided into nine grids, each one of them having nine squares.
- Each grid contain numbers 1-9 where each number can come once in
 - 1) row
 - 2) column
 - 3) grid
- Out of 6.67×10^{21} possible combinations, there is only one possible solution.

		5			9			1
	7			6			4	3
		6			2		8	7
	9				7	4		
	5			8	3			
						1		5
		3	5		8	6	9	