

ICT-Start – Session 01

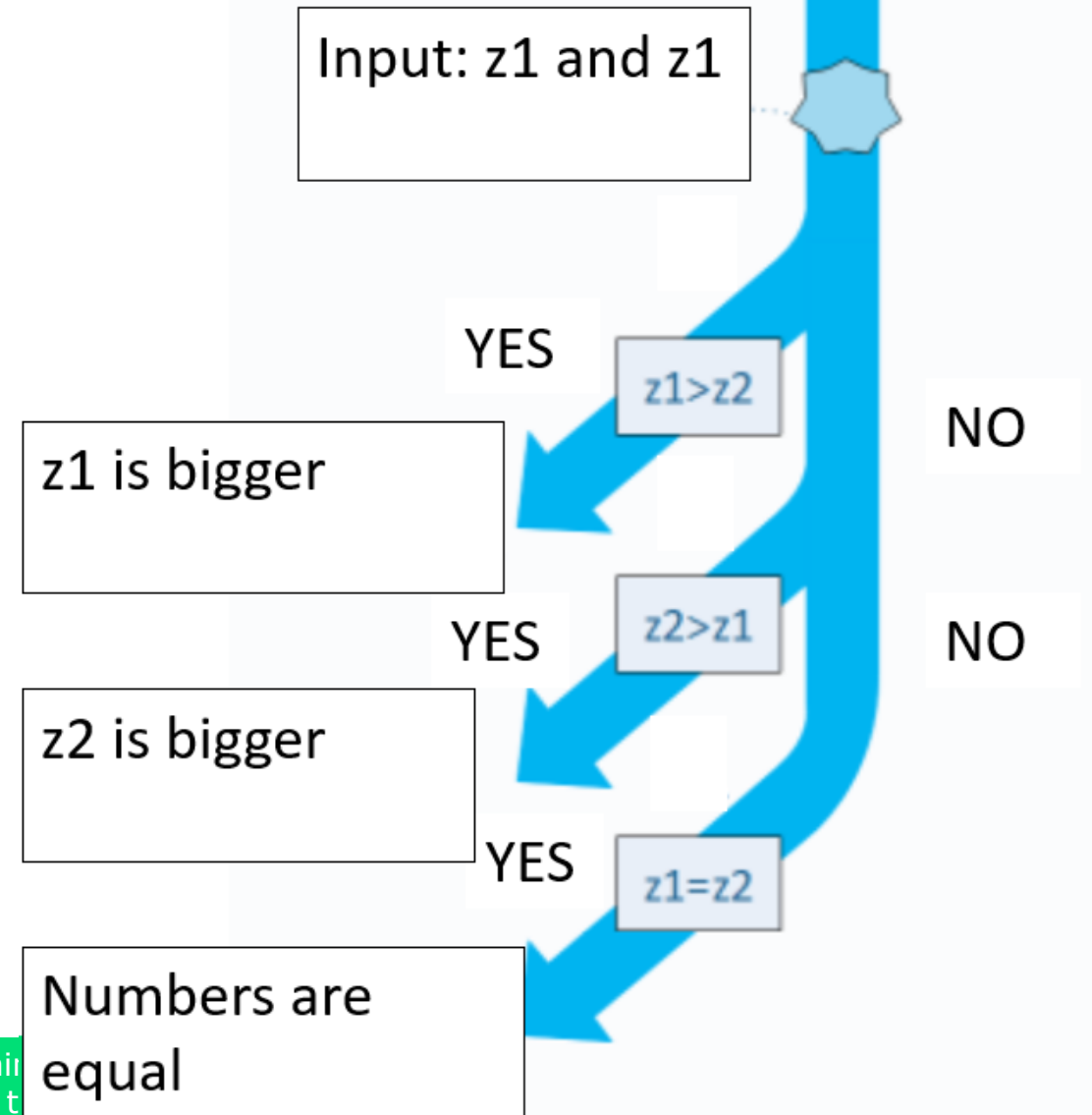
Module 3: Client-Side Scripting I Creating dynamic web pages

D) Working with HTML Lists

December 2022

Last session: Conditionals

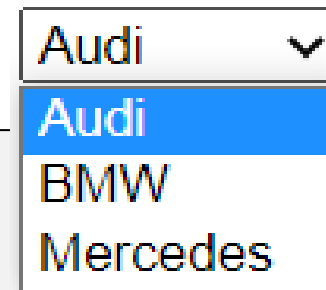
```
if(z1>z2){  
    alert("z1 is bigger")  
}  
else if(z1<z2){  
    alert("z2 is bigger")  
}  
else{  
    alert("numbers are equal")  
}
```



Today's session: Working with HTML Lists

- HTML List elements can store more than a single value
- Defined by the `<select>` tag
- Example:

```
<select id="selCars">  
  <option value="audi">Audi</option>  
  <option value="bmw">BMW</option>  
  <option value="mercedes">Mercedes</option>  
</select>
```



Audi ▼
Audi
BMW
Mercedes

JS readable

Human readable

Reading selected value

- In JavaScript, we can simply read the selected item the same way we did it with input fields
- Namely, by the `.value` attribute

```
...  
var selCars = document.getElementById("selCars")  
var selectedValue = selCars.value  
...
```

Exercices

- Solve the exercises 1 and 2 from the Worksheet 4.

Handling change Events

- Besides the onload and the onclick Event, there is another event called **onchange** that fires whenever the selection changes

```
<select id="selCars" onchange="selCarsChanged()">  
  <option value="audi">Audi</option>  
  <option value="bmw">BMW</option>  
  <option value="mercedes">Mercedes</option>  
</select>
```

Exercices

- Solve the exercise 3 from the Worksheet 4.

Manipulating a list

- With JavaScript we can dynamically **add** elements to the list

```
...  
var selCars = document.getElementById("selCars")  
selCars.innerHTML = selCars.innerHTML + "<option value='ford'>Ford</option>"  
...
```



new value

old value

new item

new value = old value + new item

Manipulating a list

- With JavaScript we can dynamically **remove** elements to the list

```
...  
var selCars = document.getElementById("selCars")  
var index = selCars.selectedIndex  
if(index >=0){  
    selCars.options[index].outerHTML = ""  
}  
...
```

Number of elements

- With JavaScript we can find the **number of elements** a list contains

...

```
var selCars = document.getElementById("selCars")
```

```
var n = selCars.length
```

...

Exercices

- Solve the rest of the exercises from the Worksheet 4.