



Topic 9: JavaScript

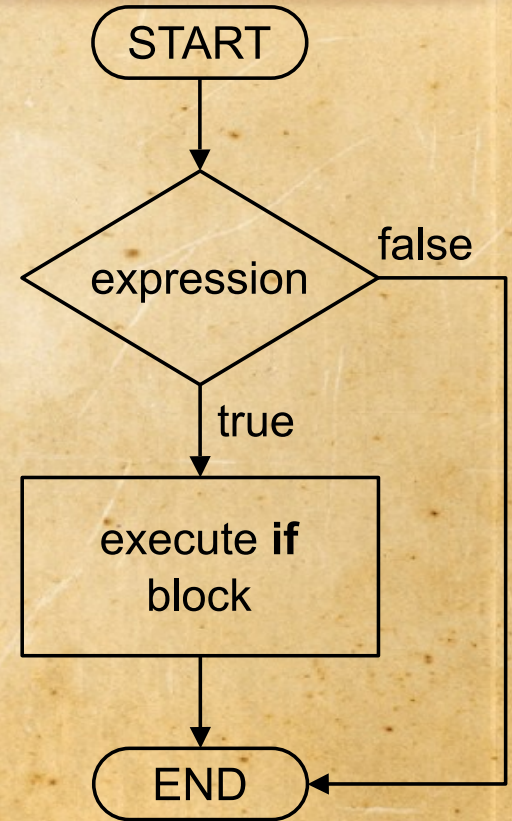
Chaining and Nesting Conditionals

Lecture Contents

- The `if` and `if..else` statements
- Chaining: `if..else if..else if..else if.. ... else`
- Nesting: `if(expression){ if..else } else { if..else }`
-

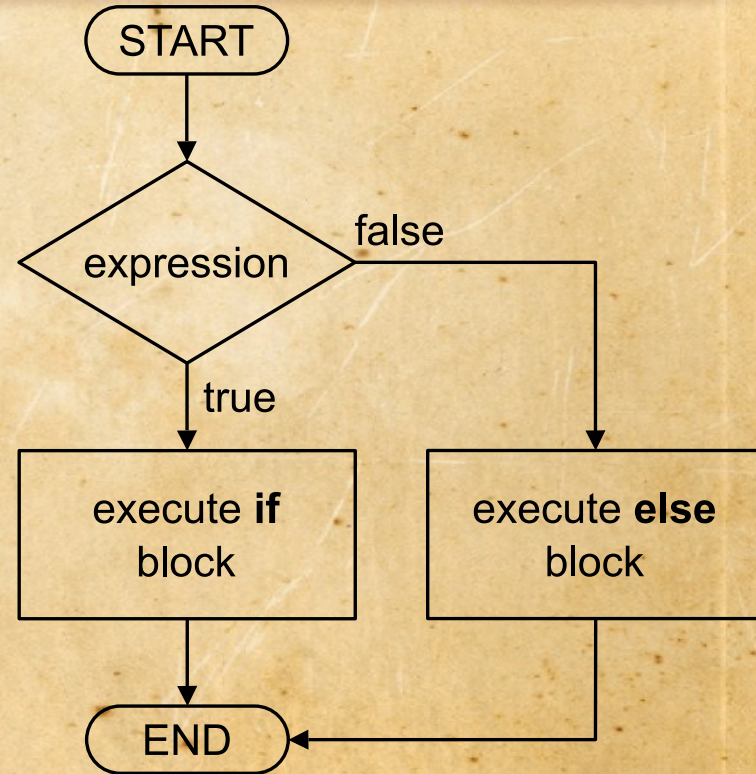
JavaScript `if` statement

```
var expr = (5+6 == 11);  
if(expr) {  
    console.log("expression is true");  
}
```



JavaScript `if...else` statement

```
var expr = (5+6 == 11);  
if(expr) {  
    console.log("expression is true");  
}  
else {  
    console.log("expression is false");  
}
```



Chaining

- `if` gives a “one-way selection”
- `if...else` gives a “two-way selection”
- What if you want more...?

Chaining

```
var myRoll = rollDice();  
var yourRoll = rollDice();  
console.log("I rolled a " + myRoll);  
console.log("You rolled a " + yourRoll);  
  
if(yourRoll > myRoll) {  
    console.log("You Win! Double or nothing?");  
} else if (myRoll > yourRoll) {  
    console.log("You're a LOSER!");  
} else {  
    console.log("It's a tie. Let's try again.");  
}
```


Chaining

```
if (boolOne) {  
  ...  
} else if (boolTwo) {  
  ...  
} else if (boolThree) {  
  ...  
} else {  
  ...  
}
```

Nesting

```
if (boolOne) {  
    if (boolTwo) {  
        ...  
    } else {  
        ...  
    }  
} else {  
    if (boolTwo) {  
        ...  
    } else {  
        ...  
    }  
}
```


Summary

- Chaining

```
if (boolOne) {  
    ...  
} else if (boolTwo) {  
    ...  
} else if (boolThree) {  
    ...  
} else {  
    ...  
}
```

- Nesting

```
if (boolOne) {  
    if (boolTwo) {  
        ...  
    } else {  
        ...  
    }  
} else {  
    if (boolTwo) {  
        ...  
    } else {  
        ...  
    }  
}
```


Chained and Nested `if` Practice

- Some software is required to output to the console whether an integer, given in the variable `n`, is ***positive*** or ***negative***, and ***odd*** or ***even***. If the value is zero, the output should simply be the text "zero" and nothing else. For example:
 - If `n = -2`, the output would be: `negative even`
 - If `n = +1`, the output would be: `positive odd`
 - If `n = 0`, the output would be: `zero`
- Write a JavaScript function that takes the integer, given as `n`, as a parameter, and conforms to the specifications above.



Topic 9: JavaScript

Chaining and Nesting Conditionals