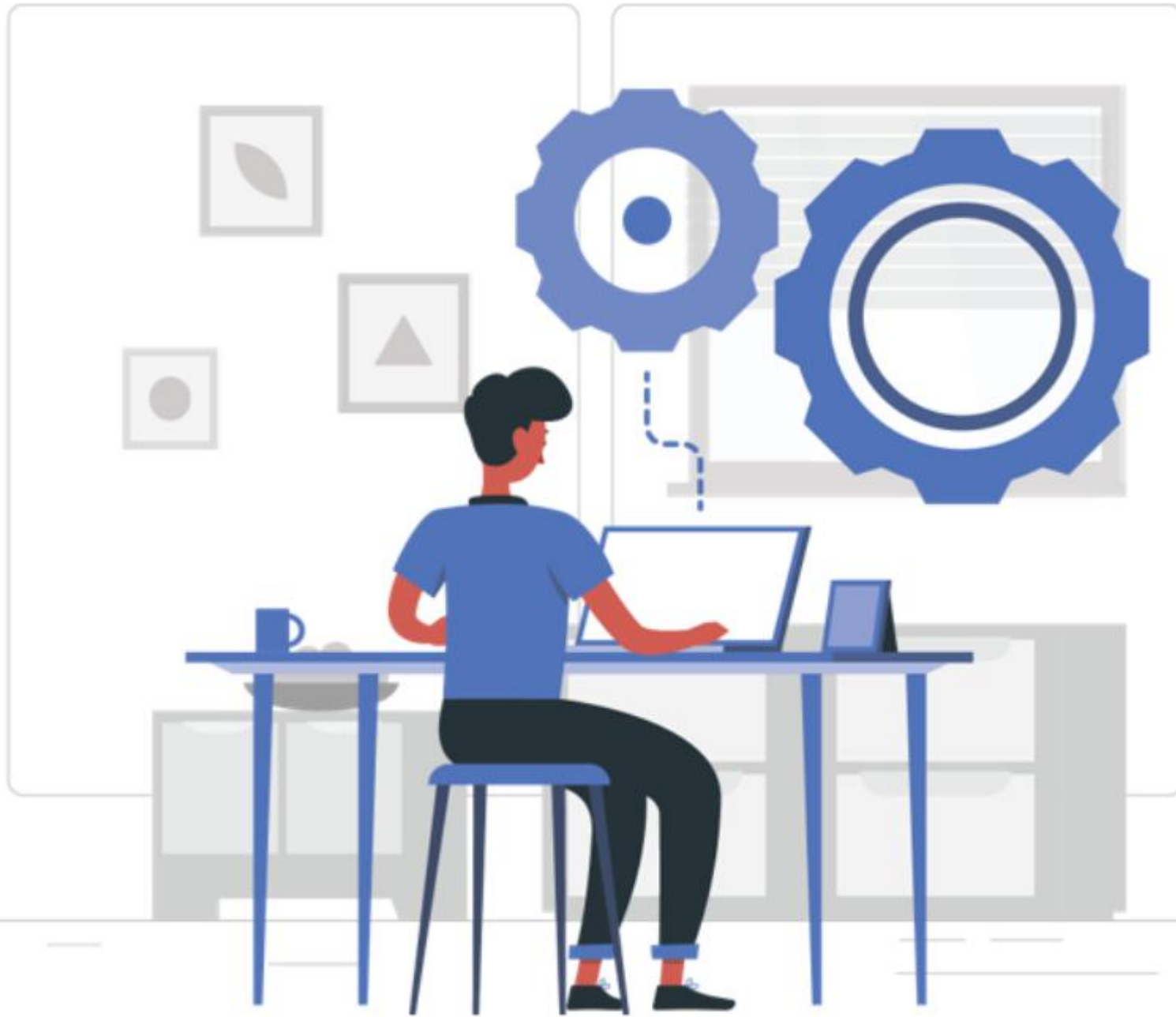Challenge
Getting Started With JavaScript

Challenge

- Challenge 1: Check Eligibility

- Challenge 2: Validate Values

- Challenge 3: Know Your Lucky Number

Challenge 1: Check Eligibility

To participate in the beauty pageant contest of a
particular country, an individual must satisfy the following criteria:
- Should be citizen of that country
- Should be female
- Should be between 18 to 28 years of age
- Should be a winner of state pageant
Write JavaScript program to check the eligibility
of the contestant.

Note: Display the messages "Eligible" or
"Not Eligible" as per the selection criteria.

CHALLENGE

Tasks

- The solution for this challenge should be written in the file `c1-submission.js` located inside the folder `c1-eligibility-check` of the boilerplate code.

- Check your logic using the data given below:

Age	Gender	Is Not a Citizen	State Pageant
23	Female	True	New York
29	Female	True	New Jersey
18	Female	False	Maryland
25	Male	True	Virginia
20	Female	True	

Challenge 2: Validate Values

Validation is a process in which incorrectly formed data can be prevented from entering the system.

Write JavaScript program that performs validations on the given data as per the stated requirements.

CHALLENGE

Tasks

- The solution for this challenge should be written in the file `c2-submission.js` located inside the folder `c2-validators` of the boilerplate code.

- Perform validations on the values as stated in the given table:

Field	Validation Criteria
First Name	Field cannot be left blank Type should be a String
Last Name	Type should be a String
Age	Field cannot be left blank Type should be a Number Value should be between 18 and 60
IsMarried	Type should be a Boolean
City	Type should be a String
State	Type should be String
Postal Code	Field cannot be left blank Type should be String

Task (cont'd)

- Refer to the table below for output messages that should be displayed for invalid values:

Field	Validation Criteria	Output Message for Invalid Values
First Name	Field cannot be left blank Type should be a String	First Name value must not be undefined. First Name value must be of type String.
Last Name	Type should be a String	Last Name value must be of type String value.
Age	Field cannot be left blank Type should be a Number Value should be between 18 and 60	Age value must not be undefined. Age value must be of type Number. Age value should be between 18 and 60.
IsMarried	Type should be a Boolean	IsMarried value must be of type Boolean.
City	Type should be a String	City value must be of type String.
State	Type should be String	State value must be of type String.
Postal Code	Field cannot be left blank Type should be String	Postal Code value must not be undefined. Postal Code value must be of type String.

Note: Column 1 and Column 2 are same as given in the previous slide.

Task (cont'd)

- Check your logic using the data given below:

First Name	Last Name	Age	IsMarried	City	State	Postal Code
James	Smith	34	True	San Jose	California	CA
James	25	34	True	San Jose	California	CA
	Smith	34	True	San Jose	California	CA
James	Smith		True	San Jose	California	CA
James	Smith	IO	True	San Jose	California	CA
James	Smith	10	True	San Jose	California	CA
James	Smith	61	True	San Jose	California	CA
James	Smith	34	Yes	San Jose	California	CA
James	Smith	34	False	123	California	CA
James	Smith	34	True	San Jose	234	CA
James	Smith	34	Yes	San Jose	California	
James	Smith	34	Yes	San Jose	California	21

Sample Output

- Below are the sample outputs for invalid age values:

  - If age is not between 18 and 60, then the message should be "Age should be between 18 and 60".

  - If age is not assigned a number, then the message should be "Age value must be of type Number".

  - If age is not assigned any value or is assigned a null value, the message should be "Age value must not be undefined".

Challenge 3 – Know Your Lucky Number

As per a numerology logic, a person's lucky number is the single digit sum calculated from their birthdate.

For example, if the birthdate is 05312022, the lucky Number is:
> 05312022 --> 0 + 5 + 3 + 1 + 2 + 0 + 2 + 2 = 15
> 15 --> 1 + 5 = 6
> the lucky number is **6**.

Write a JavaScript program that calculates the single digit sum for the given date value.

CHALLENGE

Tasks

- The solution for this challenge should be written in the file `c3-submission.js` located inside the folder `c3-lucky-number` of the boilerplate code.

- Using appropriate JavaScript loop constructs and calculate single digit sum for the date 31st May 2022

- The date should be stored as string in `mmddyyyy` format.

- The program should generate following output:

```
Output: Your Lucky Number is 6
```