Client-side form validation

1. Is validating form data before it is sent to the server.
2. The validation is done in the browser — that's why it's called client side validation.
3. Server side validation — validation done on the server.
4. Why we validate data:
   a. To make sure we get the **right data** in the **correct format.**
   b. To protect the application from malicious data.
5. There are two types of client-side validation:
   a. **Built-in form validation:**
      i. Is when you use HTML5 form validation features to validate the data.
      ii. Examples:
         1. **required** – specifies that a form field must be filled out before submitting the form.
         2. **pattern** – allow you enter a regular pattern
         3. **minlength** – the minimum number of characters allowed.
         4. **maxlength** – the maximum number of characters allowed.
         5. **type** – the type of data that should be entered (for instance email or phone)
   b. **Validating using JavaScript**
      i. Allows you to customize error messages.
      ii. For instance, if we have the following code in our form:

```html
<input type='email' id='email>'
<span id='email-error'></span>'
```

      iii. To show a custom error message when a user enters an invalid email address:

```javascript
const email = document.getElementById('email');
const emailError = document.getElementById('email-error');

email.addEventListener('input', function (event) {
//if the email entered is invalid
  if (!email.validity.valid) {

    emailError.innerHTML="Please enter a valid email address";
  }
 //In case there is an error message visible
  else {
    emailError.innerHTML="";
  }
})
```

      iv. This way, we'll be able to show any custom error messages using JavaScript.