# Solution 1

In this question we have to collect the student’s records such as name, phone number, birth date and favorite time pass.

The HTML and CSS design makes the program attractive in nature. And the JavaScript helps us to validate the required data. There was an issue which we mostly faced in this task was to write the query to validate the date of birth. So, we can resolve that query, with the help of the regular expression.

The source code for the JavaScript is given below,

/\*\*

\* check the validity of the name

\*/

function isValidName() {

const value = $name.value.trim();

const regexMatch = value.match(/\d/g);

if (

value.length == 0 ||

(regexMatch && regexMatch.length > 0)

) {

showError($name, errorMessages.name);

return 1;

}

showError($name, '');

return 0;

}

/\*\*

\*check the validity of the telephone number.

\*/

function isValidTelephone() {

const value = $tel.value.trim();

const regexMatch = value.match(/[0-9]{2}-[0-9]{4}-[0-9]{4}/g);

if (regexMatch && regexMatch.length > 0) {

showError($tel, '');

return 0;

}

showError($tel, errorMessages.tel);

return 1;

}

/\*\*

\* check the validity of the date of birth.

\*/

function isValidBirthDate() {

const value = $birthdate.value.trim();

if (dateRegex.test(value) === false) {

showError($birthdate, errorMessages.birthdate);

dateError = true;

return 1;

} else {

showError($birthdate, '');

dateError = false;

}

return 0;

}

/\*\*

\* check the validity of the form submission

\*/

function isValidForm() {

let errors = 0;

errors += isValidName();

errors += isValidTelephone();

errors += isValidBirthDate();

return errors === 0;

}

/\*\*

\* text target elements

\*/

function showError($element, message) {

const $message = $element.parentNode.querySelector('.fieldset\_\_message');

$message.innerText = message;

}

/\*\*

\*event handler, form submission

\*/

function submitHandler(e) {

if (isValidForm() === false) {

e.preventDefault();

}

}

/\*\*event hanling

\*/

function keyUpListener(e) {

if (timeoutID > 0) {

clearTimeout(timeoutID);

}

// error message

if (dateError === true) {

showError($birthdate, '');

dateError = false;

}

timeoutID = setTimeout(isValidBirthDate, keyUpInterval, e.target.value);

}

const $form = document.getElementById('form');

const $name = document.getElementById('name');

const $birthdate = document.getElementById('birthdate');

const $tel = document.getElementById('tel');

const keyUpInterval = 1000;

const dateRegex = /^(0?[1-9]|1[0-2])[\/](0?[1-9]|[1-2][0-9]|3[01])[\/]\d{4}$/;

const errorMessages = {

'birthdate': 'Please provide a valid date in the DD/MM/YYYY format.',

'name' : 'Please provide a valid name.',

'tel' : 'Please provide a valid telephone number in this format: 00-0000-0000.',

};

let timeoutID = 0;

let dateError = false;

$form.addEventListener('submit', submitHandler);

$birthdate.addEventListener('keyup', keyUpListener);

The working result of the above code is given below –



