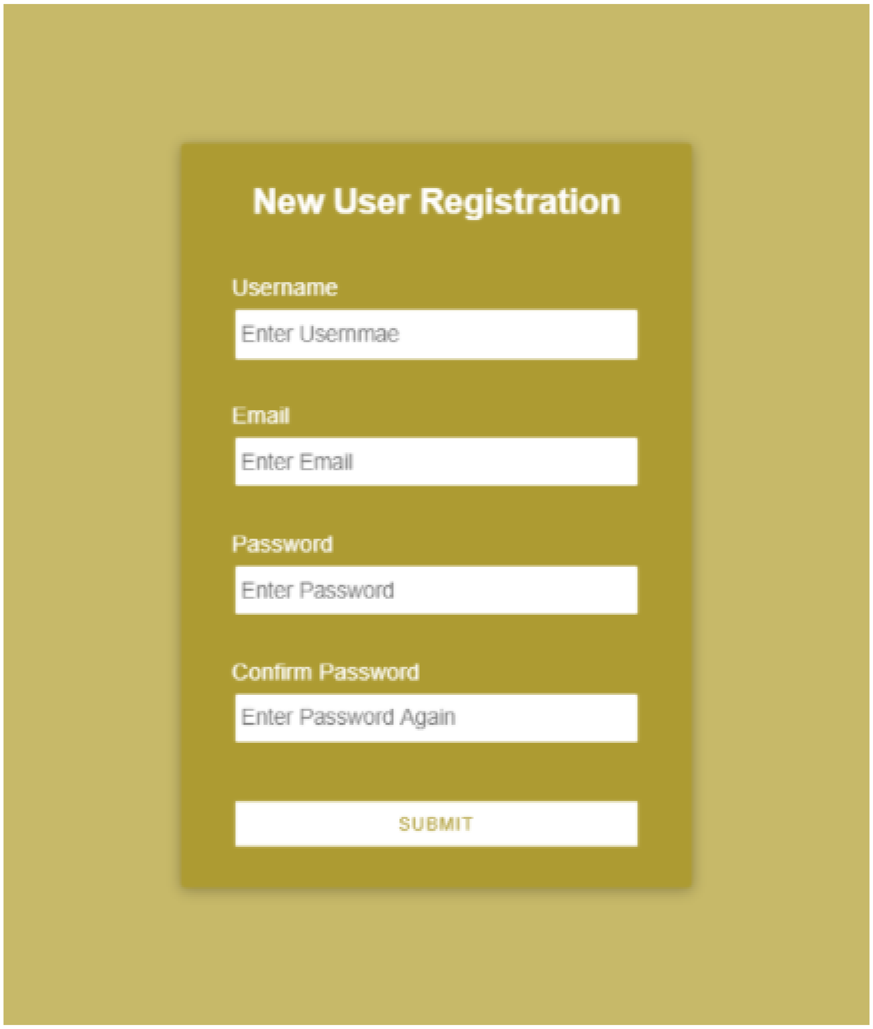
1. Form Validator Project: - **Credits - 3** Required Validations are listed below:
   - Username should not have a space in it
   - Email should have ‘@’ and ‘.’ in them and the position of ‘.’ after ‘@’.
   - Password must have a special character (get list of special characters from internet), at least one uppercase character, at least one number and at least one lowercase character.
   - Password and Confirm Password should be equal.
   - CSS for this solution also carries marks



2.Predict the output for all the code snippets given in the following link (**Mandatory - I recommend not to skip this one**) : https://docs.google.com/document/d/1dqYMlMBG4xNsEvsXIhU7x8xU2JjU0EKZqWkjcl4zAeg/edit?usp=sharing
Then try the code snippets in an online editor and find out what the actual output is. Then write the reason stating why the output is appearing that way. Reasons need not be complex/big.. It is just required for you to understand the concept behind its working. **(Credits - 2)**

3. **Write a function to concatenate 2 arrays. If only one array is passed to the function, then the same array should be duplicated and concatenated(Credits -1)**

- Function can take 2 arguments which concatenates arrays
- Solution must have the usage of **spread** operator
- 2nd array parameter can be defaulted to 1st array if the value is not passed
- myFunction(array1,array2) ⇒ {array1,array1}

4. **Square all the positive numbers of the array and return the output array (Credits-2)**

- Two solutions are required for this problem.
- In the first solution, **no predefined** methods should be used.
- In the second solution, **filter** and **map** methods must be used.

5.**Get the maximum value from a numbers array along with its index (Credits -2)**

- Three solutions are required for this problem.
- In the first solution, **no predefined** methods should be used.
- In the second solution, **Math.max** method should be used.
- In the third solution, **reduce** method should be used.

OPTIONAL PROBLEMS (You can try these if you are interested, but these dont carry any marks)

6.**Find the number of occurrences of minimum value in the numbers list**

- Two solutions are required for this problem.
- In the first solution, no predefined methods should be used.
- In the second solution, **filter** method must be used in the solution.

7.**Write the code to remove the duplicates from the array**

- Use Set Data structure in javascripts to solve the problem.

8. **Return the intersection of two arrays**

- The resultant array should have distinct elements.
- Use filter method in solution.