

**Shiva Karki**

**Technical Journal 02/14 - 02/21**

**Facilitator, Team Lotus**

### **Research:**

I have done few researches this week and my research is about “reCAPTCHA and adding testing question in our webform”. This is important because a CAPTCHA helps protect our site from spam and abuse. This includes preventing fake registration submissions.

<https://www.bronco.co.uk/our-ideas/how-to-add-google-recaptcha-to-a-form-phphtml/>

<https://www.drupal.org/node/1254710>

The above is the link I used as a reference for research and studies.

### **Lesson and Practices:**

Since I am learning gradually about HTML 5 and CSS 3, I have many things related to our web form like front end part. And I am doing research how to add test questions to prevent spam and abuse.

### **Assignments:**

Since this week is our first week related to assignments, this week I helped my teammates to update Code of Conduct- 595 and also helped my team mates to update the 2<sup>nd</sup> semester work statement and also did our first weekly minutes for the semester.

### **Prototype:**

This week I didn't do much, I just did some research on codes related to php and CSS 3, server side validation, it is basically in the server-side validation, information is being sent to the server and validated using one of server-side languages. If the validation fails, the response is then sent back to the client, page that contains the web form is refreshed and a feedback is shown.

For the CSS, they were to style out the image size and alignment, and List bullet styles and indentation.

### **Results:**

Since, I am still learning day by day about the new features our web form, so there is no unique result so far from my side.

**Problems:****What is the problem?**

The problem we as a team has created web form but we have not work before on reCAPTCHA and that seems to be more challenging. For this we need to do more research and should know how to apply CAPTCHA perfectly in our web form.

**Why is it a problem?**

Our team has no experience in CAPTCHA, and CAPTCHA is a very important feature in our webform. This is important because a APTCHA helps protect our site from spam and abuse. This includes preventing fake registration submissions by a bot.

**Solution:**

The best solution will be to get familiar with reCAPTCHA by doing a research on it. We as a team must come with planning and start doing research on it.

## **Technical Journal 02/21 - 02/28**

### **Research**

I have started to look up some additional features like right/Dark Mode Switch and Random Greetings for our updated web form. Here is the link that I have used as a reference and studies:

[https://www.w3schools.com/howto/howto\\_js\\_toggle\\_dark\\_mode.asp](https://www.w3schools.com/howto/howto_js_toggle_dark_mode.asp)

### **Lesson and Practices:**

This week also I am learning about HTML 5 and CSS 3, I am focusing on core areas of those front end. And I am doing research how to add test questions to prevent spam and abuse.

### **Assignment:**

This week was kind a busy week since we have started to meet twice for coding and learning purposes. We started to redesign and develop the new web form based on the ISME deliverables, we have contacted the Media Resources Center regarding access to the university's web domain for the deployment and testing of our prototype and we have also updated the Project Proposal write up document during our meetings.

### **Prototype:**

Since we are done with our prototype and now, we have started to redesign our new web form and started to develop our web form by means of pair programming. This week I wrote few codes related to CSS and helped my team mates to figure out the error while writing codes. This was a best practice to learn together.

### **Results:**

We have successfully written codes for the 1<sup>st</sup> phase of our web form and added new features as well like next button option.

### **Problems:**

### **What is the problem?**

The problem, we as a team has created web form's prototype before but our prototype was single page web form but after discussing with ISME team members, we have decided to start working on remodeling the web form by using the deliverable of the ISME team next week and the Qualtrics provided by ISME members our web form will be very huge and we planned to make separate pages and features like notes and next button option and it is challenging because of composition of the web page.

Also, the issue for the Search Bar has been finally fixed, it was fixed by continuous effort of team. The major issue was search bar does not show as expected behavior when user focuses out. Issue Domain were Opera (M/W), Chrome (W), Edge (W), and Firefox (M/W).

Research source link : [https://www.w3schools.com/jsref/event\\_onfocusout.asp](https://www.w3schools.com/jsref/event_onfocusout.asp)

### **Why is it a problem?**

This is problem because it will be difficult and would look bad if we were to make our web form a single page. And for other part search bar problem, it was problem because end user would not be able to focus or zoom out in search bar.

### **Solution:**

We were able to over come those problem by team hard work and dedication. I also did lots of research to figure out the major issues.

## Technical Journal 02/28 - 03/07

### Research:

This week I didn't do major developments but helped team members to develop web form by sharing ideas on features like live error checking, submit button, next and previous button features.

I also did research to help my teammates whether to add radio button or checkbox feature.

Here is the link I used as a reference for my studies and to write the codes:

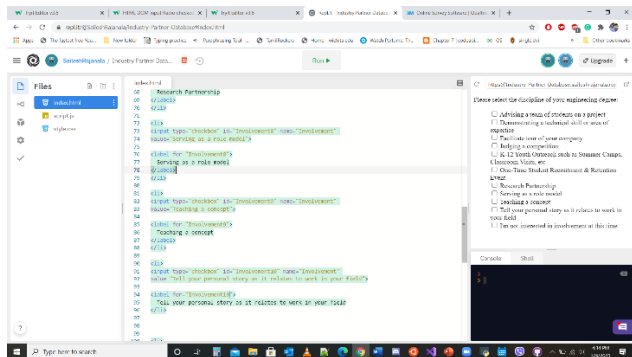
<https://www.geeksforgeeks.org/radio-button-vs-checkbox-in-html/>

[https://www.w3schools.com/tags/att\\_input\\_type\\_radio.asp](https://www.w3schools.com/tags/att_input_type_radio.asp)

### Lesson and Practices:

This week I helped my team on CSS coding and helped to add Qualtrics survey form on our web form.

Here is the screenshot of Qualtrics survey form codes that I wrote.



Since, I am weak on JavaScript and Php and I am learning basic ideas on those.

[https://www.w3schools.com/php/php\\_date.asp](https://www.w3schools.com/php/php_date.asp)

[https://www.w3schools.com/js/js\\_datatypes.asp](https://www.w3schools.com/js/js_datatypes.asp)

### Assignment:

This week there was not much assignment assigned, so I just did Individual Journal and collaborated for Weekly minutes with my teammates.

### Prototype:

Since we are done with our prototype and now, we have started to redesign our new web form and started to develop our web form by means of pair programming. This week I wrote codes related to CSS, PHP and helped my team mates to figure out the error while writing codes. This was a best practice to learn together. We have done writing Qualtrics survey form provided by ISME on our web form.

## Results:

The ultimate result for this week was to add features like live error detections and add submit, previous and next button feature and we did as a group.

## Problems:

### What is the problem?

The problem was whether to use radio button or checkbox features in our web form, for an example if an end user has to select multiple options from a certain topic, we cannot add radio button features because with radio button feature they can only select one option from multiple choice. So, we decided to use checkbox feature and radio button feature in such a way they can choose multiple from a certain topic. The option was to merge them and implement new feature.



 **WICHITA STATE UNIVERSITY**

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**Community Partner Survey**

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**Involvement Opportunities**

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How would you like to be involved with the Wichita State University College of Engineering? \* (Select all that apply)

- ☐ Advising a team of students on a project
- ☐ Demonstrating a technical skill or area of expertise
- ☐ Facilitate tour of your company
- ☐ Judging a competition
- ☐ K-12 Youth Outreach such as Summer Camps, Classroom Visits, etc
- ☐ One-Time Student Recruitment & Retention Event
- ☐ Research Partnership
- ☐ Serving as a role model
- ☐ Teaching a concept
- ☐ Tell your personal story as it relates to work in your field
- ☐ I'm not interested in involvement at this time

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**What is your preferred level of involvement? (Select all that apply)**

- ☐ A one-time event lasting 1 to 2 hours
- ☐ A day long event

Here is the link to understand better:

[https://www.w3schools.com/howto/howto\\_css\\_custom\\_checkbox.asp](https://www.w3schools.com/howto/howto_css_custom_checkbox.asp)

Another was live error detector on fields. If user inputs number in place of name, error would be shown on the top of the field. I used the following link as a reference and studies.

[https://www.w3schools.com/tags/att\\_input\\_pattern.asp](https://www.w3schools.com/tags/att_input_pattern.asp)

**Why is it a problem?**

This is a problem if user must select multiple options for a certain question. He/She cannot choose multiple option using radio button feature. So, we merged both radio button and checkbox option, created new features and that became the best option for our web form.

**Solution:**

I did study online, used online tools to figure out what is the best option for us. We were able to overcome those problem by team hard work and enthusiasm. The best solution was to merge checkbox and radio button feature.

This link was helpful to me understand better:

[https://www.w3schools.com/howto/howto\\_css\\_custom\\_checkbox.asp](https://www.w3schools.com/howto/howto_css_custom_checkbox.asp)

**Technical Journal 03/07 – 03/14****Research:**

This week I wrote HTML and CSS codes for new fields and I did some research on PHP sanitization and filters.

[https://www.w3schools.com/php/filter\\_sanitize\\_string.asp](https://www.w3schools.com/php/filter_sanitize_string.asp)

This is the link I used for research and studies.

**Lesson and Practices:**

For our web form I learnt to create table using MySQL and I learnt form handling in depth. I used the following link for the studies.

[https://www.w3schools.com/php/php\\_mysql\\_create\\_table.asp](https://www.w3schools.com/php/php_mysql_create_table.asp)

[https://www.w3schools.com/php/php\\_form\\_validation.asp](https://www.w3schools.com/php/php_form_validation.asp)

**Assignment:**

This week there was not much assignment assigned, so I just did Individual Journal, collaborated for Weekly minutes with my teammates, and start to work on TPR and documents required for it.

**Prototype:**

For our prototype beta version 5.0, we are facing some bugs on it and we are still working on it and one of the bug we had was whenever user clicks previous button, it would display bottom of that page not the top of the page. It was kind a challenging bug for us.

**Results:**

The ultimate result for this week was to fix some bugs related to UI such as blur leaking, color leaking, non-responsive height, and untriggered animations for events and whenever user zooms out the search button, it was not responsive at all. And we eventually fixed it.

**Problems:****What is the problem?**

This week the major problem I found was the mismatch of color code due to multiple reasons and Button color should have changed when disabled but it got missed out. It was very challenging. I seek the help from friend.

**Why is it a problem?**

This is the problem because our web form lacked in visual appeal. Therefore, it is necessary to make sure that our webform provides a perfect and working interface design to the user.

**Solution:**

Had to put extra effort on that bug, since I didn't know how fix and I googled it for research and help purpose. I am still working on it.



## **Week #7**

**03/14 - 03/21**

### **Research:**

This week my research is about PHP `html_entity_decode()` Function. Basically, it is like converting HTML entities to characters. The following is the link I used as a research and study purpose. This was an important tool to develop our webform.

[https://www.w3schools.com/php/func\\_string\\_html\\_entity\\_decode.asp](https://www.w3schools.com/php/func_string_html_entity_decode.asp)

### **Lesson and Practices:**

This week I did learn about HTML form validation using JavaScript. If a form field (fname) is empty, this function alerts a message, and returns false, to prevent the form from being submitted. Here is the link I used as a reference for our project.

[https://www.w3schools.com/js/js\\_validation.asp](https://www.w3schools.com/js/js_validation.asp)

### **Assignment:**

This week we met three times and did a long meeting regarding our future works, we discussed about Team Peer Review package and we made a document regarding it. This week I wrote few codes regarding CSS and HTML fields. We as a team completed the Weekly meeting, also we contacted the Media Resource Centre to get a new domain access, so we that we can deploy our webform.

### **Prototype:**

This week I researched on submit and next button features, because they had bugs and were not responding well.

I have done few researches this week and my research is about “reCAPTCHA and adding testing question in our webform”. This is important because a CAPTCHA helps protect our site from spam and abuse. This includes preventing fake registration submissions.


<https://bootstrapious.com/p/bootstrap-recaptcha>

<https://themehunt.com/blog/28-web-tips-and-tricks/bootstrap-tips-and-tricks/168-how-to-add-recaptcha-to-bootstrap-contact-form>

This are the link I used as a reference and I am not able to resolve it because I find very tricky and instead of adding reCAPTCHA, I have proposed adding “Test question” on our webform, it will be like a basic question. E.g.  $1+1=?$  and “what is the color of sky”. This question is very easy question they can be performed by any person but bots they will not be able to.

## Results:

This week for our prototype 5.0, we have finally completed adding all the fields that are required on our webform, those fields were provided by ISME team members.



The screenshot shows a survey form for Wichita State University. At the top is the university's logo and name. Below that is the title "Community Partner Survey". The main section is titled "Involvement Opportunities". It asks, "How would you like to be involved with the Wichita State University College of Engineering? \* (Select all that apply)". There is a list of 11 options, each with a checkbox: Advising a team of students on a project, Demonstrating a technical skill or area of expertise, Facilitate tour of your company, Judging a competition, K-12 Youth Outreach such as Summer Camps, Classroom Visits, etc, One-Time Student Recruitment & Retention Event, Research Partnership, Serving as a role model, Teaching a concept, Tell your personal story as it relates to work in your field, and I'm not interested in involvement at this time. Below this is another section titled "What is your preferred level of involvement? (Select all that apply)" with two options: A one-time event lasting 1 to 2 hours and A day long event.

I also provided an idea related to animation for submit button. I used the following link as a reference:

<https://codepen.io/valentingalmand/pen/MYMZZK>

## Problems:

### What's the Problem?

The problem in this week was validation of html fields. For example, when there is no input from the user yet, when there is a valid input or not and when there is an invalid input. Before

submitting data to the server, it is important to ensure all required form controls are filled out, in the correct format. This is called client-side form validation and helps ensure data submitted matches the requirements set forth in the various form controls.

This is the link I used to learn in detail:

[https://www.w3schools.com/js/js\\_validation.asp](https://www.w3schools.com/js/js_validation.asp)

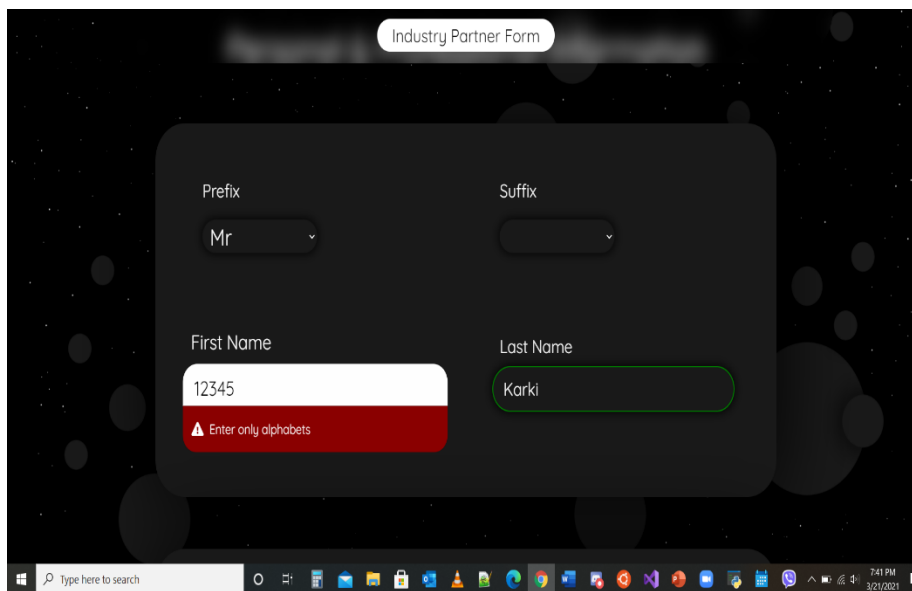
### Why is it a problem?

This is a problem because client-side validation is an initial check and an important feature of good user experience; by catching invalid data on the client-side, the user can fix it straight away. If it gets to the server and is then rejected, a noticeable delay is caused by a round trip to the server and then back to the client-side to tell the user to fix their data.

### Solutions:

The solution was to use a line of code to validate the fields.

For an example:

A screenshot of a web form titled "Industry Partner Form" on a dark background. The form has four input fields: "Prefix" (a dropdown menu with "Mr" selected), "Suffix" (an empty dropdown menu), "First Name" (a text input containing "12345"), and "Last Name" (a text input containing "Karki"). Below the "First Name" field, there is a red error message that says "Enter only alphabets" with a small warning icon. The "Last Name" field is highlighted with a green border, indicating it is valid. The form is displayed on a Windows desktop with a taskbar at the bottom showing various application icons and the system clock indicating 7:41 PM on 3/21/2021.

Here, I have used numbers on first name, so I got an error saying, "Enter only alphabets" and last name is a valid field.