



Rituparna Saha

Sr. UX Designer



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I'm Rituparna, an astute Certified Usability Analyst (CUA)™ from HFI (Human Factor International) and Certified in Design Thinking and Innovation Management from the Indian Institute of Management (Kozhikode), with expertise in building and designing UX Strategies.

Over the past 10 years, I've created the product and design solutions for clients across various domains like Enterprise Active Invoices with compliance, Enterprise Business Validation System, Enterprise Active intelligence, Enterprise Intelligent Web Forms, Enterprise Advance shipment Notice, Banking & Finance, Real Estate, Travel & Hospitality, Manufacturing & Logistics, E-learning.

Closely worked with the Business and Development team to create enriched web applications and products. I have learned to identify and incorporate consumer needs into user screens using my creative skills in the best possible way to develop complex things into an easy and creative way that speaks to the end user's goals by embracing new technologies.

I am an individual contributor and manage multiple products. I love giving back to the design community by mentoring designers, sharing design best practices, take an active role in design workshops. Well acquainted with agile methodology.



Key Clients

opentext™ | Active Invoices with Compliance

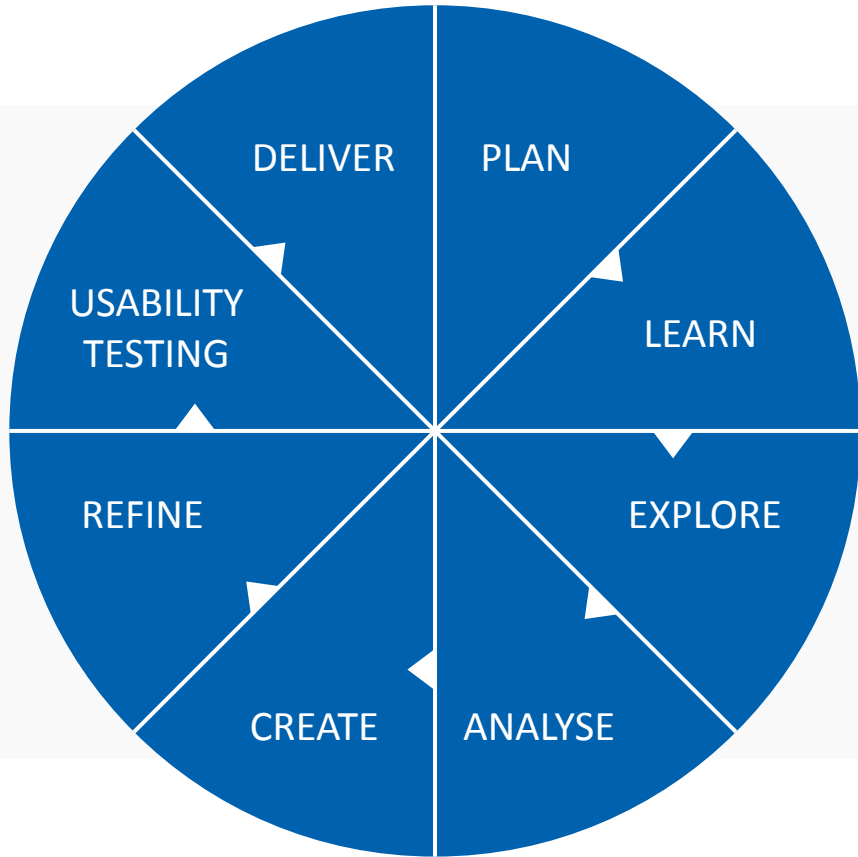
opentext™ | Business Validation Services

opentext™ | Intelligent Web Forms

opentext™ | Advance Shipment Notice

opentext™ | Active Intelligence





Process

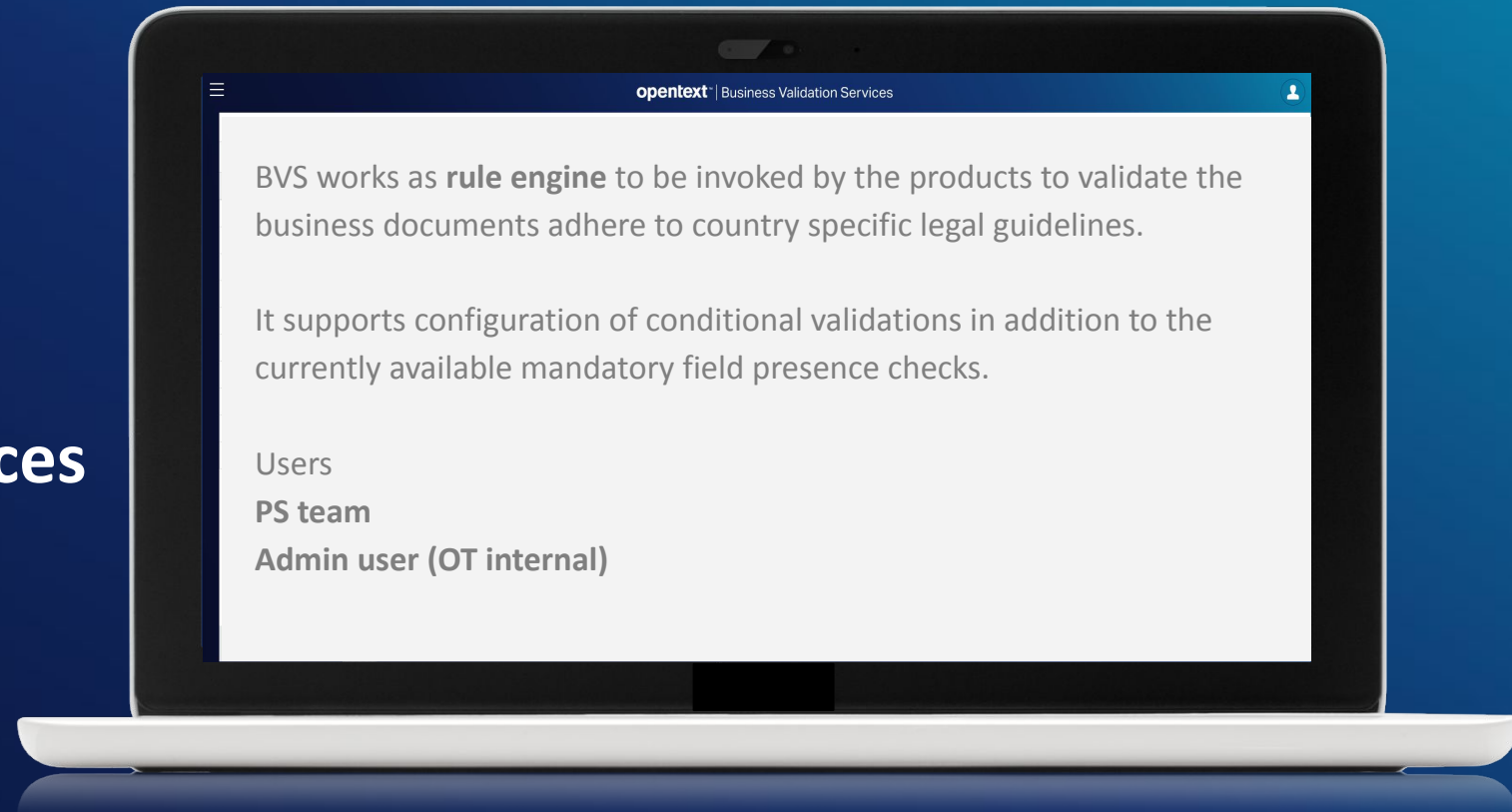
Plan to identify appropriate approaches and milestones for UCD into the overall design and development process. **Learn** and understand the user needs, expectations, context, technologies.

Explore and **Analyse** the user needs by building user profiles on gathered data, producing materials that will aid the outlining of the project IA, concept sketches, task flows, user journey, scenarios.

Create a solution based on the research findings, develop concept sketches, low fidelity prototypes, interactive prototypes, details design. **Refine** and evaluate design with stakeholders to obtain feedback. The **Usability Testing** technique uses to validate the solution across the user segment. **Deliver** complete design and produce deliverables.

Showcase

Business Validation Services



The Beginning

I still remember the very first day when I got the JIRA notification mail and my PM pinged me in the teams and wanted to discuss the JIRA created while setting a call between cross-functional teams.

That's how it started, first with 1:1 and when there is less outcome, we thought of a collaborative discussion session including the product owner, the solution architect along the product manager.

Being a listener on the very first day, I remember it was a confusing discussion on a few pieces of statements that came from the client-side (BMW).

Use Case:

1. Check if a value satisfies minimum or maximum length,
2. Verify format of date, date time, SSN, Zip code etc.
3. Verify that the field begins, contains, or ends with a specific string.

EXAMPLES

- Invoice number should start with 'INV' + 8 digits.
- Invoice should be between 6 – 12 digits
- Exempt reason can be any of

- Exempt intra-Community supply of goods according to article 138 Directive 2006/112/EC
- Supply of goods under the simplified triangulation regime according to article 141 Directive 2006/112/EC
- VAT due by the contracting party according to article 197 Directive 2006/112/EC
- Export supply of goods exempt from VAT according to article 146 Directive 2006/112/EC
- Triangulation

In addition, the reason in the EDI file may not contain the whole sentence.

- Eg: The exemption reason implying "Exempt ~~intra-Community~~ supply of goods according to article 138 Directive 2006/112/EC" maybe sent in the EDI file in any of the following ways or more.
- Exempt ~~intra-Community~~
- Exempt ~~intra-Community~~ supply of goods
- Exempt ~~intra-Community~~ supply of goods according to article 138
- Exempt ~~intra-Community~~ supply of goods according to article 138 Directive 2006/112/EC

Approach & Strategy

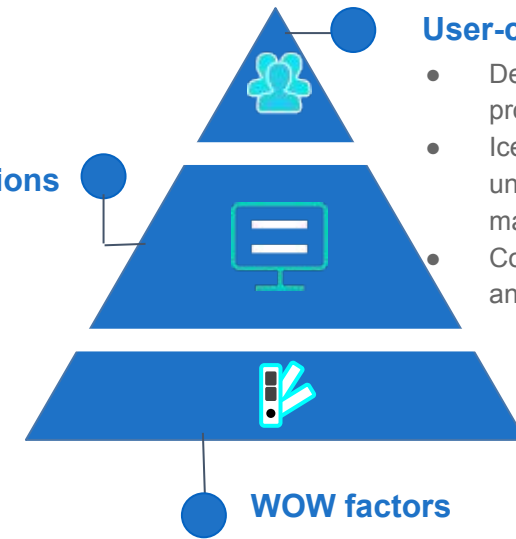
Within a few discussions, I concluded that the first task would be to break the ice by cracking the requirement statements first.

Hence, I planned to document things from the first day on the clues and the point of direction that will come out during these sessions. That can help me to refer, identify, eliminate.

Design maturity

Interface design and interactions

- Convert research input to concept sketches, journeys, interactive prototypes.
- Design solution validation/ usability testing of a specific section or flow.



User-centric

- Design is seen as a way to solve problems.
- Ice breaking sessions to understand the business need mapping with user needs.
- Considering user's mental model and built to that.

WOW factors

- Presentation is key for success.
- Visual colours, images, fonts should reflect the branding.
- Design system first.

My Role

As an individual contributor, I report and collaborated with the product manager, product owner, solution architect. As part of this work, I facilitated collaborative sessions and usability sessions and documented them.

Most of the validations of my ideas were through 1:1 meetings, design critique sessions, and team presentations.

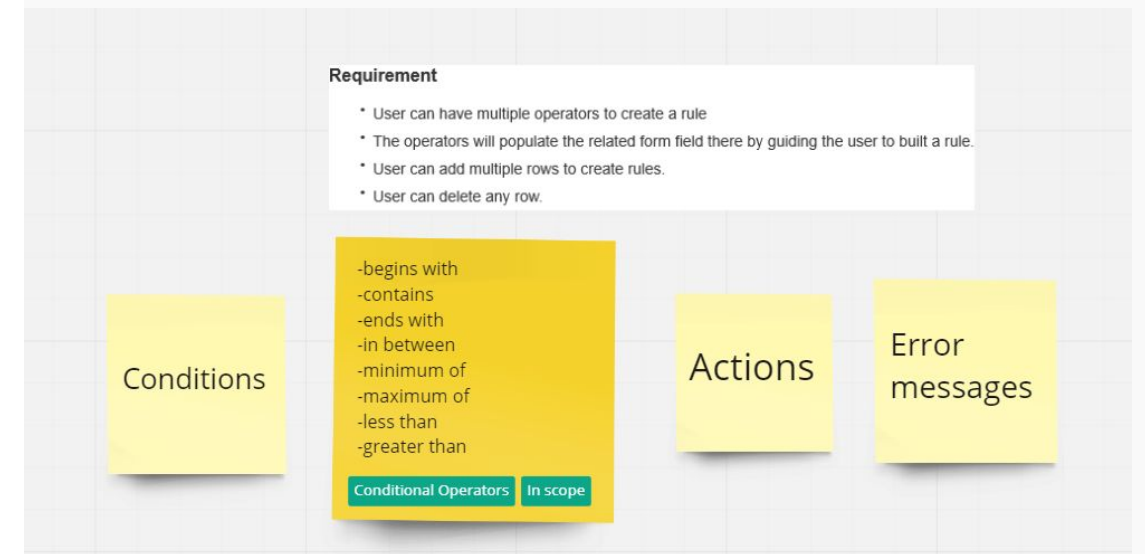
Ice Breaking Session

The ice-breaking session was based on the requirement statement where it was mentioned about the operators which can be paired with multiple fields and values to create a rule.

In the discussion probe in and around the statement and ask to share their views. We discussed the probable look around to connect the dots of every point discussed in the session.

The sessions came out fruitful. I could able to understand and gather different views and examples shared by the team and can relate them to the existing requirement.

We discussed the scopes and try to understand what are the elements that are needed to create a conditional rule. Tried to identify the new elements while keeping the existing flow, also discussed what could be the probable attributes for these new elements.



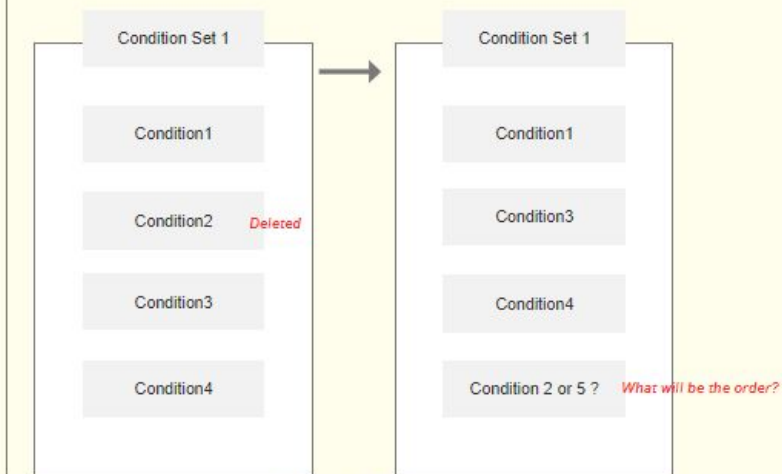
Clarity needed on the business logic for the content and order.

User creates 3 conditions under a Condition set.

What would be the suitable naming and what should be the order?

If consider the label is condition and order comes in chronological then it will be Condition1.

Scenario - If condition set has 4 conditions as cond1, cond2, cond3 and cond4. Suppose cond2 is deleted among them. What will be the order? [refer below concept sketches.](#)



[Concept sketches.](#)

Connecting the dots

Research

1. **Field name** - The first part allow user to describe what he/she wants to achieve with this rule using the conditional logic.

2. **Condition** - Is the statement refer to a field and must be fulfilled. Condition consists of Operators.

Operator - different operators are used to evaluate the condition.

3. **Value type and Value** - The way Value type and value will be defined are going to vary according to the type of field and the type of operator.

Mapping the Conditions/Operators with their related data fields (probable) -

Conditions/Operators	Definition	Value type
Equals / Does not equal	Checks if the answer is an exact match to another value.	<ul style="list-style-type: none"> Freetext Integer/Decimal/Currency Date/Time/Date Time Duration
Matches / Does not match		
On		
Before		
After		

Field name Condition Value type Value

Field name Condition Value type Value type

Field name Condition Value type Value type

Conditions/Operators	Definition	Value type
Less than	Checks if the answer is lower than another value / higher than another value / falls between (but is not equal to) two other values.	<ul style="list-style-type: none"> Integer/Decimal/Currency Date/Time/Date Time Duration
Greater than		
Between		

Field name Condition Value type Value

Field name Condition Value type Data type Value

Field name Condition Value type Value

Conditions/Operators	Definition	Value type
Begins with	Checks if the answer begins with / ends with of the given value.	<ul style="list-style-type: none"> Freetext Integer/Decimal/Currency Email / Phone number
Ends with		

Field name	Condition	Value type	Value
<input type="text" value="Lorem ipsum"/>	<input type="text" value="Begins with"/>	<input type="text" value="Free text"/>	<input type="text" value="INV"/>

Field name	Condition	Value type	Value type
<input type="text" value="Lorem ipsum"/>	<input type="text" value="Ends with"/>	<input type="text" value="Email / Phone number"/>	<input type="text" value="p.s@g.com"/>

Conditions/Operators	Definition	Value type
Minimum of	Checks if the answer is minimum of / maximum of the given value.	<ul style="list-style-type: none"> Free text Integer/Decimal/Currency
Maximum of		

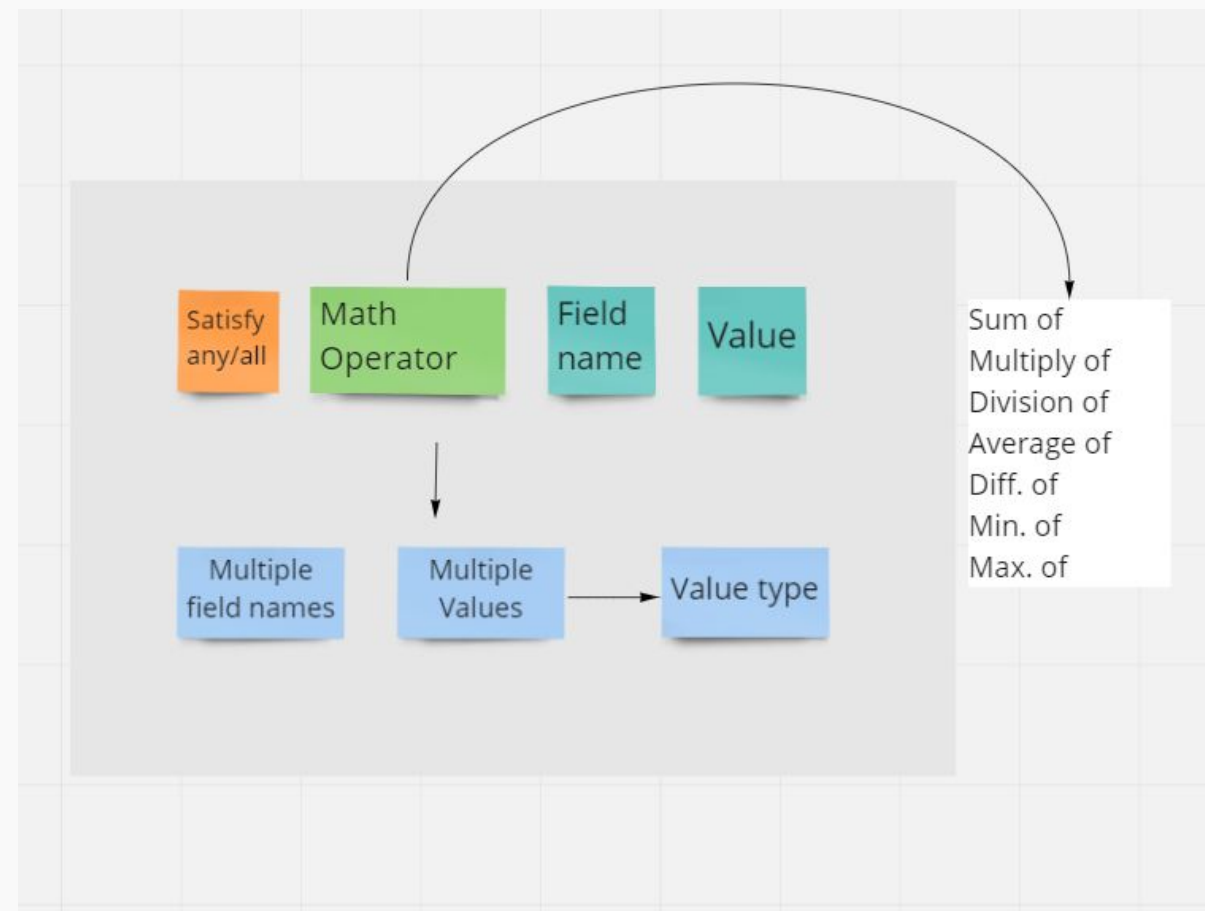
Field name	Condition	Value type	Value
<input type="text" value="Lorem ipsum"/>	<input type="text" value="Minimum of"/>	<input type="text" value="Integer/Decimal/Currency"/>	<input type="text" value="\$15"/>

Field name	Condition	Value type	Value
<input type="text" value="Lorem ipsum"/>	<input type="text" value="Maximum of"/>	<input type="text" value="Free text"/>	<input type="text" value="8 digits"/>

Brainstorming - redefining the use case

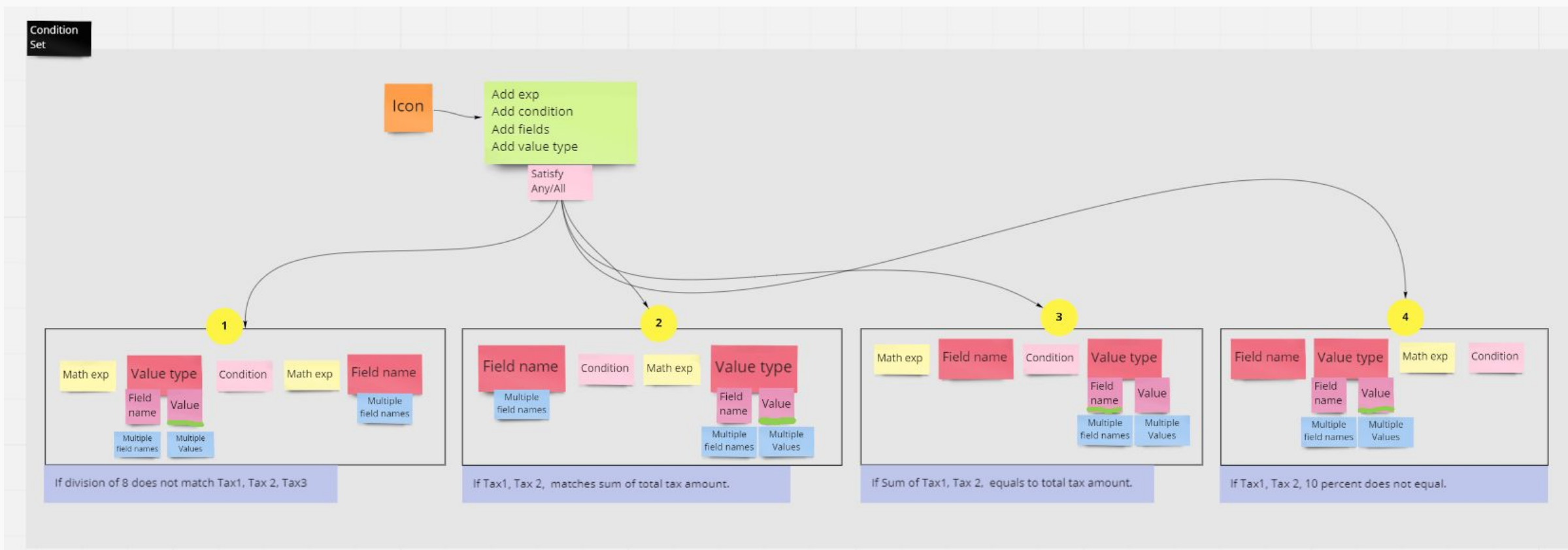
While explaining the research about the different conditional operators that support the field type or value type, and giving examples of how it might work with conditional statements, the cross-functional team could identify that the conditional operators are not only the best combinations to create the conditional rule.

To create a conditional statement on country-specific TAX rules or VAT rules we need to include math operators. As there was more clarity on the requirement side, we gradually started exploring the math operators and the probable use cases.



Brainstorming - redefining the use case

We started discussing the other attributes that can pair with the math operators, combinations that can be needed from the user side to create a conditional rule. Moving forward, with these existing data the Product Manager was able to gather some more insights from the business side and we then gradually started working on those points.

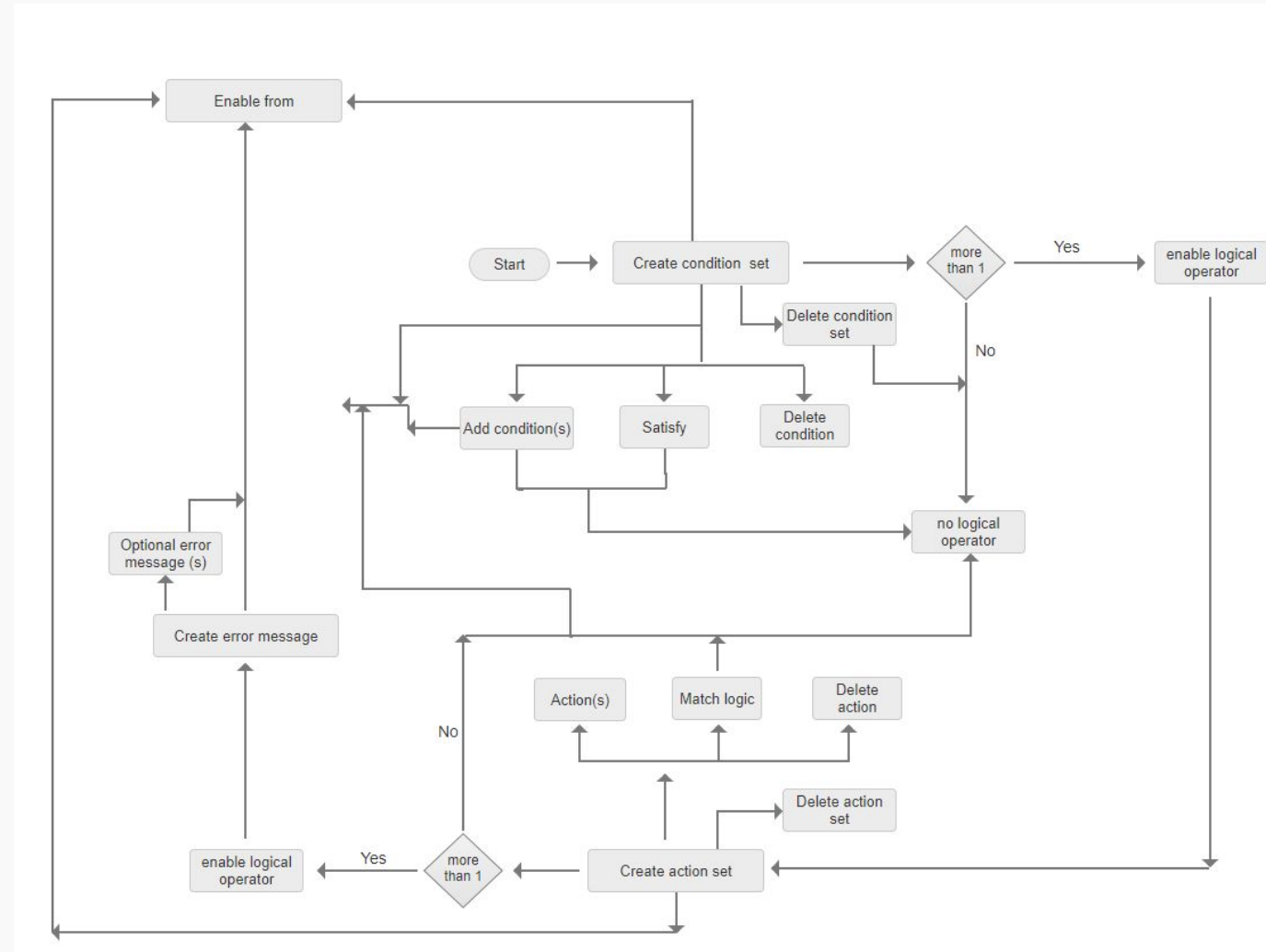


User touch points - task flow

Empathy is the core of understanding - the right problems to the right audience.

On that note, I created the task flow to identify the traces of user's possible paths through sequences of tasks (from creating multiple conditions in a condition set and then defining the actions within the action set) and decision points (on defining the error messages) while accomplishing their goal.

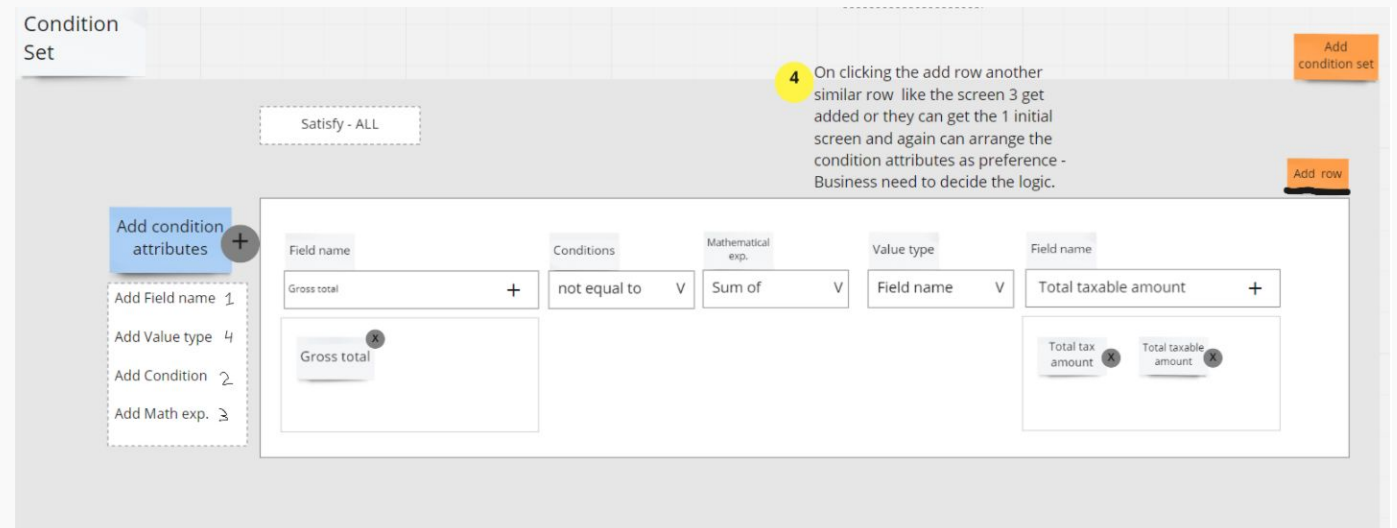
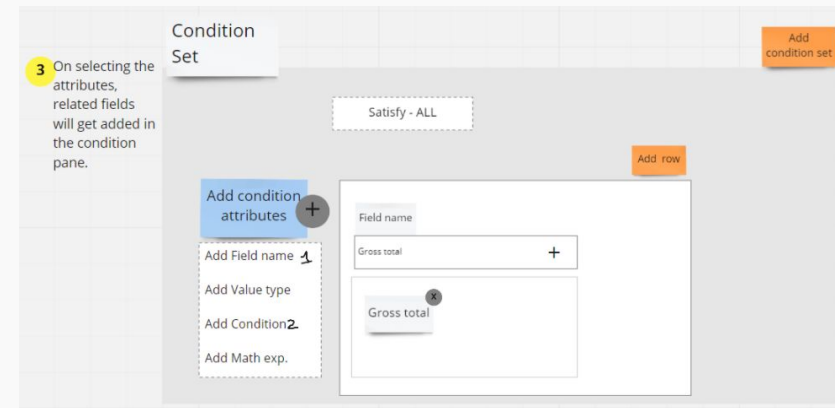
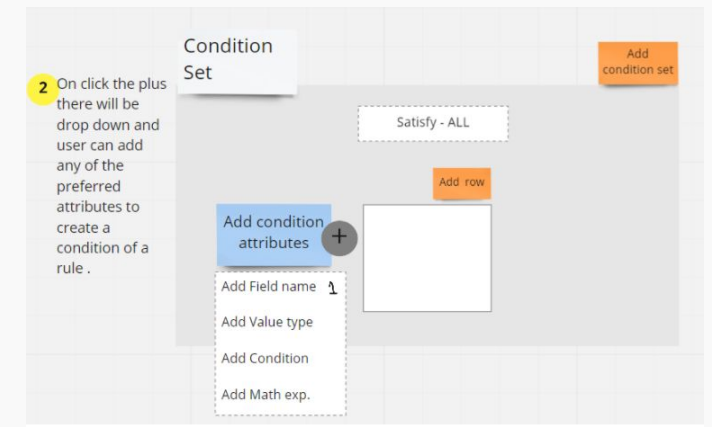
It validates the understanding of the user goals from one touchpoint to another and helps identify the common scenarios.



Concept sketches

The best way I have found to quickly, easily, and comprehensively communicate with my team: share rough concept sketches, which is quick and time-saving.

Not only does this help me articulate how I plan to tackle certain scenarios, but thinking out loud on paper, allows everyone—myself, the cross-functional team to see how ideas begin, evolve, and finally crystalize into the solution we've been working on.



Concept sketches

Rough sketches were created while discovering new ideas, I could use my imagination at the most to put my creativity to action.

Later when I introduced all of these sketches, collaboratively we discussed the feasibility of the framework, development time and effort etc. involved and can identify the best out of rest.

CONDITIONS

Sketch 1: Initial interface. A 'Satisfy' dropdown menu is at the top left. Below it is a dashed rectangular box. To the left of the box is a grey circle with an 'X' and a purple hand cursor pointing at it. To the right of the box is the text 'Add row'.

CONDITIONS

Sketch 2: Interface with a menu overlay. A 'Satisfy' dropdown menu is at the top left. Below it is a dashed rectangular box. To the left of the box is a grey circle with an 'X' and a purple hand cursor pointing at it. To the right of the box is the text 'Add row'. A grey menu overlay is positioned over the dashed box, containing the following options: 'Add field name', 'Add Value type', 'Add Conditions', and 'Add Mathematical expression'.

CONDITIONS

Sketch 3: Interface with a field name input and a plus button. A 'Satisfy' dropdown menu is at the top left. Below it is a dashed rectangular box. To the left of the box is a grey circle with an 'X' and a purple hand cursor pointing at it. To the right of the box is the text 'Add row'. Inside the dashed box, there is a 'Field name' label, a text input field with a plus button, and a grey rectangular area with an 'X' icon.

CONDITIONS

Sketch 4: Interface with a condition dropdown. A 'Satisfy' dropdown menu is at the top left. Below it is a dashed rectangular box. To the left of the box is a grey circle with a plus sign. To the right of the box is the text 'Add row'. Inside the dashed box, there is a 'Field name' label, a text input field with a plus button, and a grey rectangular area with an 'X' icon. To the right of the dashed box, there is a 'Condition' dropdown menu with a 'Select' option and a purple hand cursor pointing at it.

CONDITIONS

Sketch 5: Interface with a menu overlay and a field name input. A 'Satisfy' dropdown menu is at the top left. Below it is a dashed rectangular box. To the left of the box is a grey circle with a plus sign. To the right of the box is the text 'Add row'. Inside the dashed box, there is a 'name' label, a text input field with a plus button, and a grey rectangular area with an 'X' icon. A grey menu overlay is positioned over the dashed box, containing the following options: 'Add fields', 'Add Value type', 'Add Conditions', and 'Add Mathematical expression'.

Ideate and Design

Flexible and Stay Focused

With a better approach to building the logic by accessing the information right on the rules view without having to jump into other tabs constantly.

Users can have combinations of rule attributes which makes the user's task easy and flexible to create a rule that is based on multiple condition sets paring with different conditions defining them with logical operators and actions. If these conditional statements fail, the user can set the error message that can only get executed on failed circumstances.

The screenshot displays the 'Create rule' interface within the opentext Business Validation Services application. The interface is structured as follows:

- Header:** The top bar features the opentext logo and 'Business Validation Services' text on the left, and a user profile icon on the right.
- Form Fields:**
 - Rule set:** A dropdown menu currently showing 'DE'.
 - Rule name:** An empty text input field.
 - Rule type:** A dropdown menu currently showing 'Conditional check'.
 - Enable from:** A date picker icon.
- Define Conditions Section:**
 - Condition Set 1:** A section header with an 'Add condition set' link to its right.
 - Satisfy:** Two buttons, 'All' (selected) and 'Any'.
 - Condition1:** A container for individual conditions with a '+' icon to add more.

Field name (LHS)	Condition	Value type	Value
<input type="checkbox"/> <input type="text"/>	Select ▼	<input checked="" type="checkbox"/> Value ▼	<input type="text"/>

- Footer:** Two buttons, 'Create' (highlighted in blue) and 'Cancel'.

Ideate and Design

As **space matters** and to make the screen less cluttered, the solution is designed very sleek and lightweight yet with multiple options to play around in a delightful way.

The screenshot shows the 'Create rule' interface in the opentext Business Validation Services application. The interface is designed to be sleek and lightweight. It features a header with the opentext logo and the text 'Business Validation Services'. The main content area is titled 'Create rule' and contains two condition sets. The first condition set, 'Condition Set 1', has a 'Satisfy' dropdown set to 'All' and a 'Delete Set' link. Below this, there is a 'Condition1' section with a table-like structure for defining conditions. The table has columns for 'Expressions (LHS)', 'Field name / field name & value', 'Condition', 'Expressions (RHS)', and 'Field name and/or value'. The first row shows a 'Select' dropdown, a text input field, a 'Select' dropdown, another 'Select' dropdown, and a text input field. Below the first row, there are two smaller input fields labeled 'Field1' and 'Value1'. The second condition set, 'Condition Set 2', is partially visible below the first one. It also has a 'Satisfy' dropdown set to 'All' and an 'Add condition set' link. The bottom of the interface has a 'Create' button and a 'Cancel' button.

The screenshot shows the 'Create rule' interface in the opentext Business Validation Services application, focusing on the 'Define Actions' and 'Define Error Message' sections. The interface is sleek and lightweight. It features a header with the opentext logo and the text 'Business Validation Services'. The main content area is titled 'Create rule' and contains two sections. The first section, 'Define Actions', has an 'Action Set 1' header with an 'Add Action set' link. Below this, there is an 'Action1' section with a table-like structure for defining actions. The table has columns for 'Field name (LHS)', 'Condition', 'Value type', and 'Value'. The first row shows a text input field, a 'Select' dropdown, a 'Value' dropdown, and a text input field. The second section, 'Define Error Message', has a 'Default locale' dropdown set to 'Select' and a 'Default error message' text input field. Below this, there is an 'Other locale' dropdown set to 'Select' and an 'Error message' text input field. The bottom of the interface has a 'Create' button and a 'Cancel' button.

Usability test

So, once a solution is ready to get into the development phase, I wanted to validate the solution from the real users. My PM was happy and helped me on getting the real user's details. We conducted the usability test with 3 real users where the users were asked to create a conditional rule with different use cases provided by my PM, and I was observing where the user might encounter problems or experience confusion.

When they finished their tasks, I asked a few questions to understand if anything that is missed or needed to be accommodated or enhanced in the design. They were able to finish the task with no help and was happy with the provided solution.

UT questions and feedbacks -

Do you think the solution has captured all your task related inputs, if not can you please share what is your expectation? **Yes, this is good, I could get a lot of combinations for the field names and values, which is really a cool feature.**

Is there anything that you find need improvement, or any suggestion that you want to provide? **Nothing as such, looks good to me.**

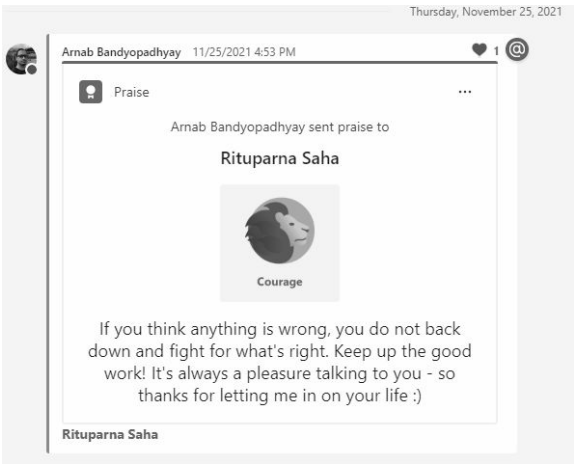
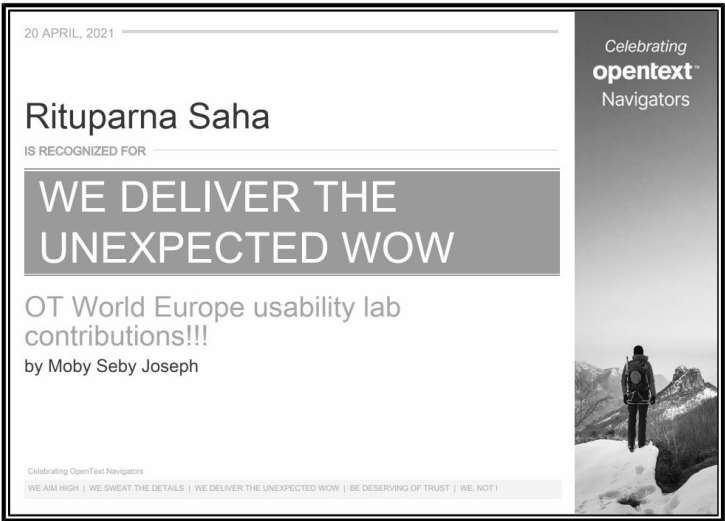
Is there any more mathematical expression that need to be added? **There is already a lot of options which I do not even know if that is needed or not, for now I can say few are useful, and others might be helpful in certain scenarios.**

How satisfied are you with the available solution? **It looks great.**

Do you think the LHS and RHS may confuse a user? - **No, not at all, we know all these terms.**

Any feedback on the tooltip for LHS and RHS to help a new user? - **No, I do not think it is needed, anyone who is performing these actions might be aware of these terms.**

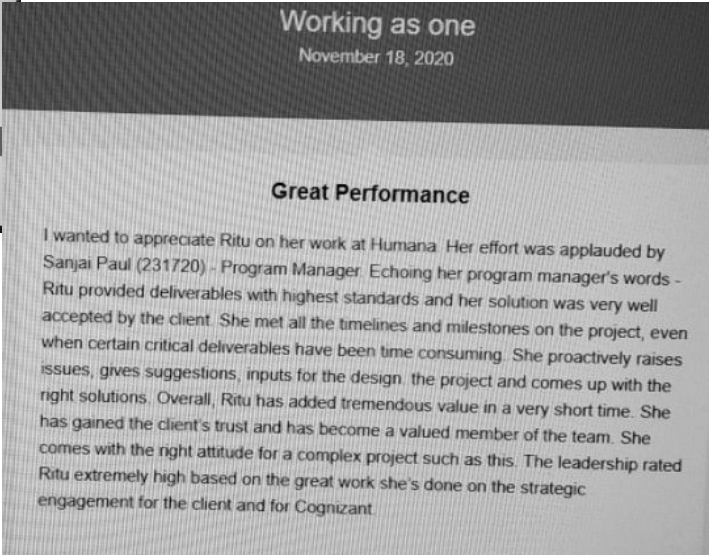
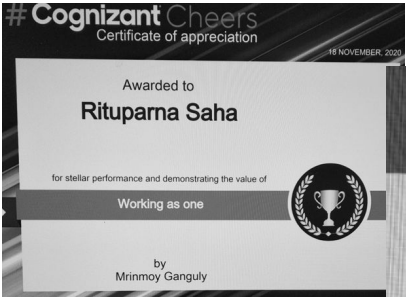
Some of the Recognitions that ignites my creative thinking skill



"I did want to take a moment and say thank you to the team. You all did a fantastic job with Sprint 15!! The stakeholder demo went very well and I think everyone was impressed with the amount of progress that has been made so far. I am thrilled with the progress!

Keep up the great work! This project is delivering such value to our company and is a key initiative to help transform how we support our brand partners."

Karen (Lowe) Ashbrook
Director, Digital Capabilities | Marketing Products & Capabilities
Alliance Data Card Services



"Ritu- This is great work"

Tanveer, Saad
POI Provision, RET

"Very impressed with the UX side of the team and feel that we're all working together in a unified way."

Lechitsky, Allen
Director - CRM, EAS Salesforce PMG

"Condering these efforts and going forward in the implementation phase."

Mochi, Venugopal
Project Manager, EAS Salesforce

"Agreed.. Kudos to the UX team"

Bose, Indraneel
Engagement Lead, Cognizant Infra Services

Thank You

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