DiTenun Website
Redesign Concept

REDESIGN BY
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Smart Devices
Weaving Motif Producer Nusantara

DiTenun is an application development project that supports traditional industrial weaving fabrics that can produce new motives according to the wishes of the user. DiTenun Website is used not only as a medium that provides information about woven fabrics, but also as a medium to communicate between buyers and weavers as well as commercial media designed to buy and sell products produced by the application Woven. DiTenun is currently already running on mobile applications and websites. DiTenun Website can be accessed through the link http://www.ditenun.com via smartphone or desktop.

Journey

Research
Find out preliminary information about tested systems such as system objectives, target participants, and features that the system

Heuristic Evaluation
Conducting Heuristic Evaluation of the website user interface using the 10 heuristic principles propounded by

Prototype
Building a prototype website based on the findings of a user interface problem from heuristic evaluation

Usability Testing
Retest to a real user by doing usability testing to identify additional problems of the website user interface

Final Prototype
Building a final prototype website based on the findings of a user interface problem from usability testing

Research

Product Target

DiTenun has a mission to develop the archipelago weaving motifs and make it easily accessible universally. Improve the welfare of the community woven fabrics through traditional skills based on technology. DiTenun application makes designing and making new weaving motifs easily, fast and automatic. In addition to the application of various derivative products produced and developed such as WEB-based applications and goods products such as print books and professional quality digital motifs, fashion products, home decore products, and other products. This research is also expected to develop a traditional Indonesian weaving industry that is finally able to improve the welfare of the lives of traditional Indonesian weaving craftsmen.

Target Participant

Weavers

Buyers of weaving products

Weaving Product Information Finder

Feature

Purchase Weaving Products

Generate Motive and Cross stitch

View print information details

Adding Images from Gallery

Heuristic Evaluation

Heuristic evaluation was done to clean the user interface to get rid of the problems that could interfere with the user's experience by experts. The result of this method will be a reference in performing a repair user interface before re-testing again

Participant

Bengris Pasaribu Ir, MM

Hanny Zora Agustina ST, MM

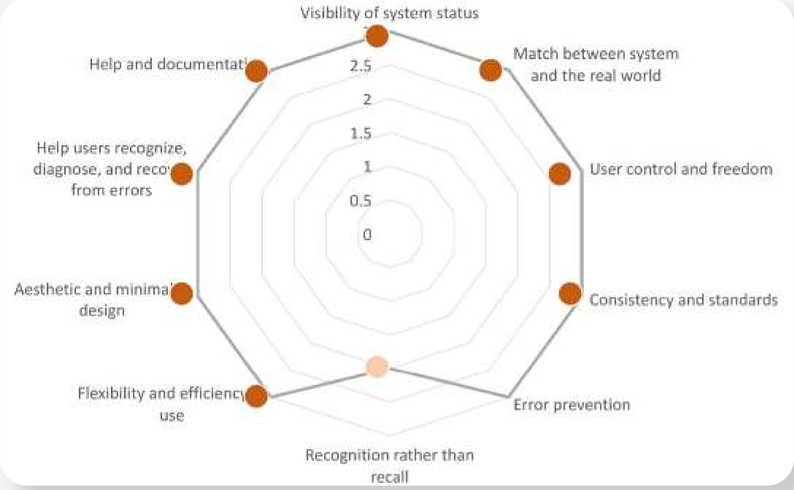
Yohannes Nababan

Result

These results are displayed in table Form based on the Ten Principles of heuristic evaluation by Jakob Nielsen. The number of findings found by the three evaluators based on the principles of HE Jakob Nielsen can be seen in the following table

No	Heuristic principles	Findings		
		Evaluator A	Evaluator B	Evaluator C
1	*Visibility of system status*	12	2	2
2	*Match between system and real world*	1	-	5
3	*User control and freedom*	1	-	-
4	*Consistency and standards*	7	8	4
5	*Error prevention*	1	1	2
6	*Recognition rather than recall*	-	1	-
7	*Flexibility and efficiency of use*	3	7	8
8	*Aesthetic and minimalist design*	-	1	3
9	*Help users recognize, diagnose, and recover from errors*	2	1	-
10	*Help and documentation*	1	-	1

The results of problems found by evaluators have different severity rating levels. Severity The highest rating illustrates that the problem must be resolved immediately



Recomendation

After obtaining the problems of usability through the process of usability inspection, then the third result of evaluators is summarized and made the result of repair recommendation. Once compiled, there are 52 problems along with the recommendation of improvements that are referenced in the creation of a website repair prototype

Prototype

Make a prototype improvement from the results of recommendations already analyzed by researchers

#1 Log in and Sign Up

Prototype improvements on this page include improving notifications in the form of feedback from the registration process, customizing authentication forms with other website standard forms and adding password visibility to the form

#2 Home Page

Prototype improvements on this page include improvements to the brand statement design that are more concise and descriptive, improvements to the design of the navigation logo links, changes to foreign terms that are difficult for users to understand, correcting writing errors, consistency of Indonesian usage, improvements to the information offered, removal of the LPDP logo, contrast improvements of navigation buttons and repairing service parts.

#3 Product Page

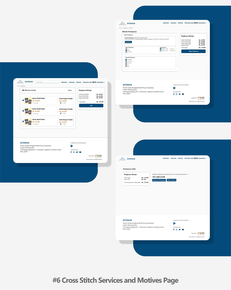
Prototype improvements on this page include product stuffing improvements from each category, addition of breadcrumbs, content filling according to the requested category, improvements to the use of foreign terms, adjustments to the same style between content, and improving content for easier understanding

#4 Detail Product Page

Prototype improvements on this page include design improvements by completing images according to category, adding cart notifications when filled in, improving content according to the requested item and improving "add to cart" writing

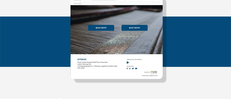
#5 Transactions Page

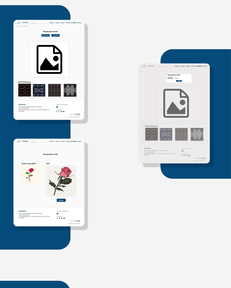
Prototype improvements on this page include design improvements on the payment page in the "use a new address" section, changing the form of the address form, improving the use of the language, displaying the latest order, correcting the use of icons in the page, adding a notification page if the cart is still empty, adding error prevention pop-ups and creating a booking status made

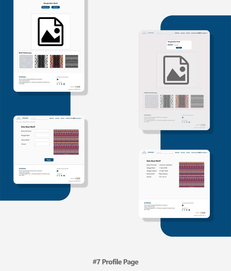


#6 Cross Stitch Services and Motives Page

Prototype improvements on this page include improvements to the design of the generate motif and kristik services as well as a clearer view of the services offered

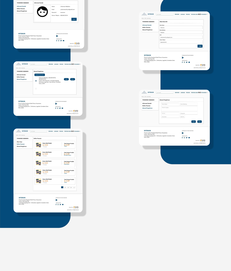






#7 Profile Page

Prototype improvements on this page include repairing the account page to the standard form of other websites in general and adding a Wish List menu inside



#8 About Us Page

Prototype improvements on this page include design improvements with profile menu adjustments and content filling according to the requested information

Usability Testing

The results of this improvement will be re-tested with usability testing method to learn and identify any additional issues that arise from the end-user side. After knowing the problems that interfere with the user experience, it will be done repair the user interface again

Method

Researchers will observe participants as they interact with the system, learning what is fun, frustrating, confusing, and so on. Researchers will encourage participants to think aloud, meaning to verbalize their minds when interacting with the user interface. Researchers will give them a task to work on and let the user speak.Quantitative data is derived from the data of SUS questionnaire and the time data of participant task execution while qualitative data usability testing is obtained from aloud think data, observation, and open interview

Participant

No	Nama Partisipan	Kode Partisipan	Nomor Hp	Kabupaten	Pekerjaan
1	Ridwan Tambunan	Partisipan 1	081362361909	Tobasa	Guru
2	Lince Sinaga	Partisipan 2	081396291387	Tobasa	Pegawai Puskesmas
3	Budianto nababan	Partisipan 3	081362871943	Taput	Wiraswasta
4	Chiristina Simanjuntak	Partisipan 4	082272498385	Taput	Mahasiswa
5	Desy Tambunan	Partisipan 5	081361108425	Tobasa	Freelance

Result

Quantitative Data

No	Partisipan	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Jumlah	Jumlah x 2.5
1	Partisipan 1	3	1	3	3	3	2	3	3	3	2	26	65
2	Partisipan 2	3	2	1	0	2	3	1	3	2	0	17	42.5
3	Partisipan 3	3	3	3	0	3	3	3	3	3	0	24	60
4	Partisipan 4	2	2	3	3	2	3	2	3	3	3	26	65
5	Partisipan 5	2	1	3	2	3	1	3	2	2	1	20	50

No	Partisipan	*Task 1*	*Task 2*	*Task 3*	*Task 4*	*Task 5*	Total
1	Partisipan 1	4.33	5.25	8.72	6.15	5.18	29.63
2	Partisipan 2	3.88	2.50	7.25	5.67	6.20	25.5
3	Partisipan 3	3.12	7.85	11.42	10.00	10.50	42.89
4	Partisipan 4	0.35	0.95	1.10	0.59	0.62	3.61
5	Partisipan 5	1.08	2.25	3.33	3.00	5.33	14.99
Rata - rata		2.55	3.76	6.36	5.08	5.57	23.32

Qualitative Data

The overall results of the lecture data in the form of observation and think aloud as well as open interview analyzed based on the problem and the number of participants affected, then given the appropriate improvement recommendation based on the analysis of the researchers. Findings and analysis of usability issues that have been made into the finding code and given improvement recommendations based on the number of affected participants and their impact to the user experience. Total usability problem results from usability testing were 37 findings divide into local and global findings.

Final Prototype

To improve the final prototype of the website based on recommendation analysis of Usability Testing method

#1 Log in and Sign Up

Prototype improvements on this page include design improvements by improving the clear highlights and hierarchies of each button, simplification of registration forms and improvements to form field instances

#2 Home Page

Prototype improvements on this page include design improvements by improving space between main menus, highlights for each active menu to be clearer, creation of dropdown menus for product and service menus as well as account menu separation from other menus

#3 Product Page

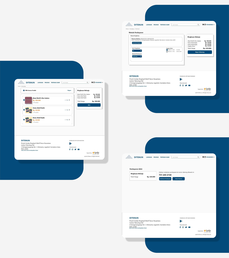
Prototype improvements on this page include design improvements by improving the look of each product with the addition of interesting-looking effects as well as the addition of filter features and other categories

#4 Detail Product Page

Prototype improvements on this page include design improvements by simplifying the look of the product and making it more interesting, changing the "add cart" writing, and improving the layout of each Information

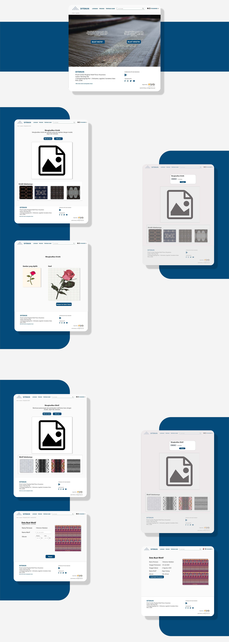
#5 Transactions Page

Prototype improvements on this page include design improvements with simplification of courier selection and payment methods, teaching the writing of units of numbers and text, making the difference between the price per product and the total price, creating error prevention pop-ups if you want to remove the product and leaving the payment page and correcting the final payment to be clearer



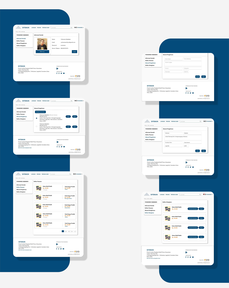
#6 Cross Stitch Services and Motives Page

Prototype improvements on this page include design improvements by adding a brief description of the services offered, improvements to the use of Language to be consistent, improvements to the motif and kristik service filling form pages.



#7 Profile Page

Prototype improvements on this page include design improvements with the separation of the Wish List and Order lists from adjacent sections, the addition of "next and previous" features and the addition of profile photo editing features



#8 Payment Confirmation and Booking Status Page

Prototype improvements on this page include design improvements with the addition of booking status pages and payment confirmations

Conclusion

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The findings of the issue of usability in heuristic evaluation show more findings than the results of usability problems in usability testing

Evaluation of usability with heuristic evaluation method that from an expert point of view or evaluator has not been sufficiently able to identify all usability problems

The initial repair prototype resulted from improved recommendations by evaluators based on heuristic evaluation results. Prototype final fix resulted from improvement recommendations based on analysis of usability testing results