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TASK.

Student generated contents:

- title of report
- headlines
- subheads
- navigation
- images
- captions
- callouts

This assignment requires us to rearrange, twist a raw piece of plain text into a very organic digital report, which explains to our client (Disney, Amazon, FAA of my own choice) about the importance of industrial ecology. We are free to gather resources through the internet, and arrange the pictorial and textual materials neatly on a 960px by 650px canvas.

Students are responsible for writing all the text below. It must be descriptive and succinct. Students must use language and tone that matches the priorities and needs of both their client and the 2 audiences.

DOMAIN RESEARCH.

I selected Federal Aviation Administration (FAA) as my client, as it represents a typical design request from a (stereotypically) less design-oriented administration. Specifically, my design should target both engineers and safety inspectors who work for FAA.

FAA's current stage

To dive deeper and better understand my audiences, I conduct several researches to understand FAA's role and its relation to aerospace industries. In general, FAA is responsible for inspection, regulatory decisions on pilots, aircrafts (manufacturers, materials used) and airports. Besides, FAA also has a research lab (William

J. Hughes Technical Center) that conducts researches and tests on various topics.

With respect to their efforts on industrial ecology: FAA used to have the guidance Airport Environmental Handbook (1980 - 1985). Now they are having Airport Environmental Program that includes both airport recycling and airport sustainability. These are all core parts of airport planning. FAA also funds airport with their airport improvement program (AIP) for airport for public use. Airport wish to enhance their environmental concerns are eligible to apply for this program.

Engineers would want to use this materials as a kickstarter on where they are going next, whereas the safety inspectors would quickly scan through the whole report, and potentially use it as a handbook to refer to. Engineer expects a pleasant reading experience; inspectors hope it is scannable and trust-worthy.

Roles

How will this industrial ecology report impact the two different roles working for FAA?

Engineers are most interested in what tools to build to maintain the whole system. There can be material scientists, mechanical engineers, computer engineers, and many others. Their top priorities would be to understand the goals of their tools, the technologies involved, and legal limitations imposed. Specifically, with regarding to the ecologies, they would like to know the outcome of their new constructions, what technologies are available, and what they can or cannot do. Perhaps also the barriers?

How they are going to build airport / aircraft differently?

Inspectors wish to learn about the safety standard, and how to enforce them. They are the people who would review airport / aircraft / flight plans, analyze through and try to identify potential safety hazards. They might either do this inside a meeting room, or on site. With regarding to industrial ecology, a safety inspector would wish to learn its impact on the current safety regulations, and how they would identify the design flaws and guide the aerospace designers to build up a safer system. They might wish to use this PDF document as a little handbook to quickly scan through.

Matching with need I then deeply digest into the raw

text, structuralized it, and matched the raw texts provided with my audience groups' need.

Here, the green text highlights the contents of engineers' interest, the blue text highlights the contents of inspectors' interest, and torquoise being an overlapping of the two.

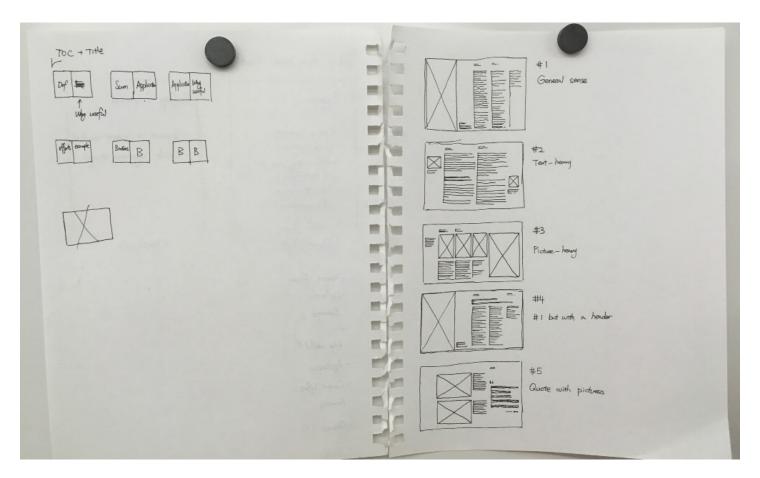
SKETCHES.

Then I sketched a book map (left) and page layout (right).

Inside the **book map**, I did some tiny adjustments to the raw text: I plan to put the definition to the industrial ecology first, followed with its "why useful" section, then "summary" before the reader goes into the body part, which talks about the status quo and barriers of industrial ecology.

Combined with the readings about the grid systems and the paragraphs, I sketched out the **page layout** I plan to use. I devised a equal-width six-column grid system to achieve the flexibility, because 6 is the least common multiple of 1, 2 and 3. The 5 scheme I came up with were serving different purposes: some are relaxing, and some are more serious.

Hand-drawin sketches used during iteration 1.



ITERATIONS.

The design went through several iterations.

Iteration 1

The instructor suggested that the 6-grid system is very bold, yet it is way too narrow to have the body text be squeezed into one grid. The instructor also noted that I should keep the body text grid more consistent: if the body text is going to occupy 2 columns, it should do so across all the locations where body text occurs. Also, #5 in the sketch felt inconsistent, for it has a weird block of quote. All the suggestions were taken during the migration to the next round.

In-class critique on going. This is the third iteration. My work is the 5 pages located at the second row to the right..

Iteration 2

Iteration 2 is moving from hand sketches to digital Hi-Fi prototypes. Not much feedback received, yet I did some modification based on what I saw through out the class. Instead of enlarging the text, I made use of the color pallette to create the hierarchy of each header. Besides, photos were revised to better serve the content. I also switched to justified body texts, because my grid margin was slightly narrower, and I wanted to make the grid less rugged.

Iteration 3

This iteration added more pages in,



The evolution of the first three pages during iteration 2 - 4. These three grid templates were used during many following pages and were representative for the trends in the entire documents.







Iteration 2







Iteration 3









Iteration 4

but with real content this time. The main criticism received was about the headers that were plain and dull. Besides, page 4. the page with a large picture of Galapagos Ecological Airport straddling half of the page, broke the flow of the whole structure. It was then suggested that I should switch to a four-column grid system, with two wide ones in the middle. amd two narrow ones running by the side.

reader still need to "breathe" from all the contents. The inter-grid margins were also a bit narrow. And there were some small suggestions on the capitalizations and hyphenations, but no big changes.

Iteration 4

Iteration 4 is the last iteration before the presentation. The feedback was mostly a lack of white space. I was overly emphasizing on the trustworthiness, but ignored the fact that the

FINAL PRESENTATIONS.

Overall, the final presentation was great. I walked through the entire design for the class and explained my design decisions in detail.

The instructor suggested that the glossary, which I desgined for the safety inspectors and was intentionally left at the top to avoid the distraction, could be brought closer to the text to merge with the text altogether through varying on colors.