

Alpine Smuggling:

This project is designed to function as an interactive picture book for children with which to learn about smuggling between France and Switzerland via the Alps. The project uses three main modes of interaction to communicate with the user: scrolling, hover (or clicking if using touch screen), and dragging. These are implemented in various ways to aid the narrative being conveyed. For example, scrolling to create a sunset or dragging a flashlight around to search for items. These interactions are designed both to aid in the conveying of information as well as make the project more entertaining to a younger audience.

This project is designed to be used in the two following formats (please refresh when changing formats to make sure images load correctly):

- Standard Laptop display: 1920 x 1080
- Ipad: 1668 x 1251

The walk through

Page 1, beginning:

- The page will open and you will be prompted by the title screen to scroll.
- Scrolling downwards will cause the sun to set. Once you have scrolled to the bottom of the page (the sun will appear fully set) text will start scrolling on the screen.
- After the text is fully written out the words "continue..." will appear in light yellow. Clicking on that will bring you to the next page.
- (also note on each page there is a small tag in the upper left corner, hovering or clicking over this tab will cause a table of contents to appear, chapters you have already finished will appear in black while chapters that have not been seen will appear in gray).

Page 2, Characters:

- This screen will open and text will appear. The dialogue will end when you see "learn more about the smugglers below".
- After the dialogue has ended you can scroll down and you will see character portraits with name tags next to them. Hovering or clicking on these names will cause them to extend and a quote by each character will appear.
- At the bottom of the page there will be another "continue..." text. Clicking this will bring you to the next page.

Page 3, Searching in the Dark:

- Text should start appearing when you open the page. You will note that the background is obstructed except for the area around your mouse. This is your "flashlight" dragging (or clicking and dragging depending on whether or not you are in chrome's inspect mode) will allow you to move the flashlight and see different parts of the page.
- After the initial text has faded away, you can search for the first object which is some handcuffs in the lower left corner of the screen. Hovering over these (or clicking on them if you are in chrome's inspect mode), will prompt the next text to appear.

- Once the text has disappeared again, move the flashlight to the right side of the screen where you will find an image of a snowflake. Interacting with this the same way you did the handcuffs will cause the next piece of text to appear.
- Finally, after the text has disappeared you can move the flashlight to the top of the screen and search for a coin. This will prompt the final piece of the text to appear.
- After the final piece of text has appeared on screen, the “continue..” text with which you are now familiar will appear again.
- Click on the continue text to go to the next page.

Page 4, The end:

- On this page text will appear automatically and scrolling will cause the sun to rise.
- You can refer to the “chapter” tab in the top left corner to return to other chapters.

Libraries:

P5.js

- P5.js is a very powerful creative coding tool that allows for the creation of images and animations on a webpage. Since animations and pictures are so central to my project I wanted a tool that would give me more control over said images and allow me to make interesting animations.
- I used it to make a canvas behind every page on which various pictures and animation would be displayed as well as some visually based interaction. For example, randomly generated clouds scrolling by on the first and final pages, or the flashlight effect on the third
- The animations and interactions it allowed me to implement added a lot of charm and help the narrative come across better.

Vara.js

- Vara.js is a library that allows you to simulate hand written text. This was useful for me as I wanted my project to feel like a single narrative and also wanted it to feel like a story book being narrated which would be reinforced by the hand written text effect.
- I used this library to make almost all the text in my project. The scrolling text that appears is made with vara.js so is the “continue..” links.
- This tool adds a lot of charm to my website and makes it overall a more interesting experience. It also helps pace the experience as you are given a speed at which to read each piece of information.

Iterations:

My original prototypes had two main flaws to them that I tried to address through various iterations: the first was that I needed to figure out how to give enough affordances for interactions while maintaining the distinct “story book” Aesthetic I was going for. The other was that I needed to figure out if I wanted to have the project be one one single page or multiple. This was quite a challenging decision because I was really interested in the visual flow of a single project, but also wanted a variety of interactions that would be hard to achieve through only one page. Eventually, through different rounds of user testing, I decided to divide up my project into multiple pages. I also created certain visual patterns and interaction that maintained

my intended aesthetic style while making the project interesting to use. These include things like scrolling or having a consistent interactive piece of text (in this case the yellow “continue...” link).

Challenges:

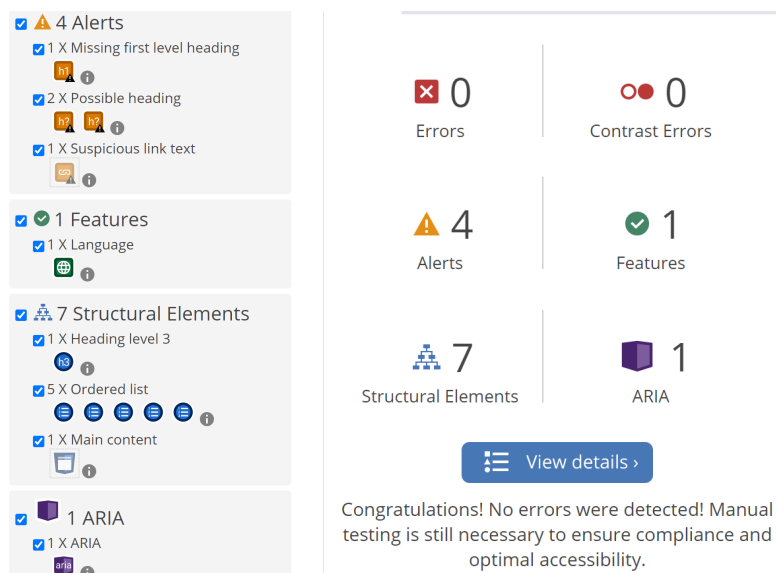
The biggest challenge I faced when creating my website was arranging the elements on the page so that they merged well with the images and also could organically adapt in ways required by the interactions implemented and the webpage adjustments.

This required a lot of combining elements from the p5.js canvas and divs from the DOM which was very challenging and required constant minute adjustments to make sure everything was meshing together properly. This challenge was magnified by the act that certain pages have moving animations.

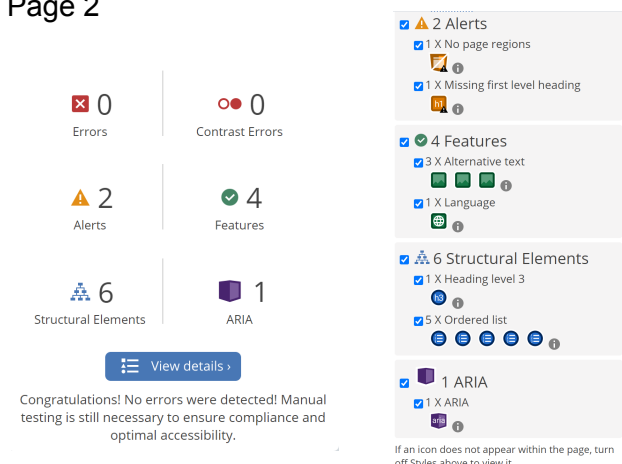
Appendix:

Images from WAVE:

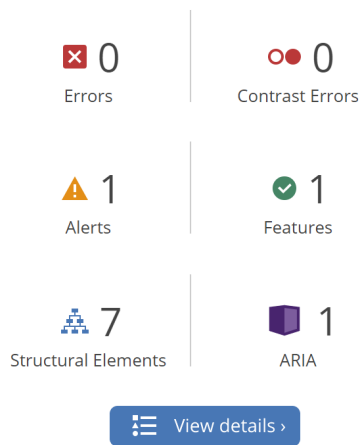
page1



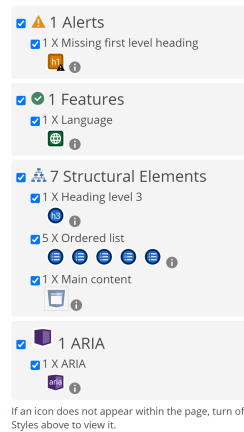
Page 2



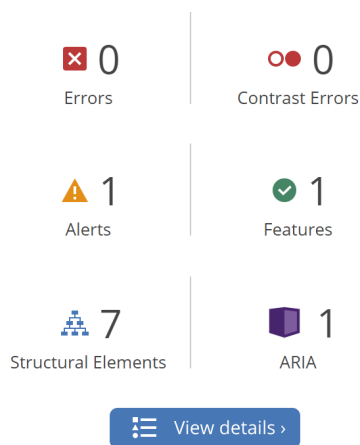
Page 3:



Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility.



Page 4



Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility.

