Portfolio

Samuel William Bowles
Front End Developer

https://samuel-bowles.github.io/index.html

About me

My name is Samuel, I am originally from the UK. I am an aspiring web developer and front end engineer living in Meguro, Tokyo. I have been living in Japan for over ten years with most of that being in Tokyo working as and English teacher and IT support. After Tokyo I moved to Hokkaido for 3 years where I worked at an outdoor apparel and equipment store in the Niseko ski resort area. Here I completely fell in love with the snow of Hokkaido, snowboarding and the nature of Japan, I spend a lot of time snowboarding in the winter and hiking the nearby mountains during the summer. As a consequence my personal websites all seem to end up with a snowboarding theme on them. When I'm not snowboarding or playing video games I am perhaps ill advisedly trying to learn how to build a synthesiser in JavaScript. I'm finding that it is just as much about learning sound engineering theory as JavaScript programming, however I enjoy the challenge and finding creative ways to continue to improve my skills.

Skills

DEVELOPMENT

HTML5
With a strong understanding of the HTML syntax I can write well organised, structured and semantic markup.

CSS3
A strong knowledge of the common tags as well as the ability to use some of the more advanced features such as keyframe animation. I can create responsive sites that adjust to multiple screen sizes.

JavaScript
I have a solid knowledge of the fundamentals of the language and am able to write my own scripts that interact with and mofiy the DOM. I can also write code that hooks into common APIs such as Google Maps and Firebase APIs and use modules from online sources to increase page interactivity.

jQuery
I can use jQuery to create animations and effects as well as implement page components such as slideshows or image elargers as well as use plugins from online sources to create a more interactive experience.

Bootstrap 5
I can implement a web page using Bootstrap for page layout that includes Bootstrap components such as slideshows or menus.

Python 3
I can create basic scripts in Python that can be used for webscraping and basic data manipulation.

Tools

Adobe Photoshop
I can adjust photographs and create composite images. I can create banners for use on websites. I can resize images and use the correct file formats for use in different situations on the web.

Adobe Illustrator
I can create logos, banners and entire web page design compositions. I can use Illustrator to create slices for direct use in web pages as well as resize and adjust images for use on the web.

Wordpress
I can use Wordpress to create blog style web pages and install and adjust template themes from online resources.

Git/Github
I have knowledge and ability to use the basic features of Git and can use Github online and offline to host projects and webpages.

Google Firebase
I can create a basic database for data storage and access and manipulate the data stored there via JavaScript and the Firebase API.

Languages
English: Native
Japanese: Degree, N2
French: Degree

Blackhawk Snowboards

Waseda IT Individual Project

Time: 10 days: material collection 2 days, wireframe 2 days, composition 2 days, coding implementation 4 days.

Site Content: Top page with introduction to the brand. Product page with details and images of the product. Shop page introducing the new store and staff. News page with upcoming events and news. Access page with store location and contact details.

Aim: The request from a client creatinga new brand and setting up a new physical store, located in a tourist area. The goal of the website is to establish an online presence tor raise awareness of the brand, product and new store location. In addition the site should help customers find the physical store as it is not in an easy to access location.

Technologies: HTML, CSS, JavaScript, jQuery.
I set myself three main goals for this project. The first was to use a prallax effect and create a striking main page design. Second was to display the product page in an interesting and engaging manner. Third was to provide a multilingual site as a significant international customer base is expected.

Tools: VS Code & live server plugin , Notepad++, Inkscape, Illustrator,

https://samuel-bowles.github.io/blackhawk-snowboards/

Photoshop:
Image masking
and clipping
.

Inkscape:
Image .svg conversion,
path creation, colouring.

Site design started with the creation of a logo. Using the name of the brand as a starting point I created this .svg logo using a combination of Inkscape and Photoshop.

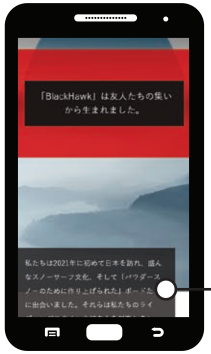
I used a simple colour palatte based on the logo for the sites design scheme to give a simple yet stylish effect.

I created the main page design using a parallax effect across three images that are tied together with a snowboard outline. I achieved this using only CSS via the " background-attachment: fixed" property.

However, as this property is not fully supported on iOS I opted to remove this effect and implement an alternative layout for the pages responsive design.

background-attachment: fixed

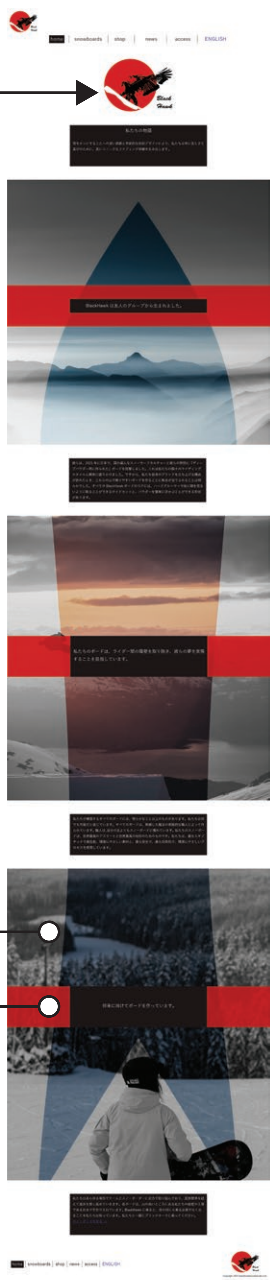
parallax scroll



「BlackHawk」は友人たちの集いから生まれました。

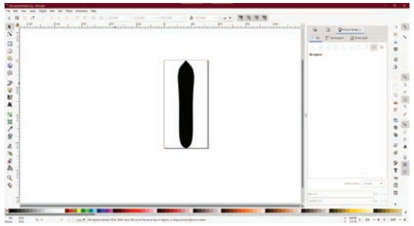
私たちは2021年に初めて日本を訪れ、盛んなスノーサーフ文化、そして「パウダースノーのために作り上げられた」ボードたちに出会いました。それらは私たちのライ

responsive layout

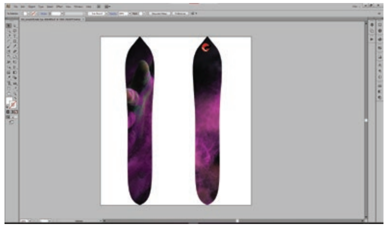


Snowboards Product Page

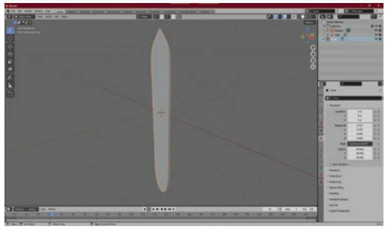
The snowboards are the shop's main product, and I wanted to show the user what they really look like. I used large, high quality .png images to show the design. In addtion, to help the user really visualise the product I created 3D models that the user can view and interact with right in their browser.



.svg outline in Inkscape



Design in Adobe Illustrator

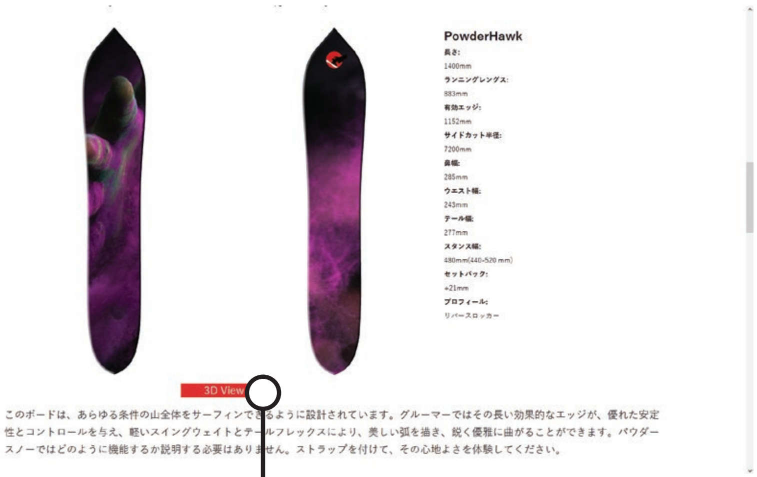


3D Modelling and Masking in Blender
created from .svg extrude and .png mask

The file was saved as .gltf which is a lightweight and crossbrowser supported web file format.

3D Viewer implementation

The user scrolls to the particular snowboard they are interested in. They can inspect an image of the board design as well as details about the product. If they wish they can click on the 3D View button to open a fully interactive 3D view of the product.

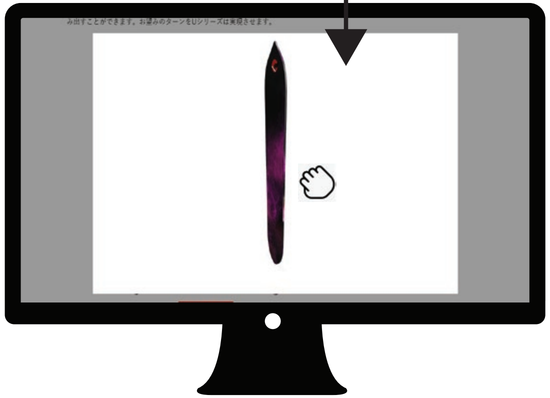


PowderHawk

長さ:
1400mm
ランニングレングス:
883mm
有効エッジ:
1152mm
サイドカット半径:
7200mm
鼻幅:
285mm
ウエスト幅:
243mm
テール幅:
277mm
スタンス幅:
480mm(440-520 mm)
セットバック:
+21mm
プロフィール:
リバースロッカー

このボードは、あらゆる条件の山全体をサーフィンできるように設計されています。グルーマーではその長い効果的なエッジが、優れた安定性とコントロールを与え、軽いスイングウェイトとテールフレックスにより、美しい弧を描き、鋭く優雅に曲がることができます。パウダースノーではどのように機能するか説明する必要はありません。ストラップを付けて、その心地よさを体験してください。

The user can click on the 3D view button next to each snowboard details section.



み出すことができます。お望みのターンをUシリーズは実現させます。

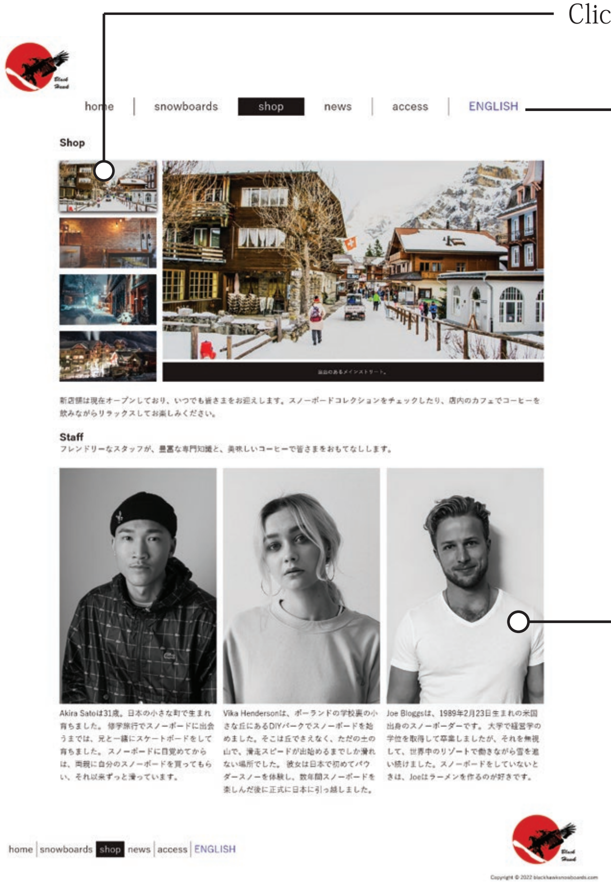
Interactive 3D with Google JavaScript module available on Github https://github.com/google/model-viewer

I wrote a small jQuery script that inserts a modal window with fade effects into the screen before loading the 3D model files. This solution has cross browser support including Android and iOS.

Shop Page

On the shop page it was important to have high quality images to introduce the shop and staff. This increases page size and page load time. To help offset this, instead of using jQuery I wrote a simple image switcher in JavaScript for the shop images. I then made a pure CSS 3D card viewer that will work even if the user has JavaScript in the browser disabled.

Click on an image in the image viewer



Shop

当店のあるメインストリート。

新店舗は現在オープンしており、いつでも皆さまをお迎えします。スノーボードコレクションをチェックしたり、店内のカフェでコーヒーを飲みながらリラックスしてお楽しみください。

Staff

フレンドリーなスタッフが、豊富な専門知識と、美味しいコーヒーで皆さまをおもてなしします。

Akira Satoは31歳。日本の小さな町で生まれ育ちました。修学旅行でスノーボードに出会うまでは、兄と一緒にスケートボードをして育ちました。スノーボードに目覚めてからは、両親に自分のスノーボードを買ってもらい、それ以来ずっと滑っています。

Vika Hendersonは、ポーランドの学校裏の小さな丘にあるDIYパークでスノーボードを始めました。そこは丘でさえなく、ただの土の山で、滑走スピードが出始めるまでしか滑れない場所でした。彼女は日本で初めてパウダースノーを体験し、数年間スノーボードを楽しんだ後に正式に日本に引っ越しました。

Joe Bloggsは、1989年2月23日生まれの米国出身のスノーボーダーです。大学で経営学の学位を取得して卒業しましたが、それを無視して、世界中のリゾートで働きながら雪を追い続けました。スノーボードをしていないときは、Joeはラーメンを作るのが好きです。

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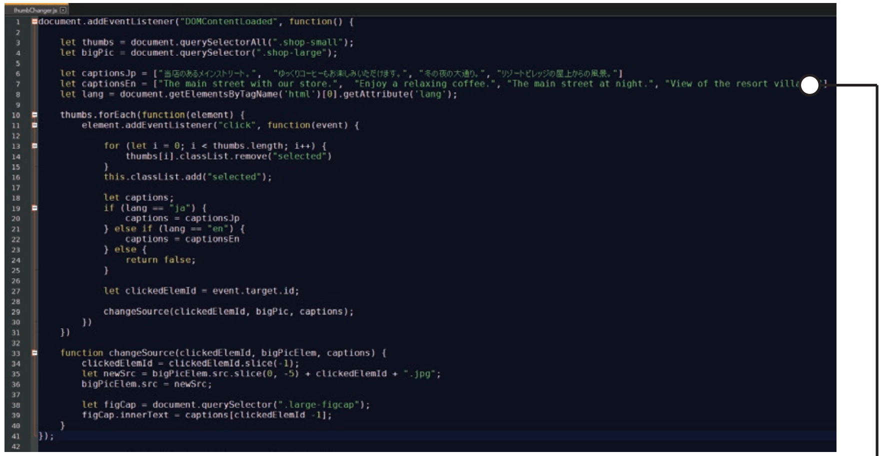
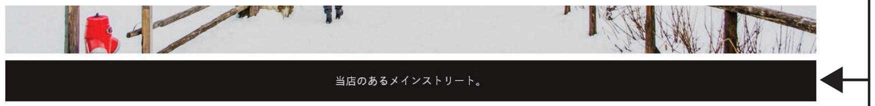
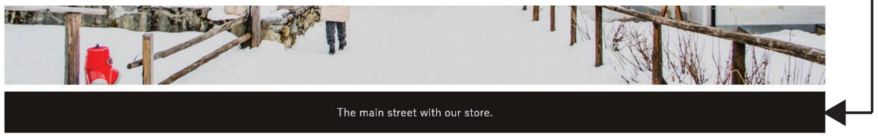


```
document.addEventListener("DOMContentLoaded", function() {

    let thumbs = document.querySelectorAll(".shop-small");
    let bigPic = document.querySelector(".shop-large");

    let captionsJp = ["当店のあるメインストリート。", "ゆっくりコーヒーもお楽しみいただけます。", "冬の夜の大通り。", "リゾートビレッジの屋上からの風景。"]
    let captionsEn = ["The main street with our store.", "Enjoy a relaxing coffee.", "The main street at night.", "View of the resort villa"]
    let lang = document.getElementsByTagName('html')[0].getAttribute('lang');

    thumbs.forEach(function(element) {
        element.addEventListener("click", function(event) {

            for (let i = 0; i < thumbs.length; i++) {
                thumbs[i].classList.remove("selected")
            }
            this.classList.add("selected");

            let captions;
            if (lang == "ja") {
                captions = captionsJp
            } else if (lang == "en") {
                captions = captionsEn
            } else {
                return false;
            }

            let clickedElemId = event.target.id;

            changeSource(clickedElemId, bigPic, captions);
        })
    })

    function changeSource(clickedElemId, bigPicElem, captions) {
        clickedElemId = clickedElemId.slice(-1);
        let newSrc = bigPicElem.src.slice(0, -5) + clickedElemId + ".jpg";
        bigPicElem.src = newSrc;

        let figCap = document.querySelector(".large-figcap");
        figCap.innerText = captions[clickedElemId -1];
    }
});
```

Simple JS changes the image.

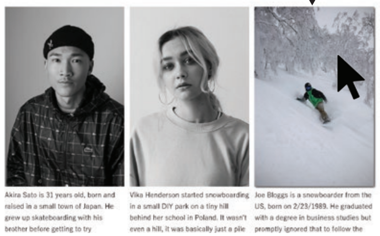


当店のあるメインストリート。



The main street with our store.

The user can change the language between Japanese or English at any time. The figcaptions are also translated and inserted into the page using JavaScript.



Akira Sato is 31 years old, born and raised in a small town of Japan. He grew up skateboarding with his brother before getting to try

Vika Henderson started snowboarding in a small DIY park on a tiny hill behind her school in Poland. It wasn't even a hill, it was basically just a pile

Joe Bloggs is a snowboarder from the US, born on 2/23/1989. He graduated with a degree in business studies but promptly ignored that to follow the

I implemented a CSS only card flipper that introduces the shop staff. The CSS transform and backface-visibility properties enabled this particular effect. However hover discoverability on mobile is limited therefore I also added a small notification that appears on mobile using CSS only.

CSS::before

Glampia

Waseda IT Group Project

Role: Lead Coder

Time: 10 days, 1 day client consultation, 1 day material collection, 4 days feature experimentation and wireframe, 3 days coding, 1 day bug fixing and beauty adjustment

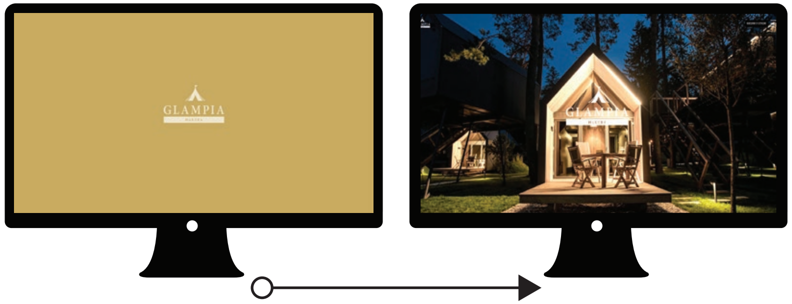
Site Content： Top page and glamping introduction, rooms page, food page, access page, contact page.

Aim: Our client requested a website to advertise their Glamping (Glamour + Camping) business. They main aim of the site was to increase awareness and client interest in this activity as well as provide customers with access information about the specific new Glamping location.

Technologies: HTML, CSS, JavaScript, jQuery.
Our goal was to use these technologies to create a strongly visual site to best show off the Glamping experience. As the lead coder I wanted to create a site using the animation features of jQuery that give the user a pleasant experience.

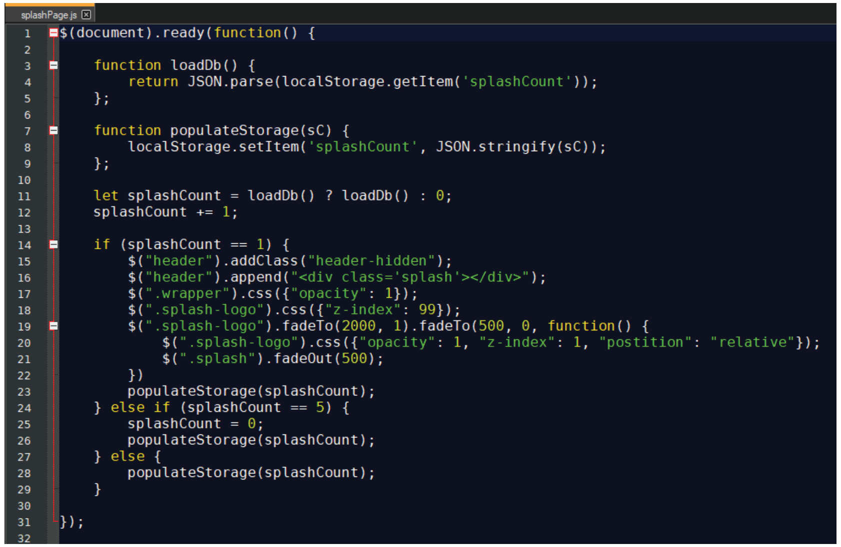
Tools: Sakura editor, Notepad++, Illustrator, Photoshop

https://samuel-bowles.github.io/glampia/



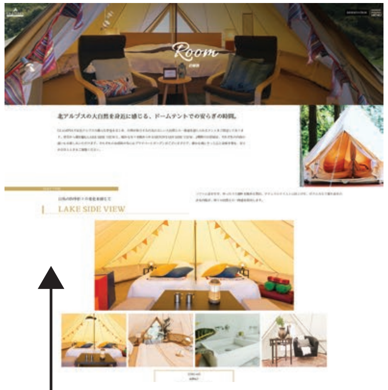
Fade from splashscreen to slideshow using jQuery & JavaScript

When the user first visits the site the company logo displays as a splashscreen before fading to a slide show with images of the campsite. To achieve this I wrote a small jQuery script that modifies the CSS classes of the splashscreen to fade in and out. I also included a tracker in local storage that prevents the screen showing every time the user visits the page, as this would disrupt the usability of the site.



```
$(document).ready(function() {

    function loadDb() {
        return JSON.parse(localStorage.getItem('splashCount'));
    };

    function populateStorage(sC) {
        localStorage.setItem('splashCount', JSON.stringify(sC));
    };

    let splashCount = loadDb() ? loadDb() : 0;
    splashCount += 1;

    if (splashCount == 1) {
        $("header").addClass("header-hidden");
        $("header").append("<div class='splash'></div>");
        $(".wrapper").css({"opacity": 1});
        $(".splash-logo").css({"z-index": 99});
        $(".splash-logo").fadeTo(2000, 1).fadeTo(500, 0, function() {
            $(".splash-logo").css({"opacity": 1, "z-index": 1, "postition": "relative"});
            $(".splash").fadeOut(500);
        })
        populateStorage(splashCount);
    } else if (splashCount == 5) {
        splashCount = 0;
        populateStorage(splashCount);
    } else {
        populateStorage(splashCount);
    }

});
```

before

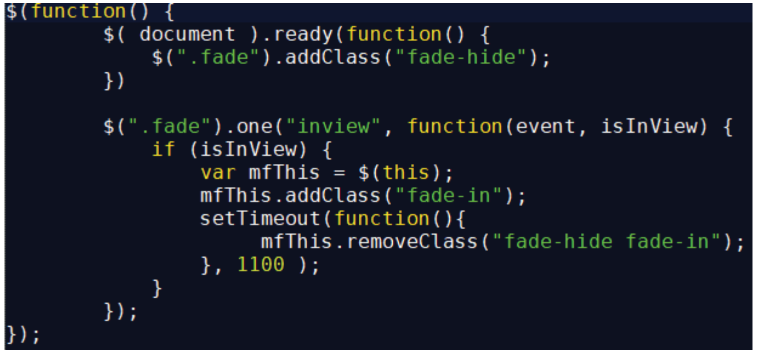


after

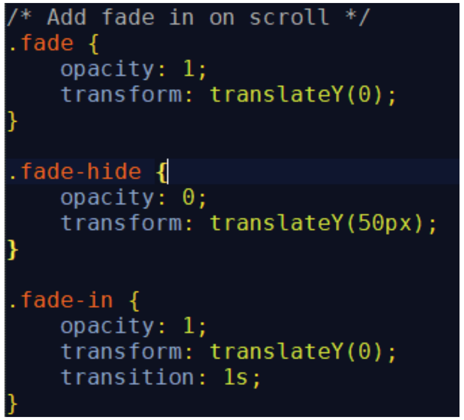
jQuery

To implement a fade in effect on any element on the page I used a small plugin called inview (https://github.com/protonet/jquery.inview) that calculates when a certain element is within view of the viewport or not. I wrote a small script that adds or removes a CSS class to transform the element on the Y axis and modify its opacity.

I set up the script and CSS classes so that the effect can be applied to any element simply by applying the .fade class to the element HTML. Setting up the script and CSS this way also ensures that the page will display all information should JavaScript be disabled.

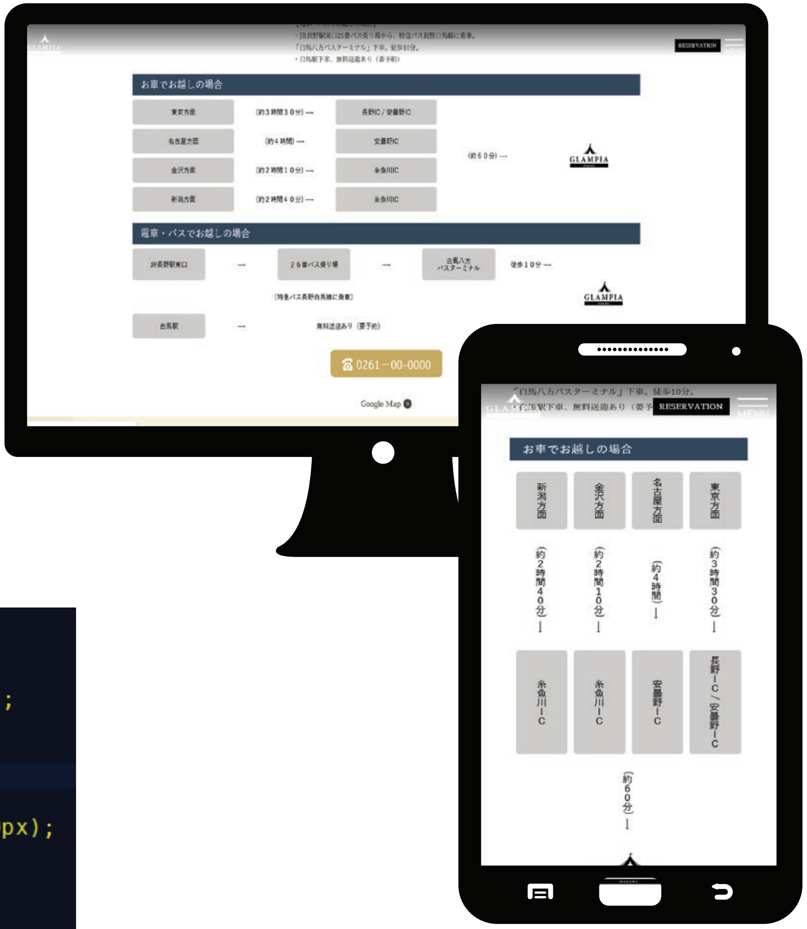


```
$(function() {
        $( document ).ready(function() {
            $(".fade").addClass("fade-hide");
        })

        $(".fade").one("inview", function(event, isInView) {
            if (isInView) {
                var mfThis = $(this);
                mfThis.addClass("fade-in");
                setTimeout(function(){
                     mfThis.removeClass("fade-hide fade-in");
                }, 1100 );
            }
        });
});
```



```
/* Add fade in on scroll */
.fade {
    opacity: 1;
    transform: translateY(0);
}

.fade-hide {
    opacity: 0;
    transform: translateY(50px);
}

.fade-in {
    opacity: 1;
    transform: translateY(0);
    transition: 1s;
}
```

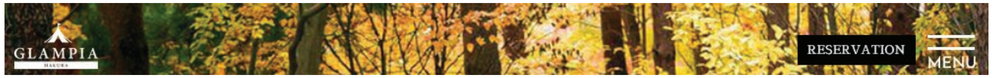
Our access page originally used static image route-maps. However, they were not responsive or accessible to screen readers and search engines. Therefore I implemented a fully responsive and accesible version in HTML and CSS only. The text also changes direction to improve readability on mobile displays.



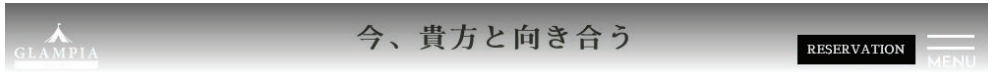
Menu Bar Visibility

Another subtle but important usability aspect of the site that I worked on was the visibility of the top menu. Our team designer wanted to create a strong impact with the main visual at the top of each page and so it was necessary to hide the top menu bar. However, as the font and logo are white they could become “invisible” as the user scrolled down the page. To solve this I implemented a small piece of JavaScript that fills in the background colour of the top menu bar when the user has scrolled past the main visual. Since usability is important for the main menu I also included a CSS fallback solution that will color the menu bar should JavaScript be disabled.

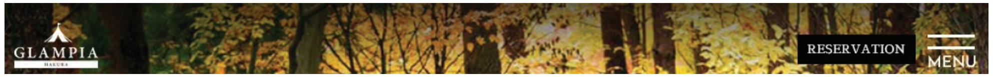
Top bar hidden JavaScript ON



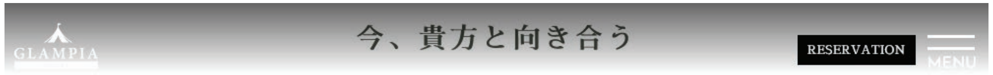
Top bar visible JavaScript ON

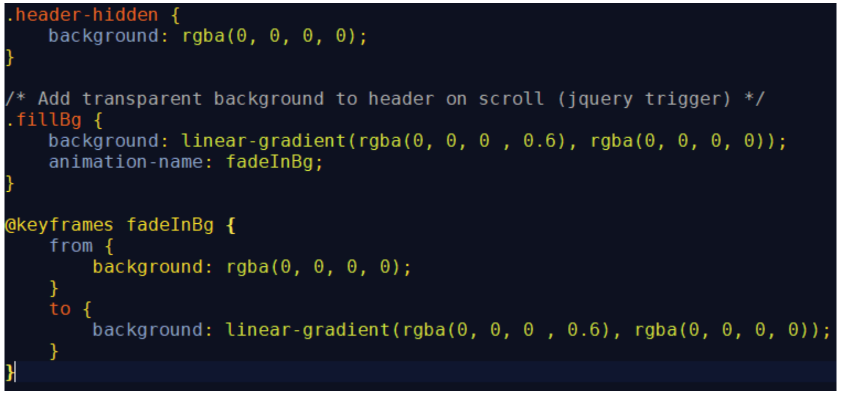


Top bar visible JavaScript OFF



Top bar visible JavaScript OFF

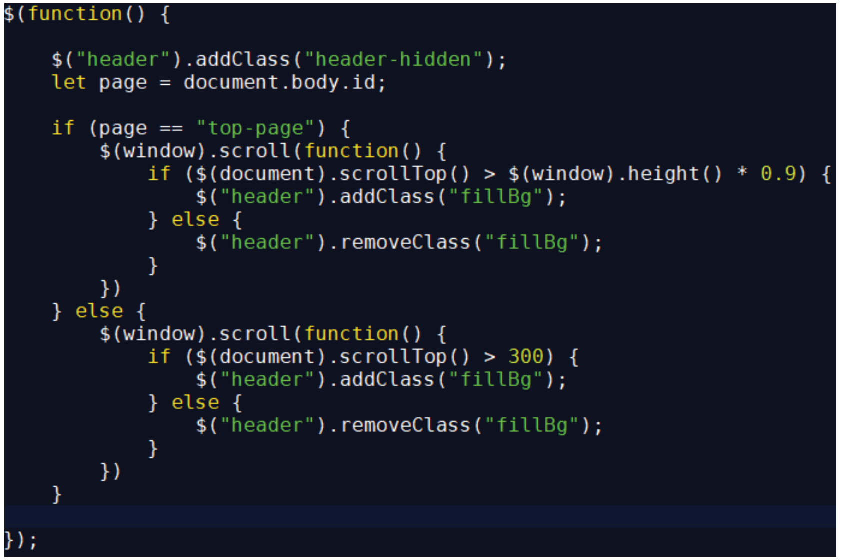




```css
.header-hidden {
    background: rgba(0, 0, 0, 0);
}

/* Add transparent background to header on scroll (jquery trigger) */
.fillBg {
    background: linear-gradient(rgba(0, 0, 0 , 0.6), rgba(0, 0, 0, 0));
    animation-name: fadeInBg;
}

@keyframes fadeInBg {
    from {
        background: rgba(0, 0, 0, 0);
    }
    to {
        background: linear-gradient(rgba(0, 0, 0 , 0.6), rgba(0, 0, 0, 0));
    }
}
```

CSS keyframes animation allow the background to be filled in when triggered by JavaScript and jQuery.

The JavaScript calculates the scroll position from the top of the window. Since the height of the images is known we can trigger the effect slightly before the user scolls past the image so that the fade in is less noticeable.



```javascript
$(function() {

    $("header").addClass("header-hidden");
    let page = document.body.id;

    if (page == "top-page") {
        $(window).scroll(function() {
            if ($(document).scrollTop() > $(window).height() * 0.9) {
                $("header").addClass("fillBg");
            } else {
                $("header").removeClass("fillBg");
            }
        })
    } else {
        $(window).scroll(function() {
            if ($(document).scrollTop() > 300) {
                $("header").addClass("fillBg");
            } else {
                $("header").removeClass("fillBg");
            }
        })
    }

});
```

Hotel

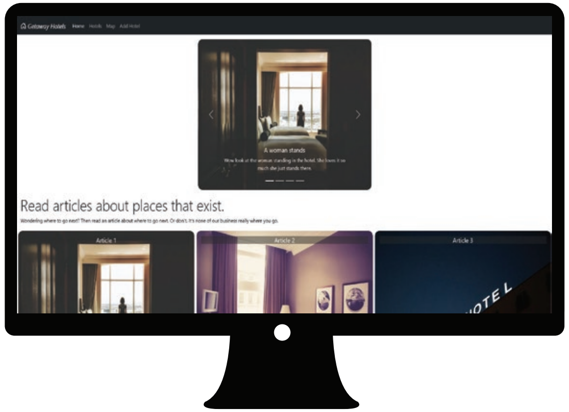
Personal Project

Time: 15 days

Aim: To experiment with and learn new technologies including Bootstrap and Google Firebase and Google Maps API.

Technologies: HTML, CSS, JavaScript, Bootstrap 5, Google Firebase, Google Maps API, Stripe Payments

Tools: VS Code, Google Firebase



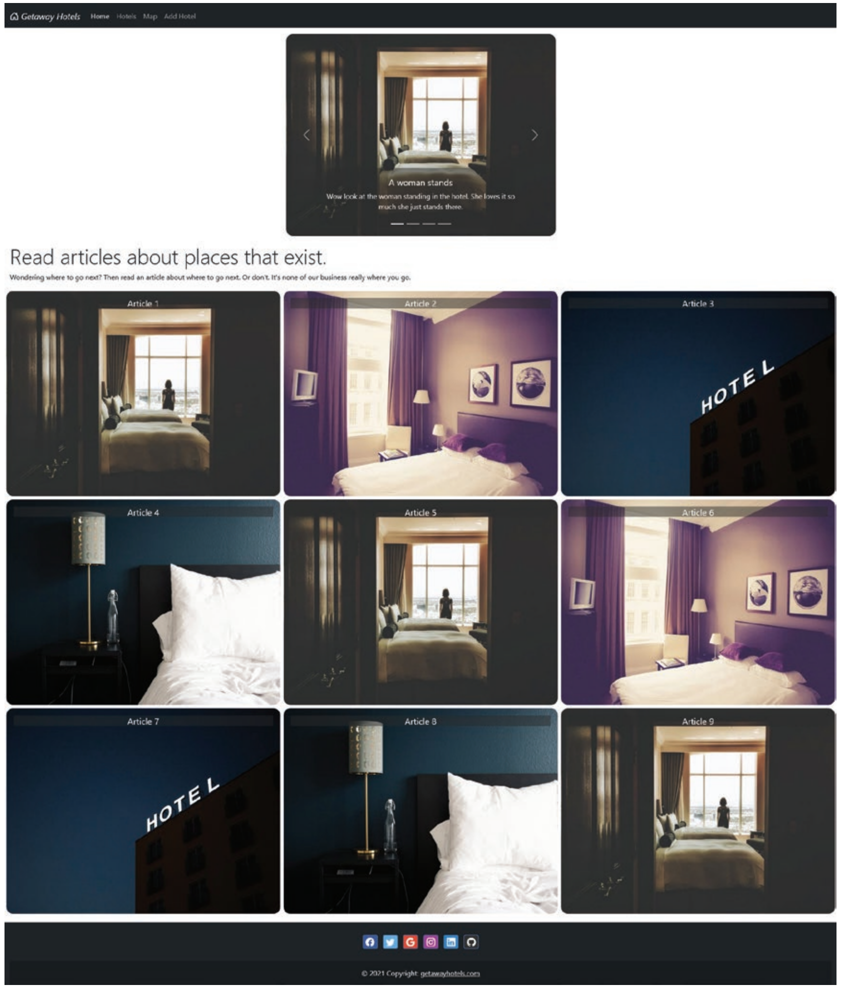
A woman stands

Wow look at the woman standing in the hotel. She loves it so much she just stands there.

Read articles about places that exist.

Wondering where to go next? Then read an article about where to go next. Or don't. It's none of our business really where you go.

https://samuel-bowles.github.io/hotel-website/



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Wondering where to go next? Then read an article about where to go next. Or don't. It's none of our business really where you go.

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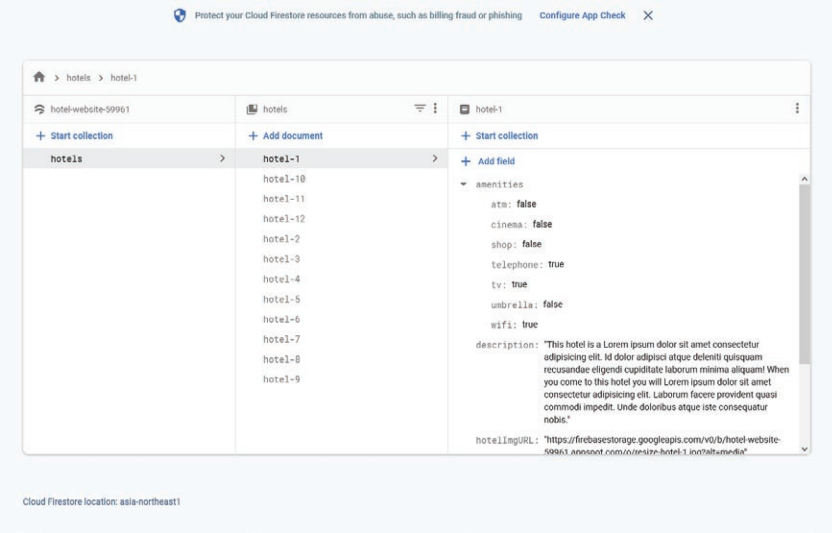
Using Bootstrap I was able to quickly implement a responsive grid like layout including a responsive hamburger style menu. Bootstrap also allows easy insertion of social media icons into webpages.



Protect your Cloud Firestore resources from abuse, such as billing fraud or phishing   Configure App Check

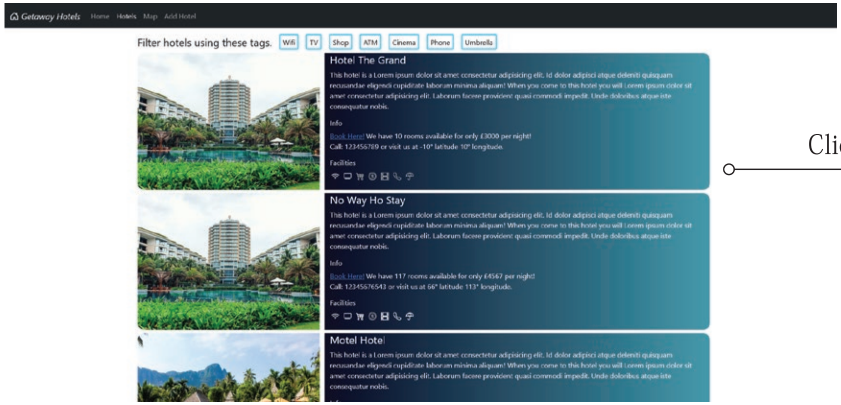
hotels > hotel-1

hotel-website-59961	hotels	hotel-1
+ Start collection	+ Add document	+ Start collection
hotels	hotel-1	+ Add field
	hotel-10	amenities
	hotel-11	atm: false
	hotel-12	cinema: false
	hotel-2	shop: false
	hotel-3	telephone: true
	hotel-4	tv: true
	hotel-5	umbrella: false
	hotel-6	wifi: true
	hotel-7	description: "This hotel is a Lorem ipsum dolor sit amet consectetur adipisicing elit. Id dolor adipisci atque deleniti quisquam recusandae eligendi cupiditate laborum minima aliquam! When you come to this hotel you will Lorem ipsum dolor sit amet consectetur adipisicing elit. Laborum facere provident quasi commodi impedit. Unde doloribus atque iste consequatur nobis."
	hotel-8	hotelImgURL: "https://firebasestorage.googleapis.com/v0/b/hotel-website-59961.appspot.com/o/resize-hotel-1.jpg?alt=media"
	hotel-9	

Cloud Firestore location: asia-northeast1

I used Google Firebase to host data about the hotels. While the example data set I used is small it could easily be expanded to include different collections that could be fetched via the API using Javascript.

Here the JavaScript fetches the data on the hotels by using the Firebase API. It then feeds that data into a template I created using Bootstrap for styles, and then inserts the entire element into the page. The user can filter the hotels on the client side by selecting different amenity tags.



Filter hotels using these tags. Wifi TV Shop ATM Cinema Phone Umbrella

Hotel The Grand

This hotel is a Lorem ipsum dolor sit amet consectetur adipisicing elit. Id dolor adipisci atque deleniti quisquam recusandae eligendi cupiditate laborum minima aliquam! When you come to this hotel you will Lorem ipsum dolor sit amet consectetur adipisicing elit. Laborum facere provident quasi commodi impedit. Unde doloribus atque iste consequatur nobis.

Info

Book Here! We have 10 rooms available for only £3000 per night!
Call: 123456789 or visit us at -10° latitude 10° longitude.

Facilities

No Way Ho Stay

This hotel is a Lorem ipsum dolor sit amet consectetur adipisicing elit. Id dolor adipisci atque deleniti quisquam recusandae eligendi cupiditate laborum minima aliquam! When you come to this hotel you will Lorem ipsum dolor sit amet consectetur adipisicing elit. Laborum facere provident quasi commodi impedit. Unde doloribus atque iste consequatur nobis.

Info

Book Here! We have 117 rooms available for only £4567 per night!
Call: 12345576543 or visit us at 66° latitude 113° longitude.

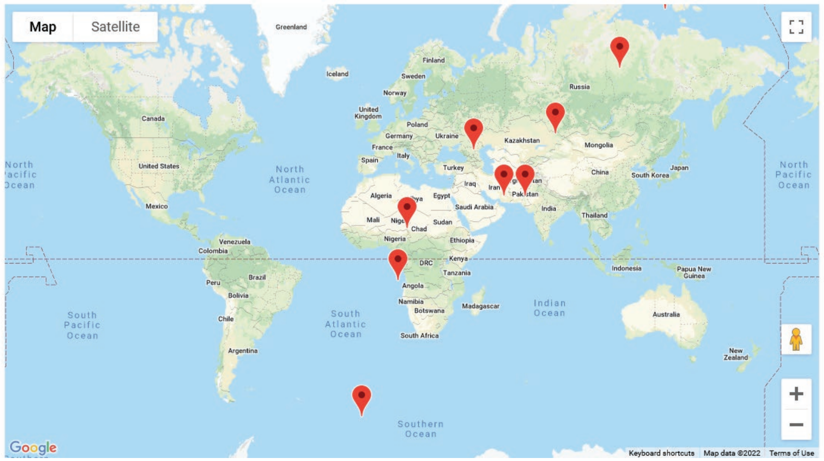
Facilities

Motel Hotel

This hotel is a Lorem ipsum dolor sit amet consectetur adipisicing elit. Id dolor adipisci atque deleniti quisquam recusandae eligendi cupiditate laborum minima aliquam! When you come to this hotel you will Lorem ipsum dolor sit amet consectetur adipisicing elit. Laborum facere provident quasi commodi impedit. Unde doloribus atque iste consequatur nobis.

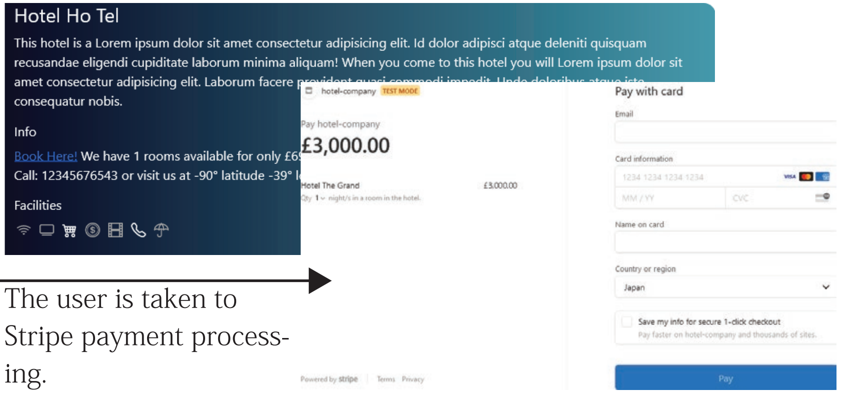
Click on “Book Here!”

Click on a location for more information about the hotel.



The same dataset can be used to generate a location map of the hotels on Google Maps using the Google Maps API. This provides the user with the ability to select hotels by location, and they can even click on the map icons to display information about each hotel.

I also included a simple one time payment processing ability using Stripes checkout service. This allows for secure payments without having to run the payment infrastructure on the website itself, with all the security and privacy concerns that come with it.



Hotel Ho Tel

This hotel is a Lorem ipsum dolor sit amet consectetur adipisicing elit. Id dolor adipisci atque deleniti quisquam recusandae eligendi cupiditate laborum minima aliquam! When you come to this hotel you will Lorem ipsum dolor sit amet consectetur adipisicing elit. Laborum facere provident quasi commodi impedit. Unde doloribus atque iste consequatur nobis.

Info

Book Here! We have 1 rooms available for only £6
Call: 12345676543 or visit us at -90° latitude -39° l

Facilities

hotel-company TEST MODE

Pay hotel-company

£3,000.00

Hotel The Grand	£3,000.00
Qty 1 night/s in a room in the hotel.	

Pay with card

Email

Card information: 1234 1234 1234 1234 | MM / YY | CVC

Name on card

Country or region: Japan

□ Save my info for secure 1-click checkout
Pay faster on hotel-company and thousands of sites.

Pay

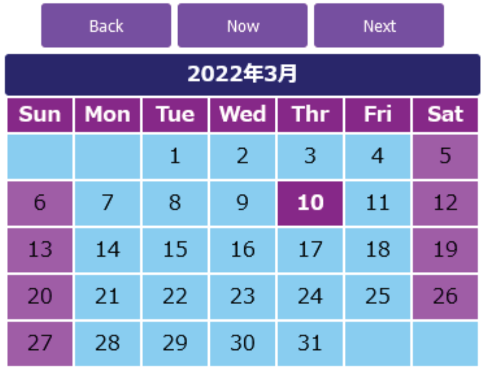
Powered by stripe | Terms Privacy

The user is taken to Stripe payment processing.

Code Snippets

Here I am including a few code snippets of parts I created for testing purposes but which did not eventually make it into a finished web

JavaScript Calendar

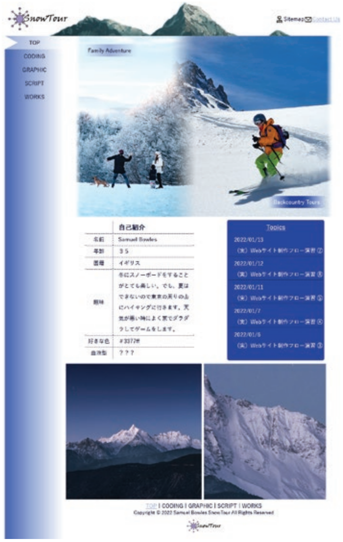


2022年3月

Sun	Mon	Tue	Wed	Thr	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

This is a simple JavaScript calendar created using the Date object. The user can clickforwards and backwards through the calendar as well as returning to the current month.

jQuery image enlarger
This image enlarger was based off of code in jQuery Standard Design Lesson by Yukie Kanda, however I extended the code to work within a responsive design page as opposed to the fixed layout of the book.



	自己紹介
名前	Samuel Bowles
年齢	3 5
国籍	イギリス
趣味	冬にスノーボードをすることがとても楽しい。でも、夏はできないので東京の周りの山にハイキングに行きます。天気が悪い時によく家でダラダラしてゲームをします。
好きな色	#3372ff
血液型	? ? ?

Topics
2022/01/13
（実）Webサイト制作フロー演習 ⑦
2022/01/12
（実）Webサイト制作フロー演習 ⑥
2022/01/11
（実）Webサイト制作フロー演習 ⑤
2022/01/7
（実）Webサイト制作フロー演習 ④
2022/01/6
（実）Webサイト制作フロー演習 ③

TOP | CODING | GRAPHIC | SCRIPT | WORKS
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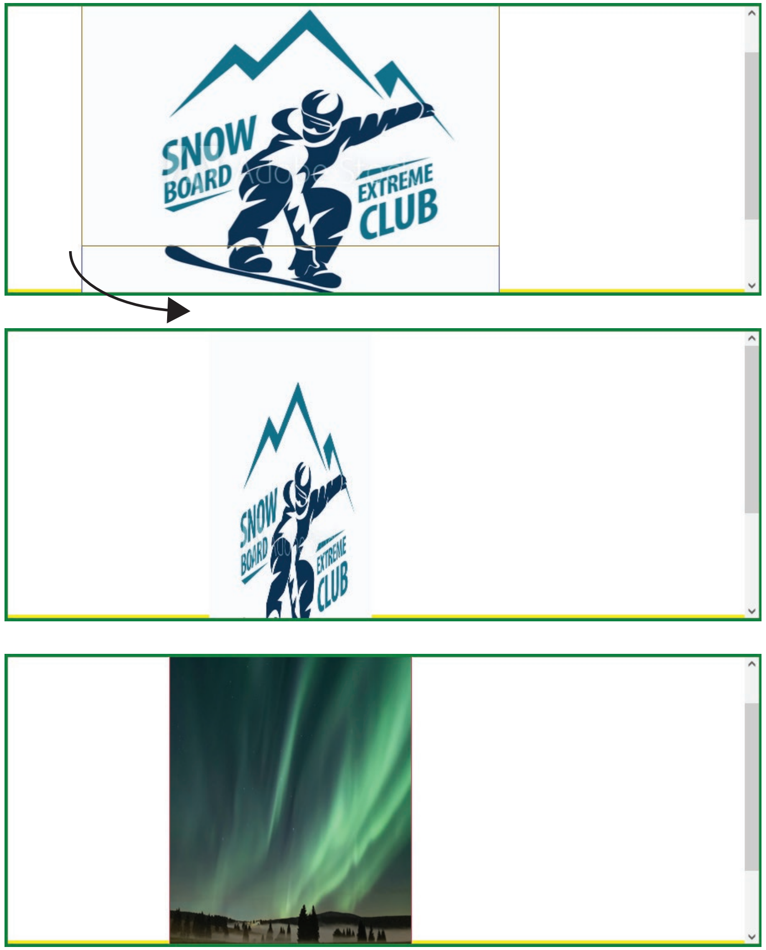
I created a CSS only automatic revolving card with separate images on each face. Unfortunately this particular implementation is not responsive so a modified version was used in my Blackhawk Snowboards website.


SNOW
BOARD
EXTREME
CLUB