BLACK CARD

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Black Card
Pristine Private School
UAE Dubai

Our Vision & Mission

The business card has been around since the 17th century in Europe as they were used to announce the impending arrival of prosperous or aristocratic people to their local town or even their home. They were shaped and sized in a similar way to a playing card and became a staple of the elite by the middle of the century. They are so famous that we still use it to this day by everyone wanting to look professional. The issue with business cards is while the physical aspect of having a customisable card is great, they can only share as much information as can fit in there small size, which brings us to what many people claim is a modern a business card, a website. While websites are interesting they do not, and can not provide a viable method of sharing your information in person as telling people a URL is neither is expecting one to visit one mentioned in a business card. We wanted to combine the physical aspect of a business card and the customizability and flexibility of a digital website, which is how we ended up with the black card. A smart NFC card that is capable of sharing a website to any mobile device with a tap. Off course the card is self is only part of the experience. We designed a selection of templates that can be customised by the customers upon purchase, which then automatically gets activated at a designated date by hosting it in a cloud server.
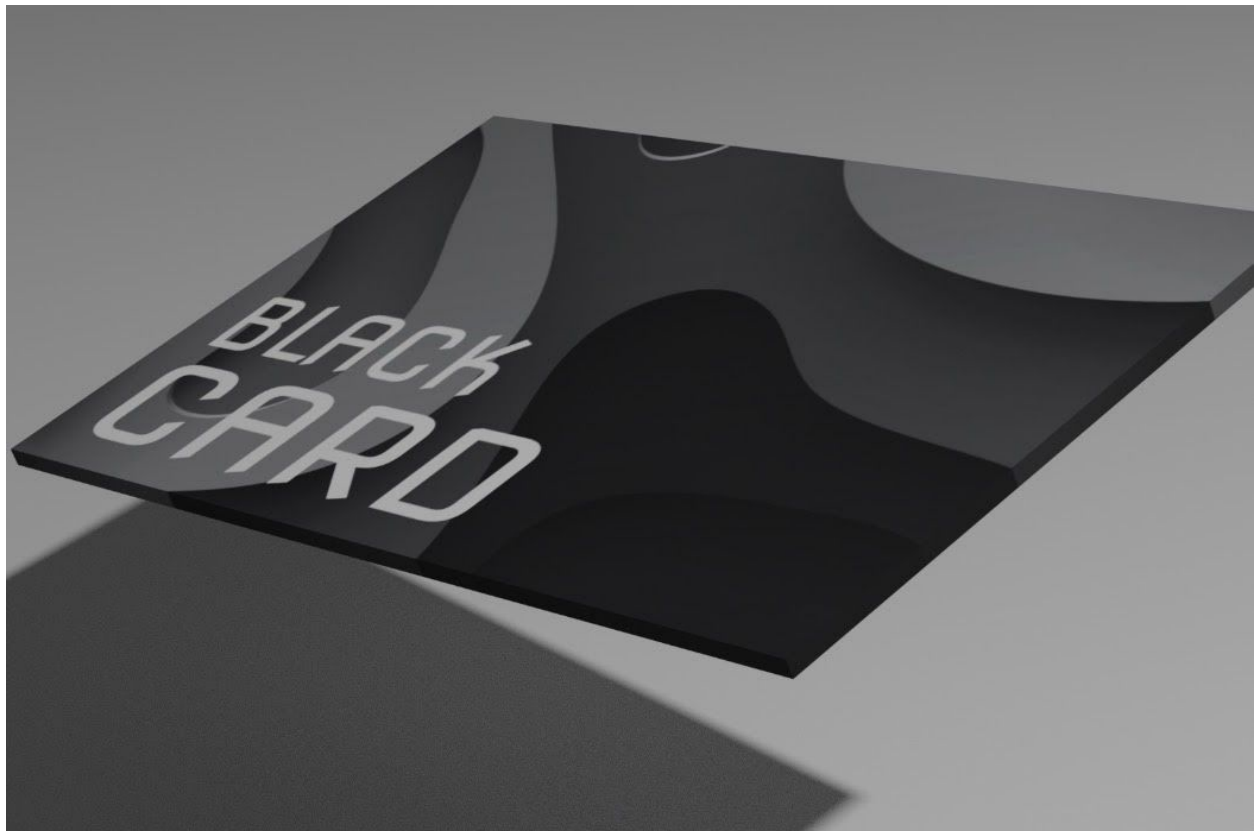
P.E.S.T Analysis

Political

We had to make sure we followed the rules and regulations of the UAE and our school. This was particularly a hurdle during the development of our website. We had originally implemented an online payment solution using <u>stripe</u>. While the implementation was a success in a technical aspect due to age restrictions in the UAE we were unable to create a business bank account to collect the transaction so we had to shift to a COD (Cash on delivery) system for the transaction. We also still need to follow the school's guidelines of advertising at school and if we can distribute our product at school and distribute in a way that adheres to Covid19 guidelines.

Economical

We had to make sure we wanted to sell our product at an affordable and desirable rate and this caused us problems from the start. Our original iteration of the card had an led screen and a microcontroller to control it, our pricing model was to increment the price with different modules that provide different features to the black card. We had to make sure that our cost of manufacturing would be repaid and give us a decent profit margin. While we designed and prepared for manufacturing, due to covid19, since part of the manufacturing was done in China and the boards themselves were made in china when COVID 19 hit and factories started closing down the cost skyrocketed making the manufacturing of our product not feasible. Due to the circumstances, we took the best from the first design and refocused our attention to the software aspect to reduce the cost of manufacturing and increase our profit margins, resulting in our current iteration. We also took advantage of Covid19 with our partnership program allowing other enterprises to partner with the Black Card by providing them online components such as a website and payment systems because many of the enterprises that exist in pristine lack the technical expertise to run an online business.

Social

We had a particular market in mind when creating the black card. Our market, due to school restrictions, was students, of which we focused on senior school. Therefore we needed our product to be appealing to that market segment. To achieve this we conducted a number of private polls with select members and social media polls on our official @black_card_official_ Instagram, we were able to gauge the interests of the market to make more appealing designs. We were able to shift from our first iteration of the black card and then to the second iteration by conducting private surveys with members of our target market and collecting information on what they enjoyed best then focusing on those features for the second version which allowed us to not only create a cheaper product but also a more appealing one.

Technological

Technology has played a big role in our enterprise as our product is the result of research and development, the product itself is a tech product. Due to this, we have overcome numerous problems throughout our development process. When we created the first version of the project, while our core object was externally the same we achieved it in a much different way. Our original iteration was a PCB based design, it had a led screen that could have customised text displayed on it, it would use a custom microcontroller-based off the Arduino line of hobbyist microcontrollers to control the screen. Later on, we added support for modules that expand the capabilities for the card, this was our previous pricing model, to sell the base card then optional modulus. The modulus ranged widely and the card itself was built for expandability from the ground up so that we didn't have to custom design modules and we can use off the shelf Arduino modules. The technology was there but we faced certain issues with finance as Covid19 hit and social issues as we concluded after research that while appealing to the hobbyist groups the market was too niche. But there was one part of the card our polls indicated that people liked, the NFC that allows for the card to share a website or contact info. We took this idea of our product and decided to iterate on the design, first by removing the necessary features and then shifting from a PCB to a traditional plastic card with NFC, to focus on the features that matter. To enhance the NFC feature we created custom software to create and deploy custom static web pages once the customer sends the information they want to include in their website. We developed our custom solution over a period of two months, streamlining the process to make it as seamless as possible for the customers. This also changed our pricing model from modules to web templates. We will continue to iterate our software to increase efficiency and reliability.