



Euclid's Cafe; an Intellectually Brewed Enigma

On November 20, 2022, Stephan Work, a Business Student at the University of Eastern Canada (UEC) and manager of Euclid's Cafe realized he was in somewhat of a predicament. Ian Nusk, a first-year software developer intern, recently joined the Euclid's Cafe team to work on an ordering application for the Cafe. Nusk, a cat enthusiast and proud owner of 13 cats left his laptop open while working on the site and that's when a freakish accident happened. For 20 minutes straight, four of Nusk's cats ran all over his laptop, deleting the original repository and mangling the working issue on Nusk's laptop. Nusk ran to his manager, Work and explained what had happened. With a meeting tomorrow with upper management, Work sipped on his coffee contemplating what he had to do next...

Company Background

Work became manager in the Summer of 2021. Work is an easygoing guy who enjoys wine tasting and dirt biking with his friends. Most importantly he is a huge coffee lover. During the 2020 pandemic, Work became a huge fan of the cafe, eventually working part-time as a barista and eventually becoming the manager pushing Euclid's Cafe to record-breaking earnings (Exhibit 1) in the fall of 2021 thanks to his comprehensive marketing strategies, strong leadership skills, and savvy business acumen.

Euclid's Cafe is located in the Math Faculty building in the heart of campus where they serve all the standard cafe essentials: fresh brewed coffee, homemade sandwiches and pastries, and all kinds of other snacks and refreshments. Every week, the cafe would display their specials, advertising new and highlighted menu items in addition to their popular staples. Both students and faculty members preferred their lightly sweetened coffee brews, Work included, while those who preferred to stay away from caffeine seemed to largely prefer the Chocolate French Vanilla drinks.

Euclid's Cafe is not only a place for people to grab a bite to eat and a drink but also a spot to hang out and study. Euclid's cafe is always filled with students and recently there's been a new slang plaguing the math faculty "EuclidCafePog".

Consumers at Euclid's Cafe

Euclid's Cafe had two main consumer groups, students of UEC and professors of UEC both with distinct behaviours and preferences.

Students

UEC students are quite famous across Canada. They are very well known for being tech-savvy, lively, and party-goers. Little does the rest of Canada know that UEC also loves their coffee. Euclid's Cafe has gone viral several times (Exhibit 1) for its famous anti-hangover coffee and is generally well-regarded amongst the student population at the University of Eastern Canada. UEC students typically order around 10 am and account for 1000 of Euclid's daily orders. The student population, however, only spends \$7.67 on average per order at Euclid's, typically only getting a single drink or snack. The UEC Student population is currently 80,000 undergraduate students and is expected to reach 100,000 by 2030.



Faculty

UEC Faculty is very different from their student counterparts. The average UEC professor is 57 years old and only accounts for 100 of Euclid's daily orders. A recent poll during the last UEC Census noted that UEC professors only check their phones three times a day and that 95% of UEC professors do not take their phones with them on trips that will keep them away from their office for less than 30 minutes such as: grabbing lunch, going to the bathroom, visiting the vending machine. Following a recent strike, the UEC professors union reached an agreement with the institute resulting in a 10% raise annually until their next bargaining date in September 2032. UEC professors unlike students, generally eat meals at Euclids spending on average \$18.89 per order at Euclid's. The 1800 members of the UEC faculty are also very people-oriented, known to enjoy small talk, and absolutely detested the virtual style of learning that took place over the recent Pandemic.

Human Capital

So far during his undergraduate degree in business, Stephan Work has only taken one beginner programming class and ended with a 61 in the course. Recognizing his clear lack of skill he hired Ian Nusk, a first-year Computer science student at UEC as an intern to work on improving the ordering application that customers used to place orders. Nusk was basing his current design off of the site mock-up that Work had provided him, Nusk knew it'd be difficult to exactly meet Work's outline but understood that as long as the general idea was maintained that he could exercise his own personal creativity in designing the site.

Working Issue

Before Nusk was allotted this role, Euclid's Cafe had previously hired a student programmer to construct the app for students to use. However, upon receiving the first half of their agreed payment, the developer seemed to completely abandon the project, cutting off all forms of contact from Euclid and leaving behind a half-completed web page.

Upon further inspection, Work discovered that, to his dismay, the web page wouldn't even render, and appeared to not even be based around the cafe itself. In addition, upon inspection of the code, there appeared to be no external functionality with no actual ordering form.

Additionally, the website seemed to have no relevant styling, and while the assets may have been usable, Work evidently saw that the developer made no use of Euclid's existing mock-ups and assets (Exhibit 3). This appeared to be one of the most glaring visual problems with the program. Fortunately, it seemed that most of the existing HTML elements had classNames, so styling could always be implemented. Regarding the logic, Work wondered if there could be something to calculate the price of multiple items.

Finally, Work could see that the file code was very messy, containing a slew of elements and code that was unnecessary or useless without the non-existent assets that the previous developer left in its wake. Therefore, a lot of cleanup was to be done to remove any nonessential elements and create a cleaner document.



Features

With a better understanding of the trainwreck of an application that Euclid's Cafe was left with, Nusk and Work prepared to start working towards a new online face for the establishment. Nusk considered all the possible implementations that would make the app much more usable.

Competent styling, a functioning shopping cart window, or even perhaps the ability to change the website into a night mode to ease the strain on his eyes. With there being many purchasing apps online, he had plenty of inspiration for building out the site.

Task

Due to the increasing student population and growing faculty earnings within the University of Eastern Canada, Euclid's Upper Management decided it was time to implement a new ordering system to improve the customer experience. They requested a complete overhaul of the current system in place, a comprehensive code review to be done, and a presentation overviewing all the bugs removed and features added to the new application. With only a day to make their presentation, Work and Nusk knew they had a lot of work ahead of them.

Exhibits

Exhibit 1: Monthly Earnings

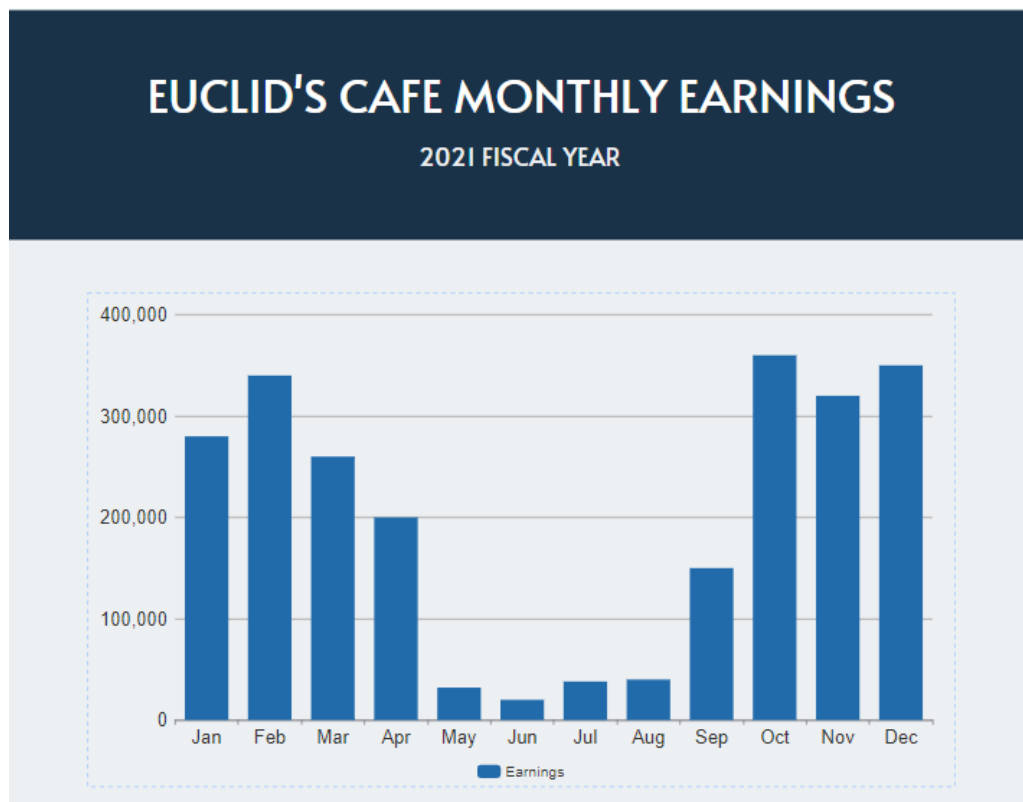




Exhibit 2: Posts from @UECPartylyfe received a combined 130,292 likes & 8059 comments in 2021



UEC Girl Starter Pack



Exhibit 3: Link to UI Design on Figma

<https://www.figma.com/file/BiOP18UuWIK6dPTTo7Lxe1U/Euclid's-Cafe-Mock-Up?node-id=0%3A1&t=HOfiJsiaC1NV2Y4f-1>