Global Coffee Sourcing: Farm to Cup

Website Proposal

Team Members: Anusha Valasapalli, Jeevan Hall

Context

Most of the world's coffee production occurs in tropical regions near the equator. This region between the tropic of Cancer and the tropic of Capricorn, the coffee belt, extends 23.5 degrees north and south of the equator. We learned that coffee is one of the most valuable global commodities traded through my investigation. The genus *Coffea* features two species traded worldwide (*Arabica* and *Robusta*). Most people prefer Arabica due to its superb quality and taste. The Arabica species directly affects the human sensory experience more significantly than Robusta. Robusta coffee features a less potent and more bitter taste. Robusta covers only 35% of world production, while Arabica covers 64%. A third species *Liberica* needs more demand or production internationally.

Purpose

We want to raise awareness about different coffee beans across the globe. Coffee is like wine in that it has many different flavors and textures. We want to introduce and connect the people of LA with various coffee types worldwide. We will address coffee processing methodology and develop relevant access to coffee for everyday people regardless of income. Our website aims to promote fair trade coffee, which originates from reliable local sources untainted by mass production. Global coffee source aims to provide a standardized measurement of quality coffee across the globe while promoting market accessibility for local coffee far mers and linking them with consumers.

Target Audience

Our target audience includes college-aged youth to seniors who are coffee lovers. Our focus is on anyone who has an interest in fair-trade coffee. We want to promote awareness of less popular coffee sources. We want to attract people who are more sensitive to the plight of the farmers producing the coffee from the source. Also, coffee takes a short amount of time to brew, which makes it an easy, immediate pleasure, and convenient as a commodity. Those more inclined to the most natural and traditional methods of coffee will be attracted to our website.

Visitors' Motivation and Goals

Our visitor's motivation and goals include many details, including gaining knowledge about various coffee processing methods, connecting with local farmers across the globe, purchasing home brew kits, buying fresh and globally sourced coffee, and understanding the different types of coffee beans and their origin. Our website provides a comprehensive list of various coffee products and the necessary appliances for coffee-making. Visitors can conveniently search for and add products to their cart, with the flexibility to remove them anytime. On clicking the submit button, orders can be placed easily. In addition to this, our website also features a contact form in the "Contact" tab, where local farmers and shopkeepers can communicate with our management team. We store all order history details in the Superbase and customer details in Firebase. We are committed to organizing meetings for improved communication. Our website also offers many informational videos and multimedia to enhance the visitor's learning experience.

Information Requirements

- 1. VS Code
- 2. CSS, HTML, JavaScript (Bootstrap 5)
- 3. Supabase, Firebase

- 4. Ajax
- 5. GitHub for Version Control and WebHosting
- 6. Web Designers (Ansuha Vallasapali, Jeevan Hall)

Web Design & Development

References

- Aloe, R. M. (2020, November 20). *Grading the usefulness of Q-scores for coffee grading*. Medium. https://towardsdatascience.com/grading-the-usefulness-of-q scores-for-coffee-grading-8ff2e8439572
- Bodhi Leaf Coffee Traders. (n.d.). *Ethiopia guji arsosala gr3 natural green*. Bodhi Leaf Coffee Traders. Retrieved February 27, 2023, from https://www.bodhileafcoffee.com/collections/green-coffee/products/ethiopiaguji-arsosala-g3natural-green
- Gebrekidan, M., Redi-Abshiro, M., Chandravanshi, B., Ele, E., Mohammed, A., & Mamo, M. (2019).

 Influence of Altitudes of Coffee Plants on the Alkaloids Contents of Green Coffee Beans. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3407495
- Milton, J. (2020, April 17). The coffee bean belt: What is it & why is it important? Eleven Coffees. https://elevencoffees.com/the-coffee-bean-belt-what-is-it-and-why-isitimportant/#:~:text=The%20coffee%20bean%20belt%20is,are%20perfect%2 0for%20growing%20coffee
- Mintesnot, A., & Dechassa, N. (2018). Effect of Altitude, Shade, and Processing Methods on the Quality and Biochemical Composition of Green Coffee Beans in Ethiopia. *East African Journal of Sciences*, 12(2).
- Prakash, N. S., Combes, M.-C., Dussert, S., Naveen, S., & Lashermes, P. (2005). Analysis of genetic diversity in Indian Robusta coffee genepool (Coffea canephora) in comparison with a representative core collection using SSRs and AFLPs. *Genetic Resources and Crop Evolution*, 52(3), 333–343. https://doi.org/10.1007/s10722-003-2125-5
- Staff, S., Carlsen, Z., Clayton, L., Cadwalader, Z., & Release, P. (2023, February 15). What is natural process coffee? Sprudge Coffee. Retrieved February 27, 2023, from https://sprudge.com/what-isnatural-process-coffee-185926.html
- Sridevi, V., & Giridhar, P. (2015). Variations in Diterpenes-Cafestol and Kahweol Content in Beans of Robusta Coffee Grown at Different Altitudes. *Proceedings of the National Academy of Sciences, India Section B: Biological Sciences*, 86(2), 291–297. https://doi.org/10.1007/s40011-014-0429-1
- Tsegay, G., Redi-Abshiro, M., Chandravanshi, B. S., Ele, E., Mohammed, A. M., & Mamo, H. (2020). Effect of altitude of coffee plants on the composition of fatty acidsofgreencoffeebeans. *BMCChemistry*, 14(1). https://doi.org/10.1186/s13065 -020-00688-0
- Uganda rwenzori kisinga. Hometown. (n.d.). Retrieved February 27, 2023, from https://hometown.shopping/shop/the-coffee-ride-coffee-roasting-co/uganda-rwenzorikisinga-?attribute_pa_size=12oz&gclid=EAIaIQobChMIv_WygYGy_QIVVxXUAR3JowFoEAQYASABEgIE7fD_BwE

Unknown. (n.d.). Araku Valley India Organic Robusta, green unroasted coffee beans. Len's Coffee LLC. Retrieved February 27, 2023, from https://lenscoffee.com/araku-valley-india-organic-robusta-green-unroastedcoffee-beans/

YouTube. (2015, October 20). *Ethiopian Coffee Ceremony*. YouTube. Retrieved February 27, 2023, from https://www.youtube.com/watch?v=TKT5MloFYcQ