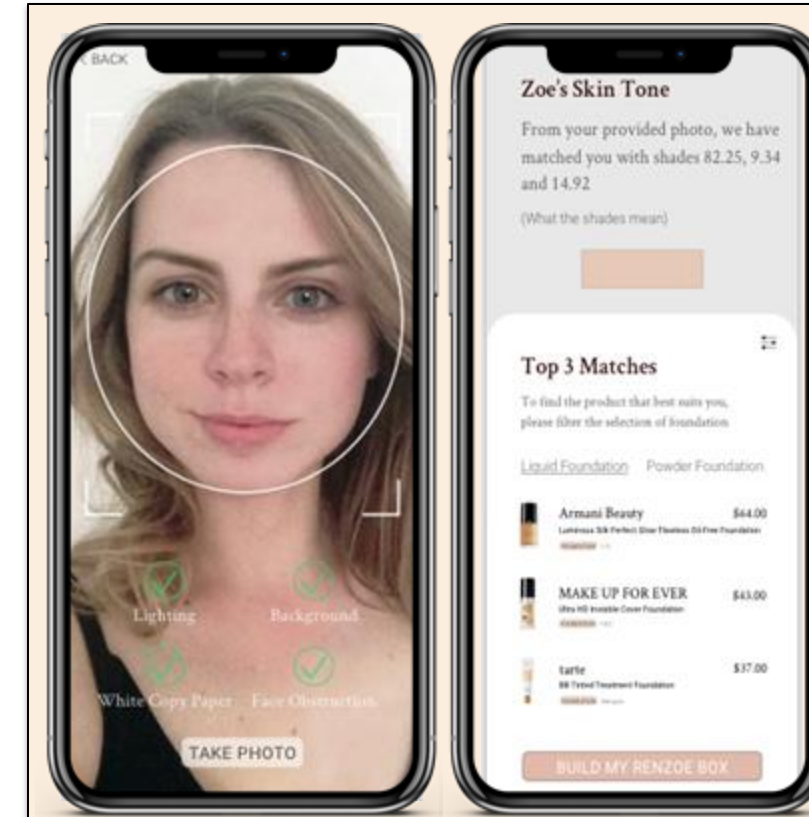


Company Introduction

The concept for Renzoe Box came to Founder & CEO René Graham on a train ride to work. While using her cluttered makeup bag to get ready, the train jolted and her products went everywhere. With her favorite bronzer now in pieces, René thought to herself, "There must be a better way."

Renzoe Box implements computer vision, machine learning, natural language processing, web scraping, and more to recommend the best products for its users.

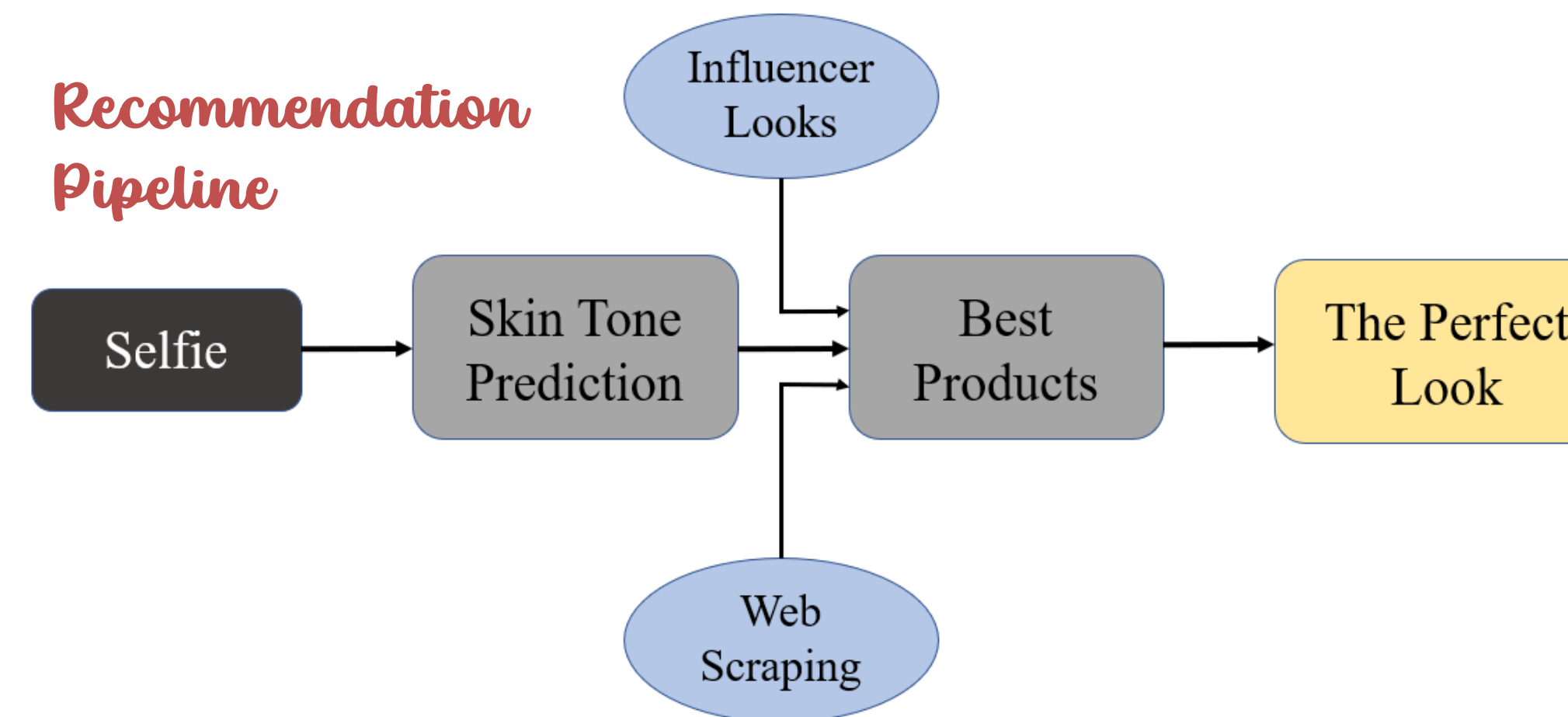
Renzoe Box is where beauty meets brains.



RZM – RenzoeMatch

RenzoeMatch takes a user's predicted skin tone and finds products with the correct foundation shade. It finds popular looks from makeup influencers and follows current makeup trends.

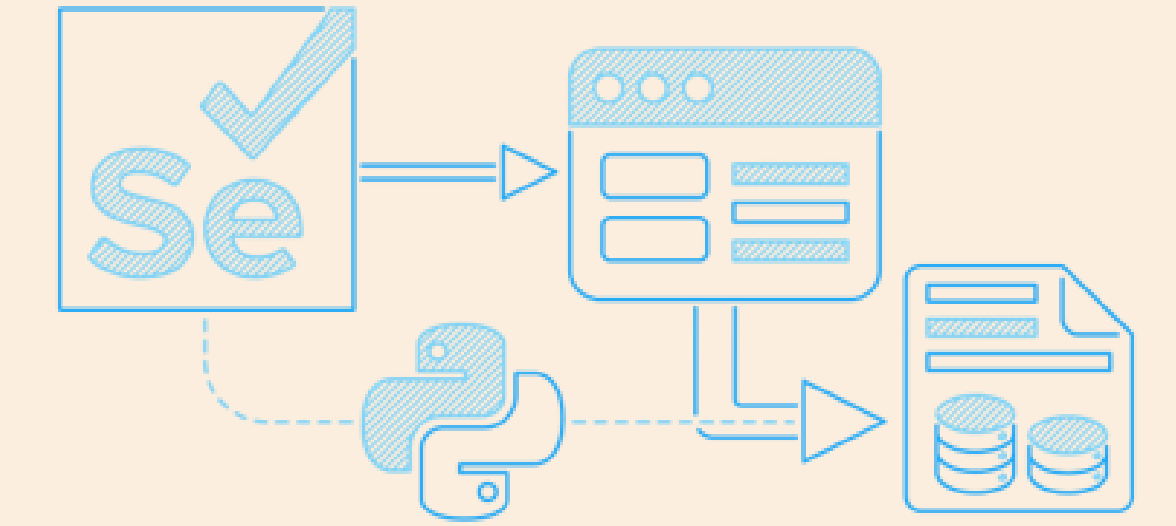
Recommendation Pipeline



Next Steps

Web Scraping

- Further improve the accuracy of scrapers
- Utilize the machine learning model to create more complex and accurate scrapers

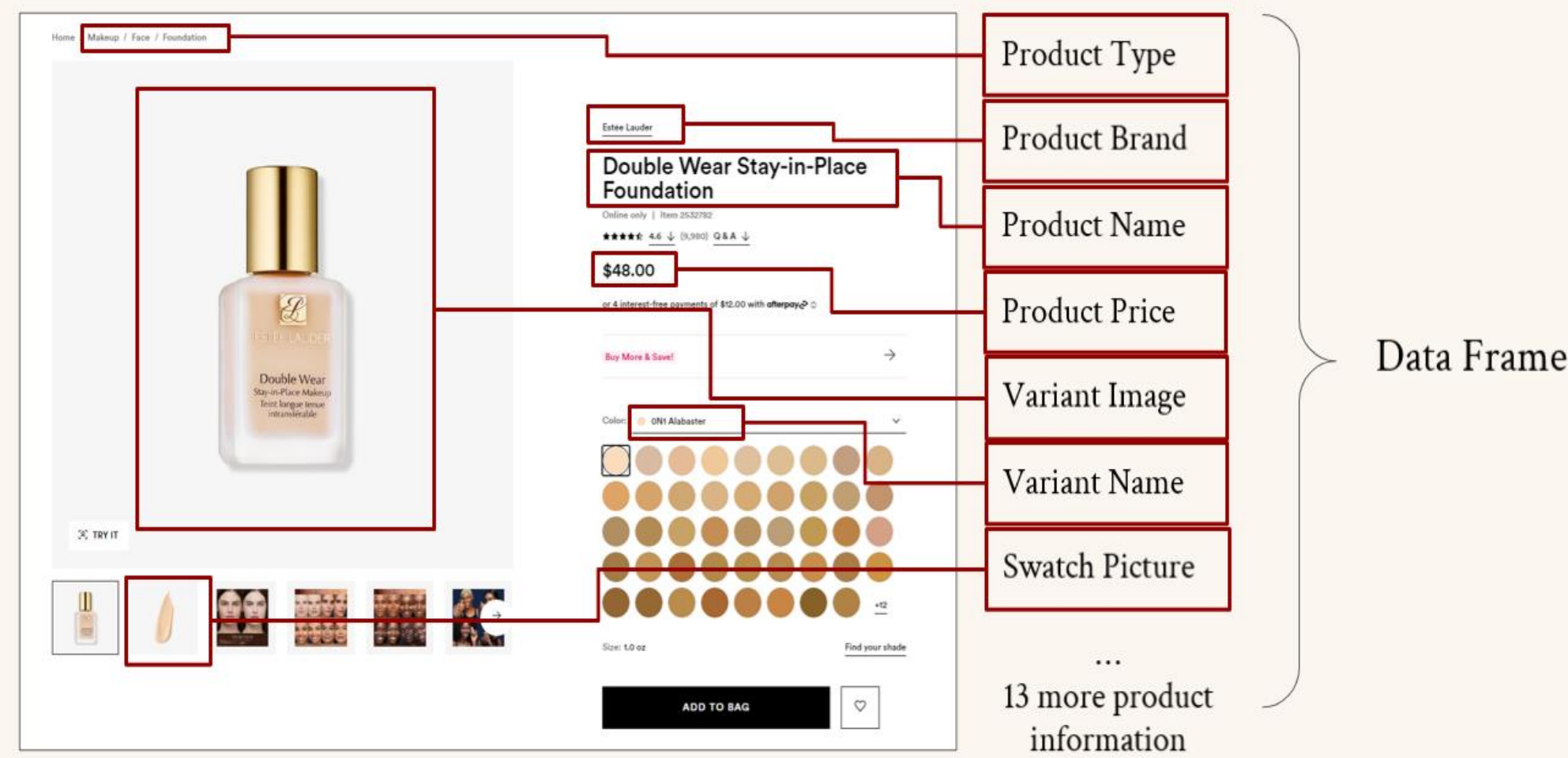


Computer Vision

- Improve the machine learning algorithm to better detect facial features
- Collect more data to train selfie classifiers and further improve its accuracy

Web Scraping

- Created scrapers for large websites like Ulta and Sephorad using Python and BeautifulSoup
- Utilized Selenium WebDriver for Dynamic Websites
- Utilized NLP models to achieve data consistency across similar products on different websites.



Computer Vision

Computer vision is essential for Renzoe Box's recommendation system. It extracts user's skin tone and color balancing while checking the following:

- Facial obstructions such as masks, hair, and glasses.
- Poor lighting conditions such as dim lights, sharp highlights, and shadows

Possible Obstructions



What have we accomplished?

- Collected data by taking a variety of selfies to train selfie classifier machine learning programs
- Created a more precise selfie classifier after training the program
- Documented results in numpy files

Conclusion

The ultimate goal of Renzoe Box is to become the pioneer of tech in beauty and serve as an accelerator model for innovation with technology.

Our next steps for this project will be to improve the accuracy of our developed algorithm and to implement a one of its kind user personalized product experience.



Acknowledgements

We would like to express our gratitude to Rene and Christine for guiding our project implementation with industry knowledge and personal wisdom.

Thank you to Wenru and Shashank for facilitating the program and investing in each student on the team.