


Envitas Project Proposal SneakerX

Jeffrey Taylor, Topher Roebuck, Cholyeon
Cho, Gabriel Mendonca, Mike Yu

A dark blue diagonal gradient bar that starts from the bottom left corner and extends towards the top right corner, covering the lower half of the slide.

Our Team



Jeffrey Taylor



Cholyeon Cho



Topher Roebuck

Our Team



Gabriel Munhoz



Mike Yu

Elevator Pitch



SneakerX

SneakerX is a revolutionary Web Application that allows sneaker enthusiasts to **visualize** sneaker data and price predictions like never before. With the help of our own customly developed ML sneaker price prediction model, we allow sneakerheads to get reliable future valuation insights for any specific sneaker.

Additionally, users will also have access to an LLM powered personalized AI chatbot that can answer any question related to sneakers or price trends, as it will have access to all of our data and insights. That, coupled with our intuitive minimalistic data visualization UI will ensure users can also visualize all the current data and trends for any given sneaker.

Displayed Need and Targeted Audience

If need is too big and targeted audience too large:

There are already competitive models that are more advanced and more detailed.

-> **Stock predictions**

Therefore, want to have an adequate amount of audience with conceivable need

-> **Specialize in the area of sneakers!**

Specifically,

Audience that do not have resources to implement advanced methodology or in a market where methodology is not implemented

-> Second hand dealers make considerable profit by reselling sneakers. Prediction of sneaker prices with continuous updates can give benefit to them.

-> To assist users in predicting pricing given many variable factors that might've been used in the business decision that users may not be knowledgeable of

Benefit to Users

Show users the estimated market value of the price of the shoe they want to buy.

Understanding our analysis and Valuation:

Users can utilize our chatbot to understand the factors that contributed to the makeup of the valuation of the item (shoe) and make sense of the visual projections.

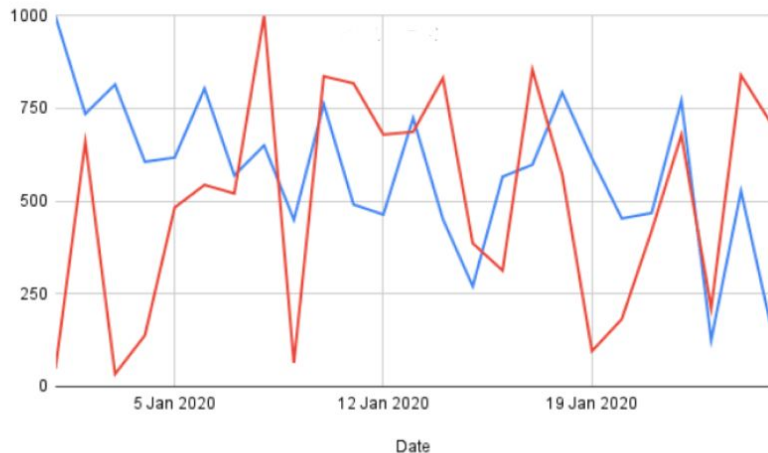
We utilize machine learning and mathematical models /probabilistic factors to help the user make predictions if prices will fall or rise within a certain time frame.

Clean and up-to-date data for users:

Utilizing the best data aggregation tactics (web scraping) and engineering data pipelines we can provide the most up to data to our algorithms which is beneficial to our users so they can make their own assessment of the value of the shoes with their cost analysis.



Dashboard



Question Prompt

Question Prompt

Question Prompt

Ask me about shoes!

New Releases



\$160

Air Jordan 4
Retro Reimagined



\$200

Air Jordan 1
High 85



\$85

Nike SB Vertebrae
Black Gum



\$85

Nike SB Vertebrae
Persian Violet

Tools and Technologies

Figma for design

Thesneakerdatabase.com for database api and design idea

Trello for scrum management

Python for backend model construction and API plugin

Llama2 or GPT for chatbot interactivity

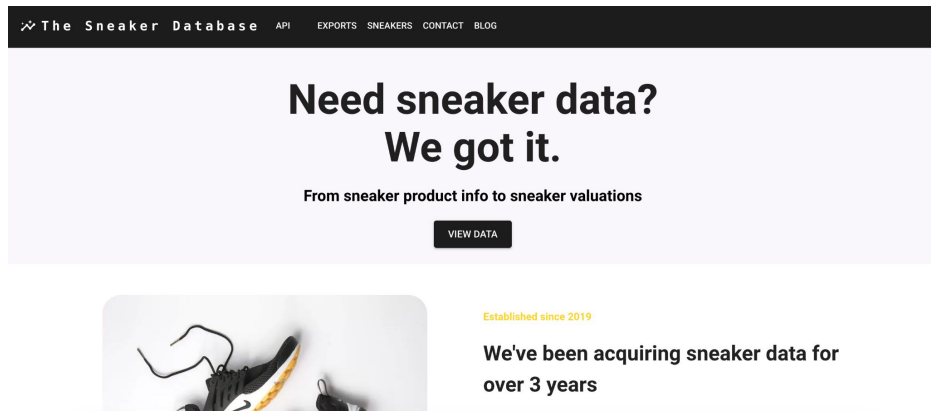
Builder.io for frontend react and design coding

Discord for team communication

Github + Git for version control

Likely a predictive neural network model (specifics will depend on model performance)

Interactive dataviz python package (specifics tbd)



The screenshot shows the homepage of 'The Sneaker Database'. The header is a dark bar with the site name and navigation links: API, EXPORTS, SNEAKERS, CONTACT, and BLOG. The main content area has a light purple background with the headline 'Need sneaker data? We got it.' followed by the tagline 'From sneaker product info to sneaker valuations' and a 'VIEW DATA' button. Below this is a section with an image of sneakers, the text 'Established since 2019', and the statement 'We've been acquiring sneaker data for over 3 years'.

~ The Sneaker Database API EXPORTS SNEAKERS CONTACT BLOG

Need sneaker data?
We got it.

From sneaker product info to sneaker valuations

[VIEW DATA](#)

Established since 2019

We've been acquiring sneaker data for over 3 years

Potential Risks and Unknowns

- 1. Model Performance:** Ensuring the model is actually able to accurately predict sneaker prices overtime could be challenging. The quality of the data and the training technique used will play a huge role here.
- 2. Data Quality and Availability:** An over dependence on third-party APIs and web scraping for data might lead to issues with reliability and access changes.
- 3. AI Chatbot Jailbreaking:** It will be critical to address possible chatbot hallucinations or jailbreaking. Comprehensively defining the behaviour of the assistant and instructing it to resist jailbreak attempts through it's system prompt could be a solution.
- 4. Legal and Regulatory Risks:** Utilizing web scraping and external data sources could pose legal challenges related to copyright and data privacy.