

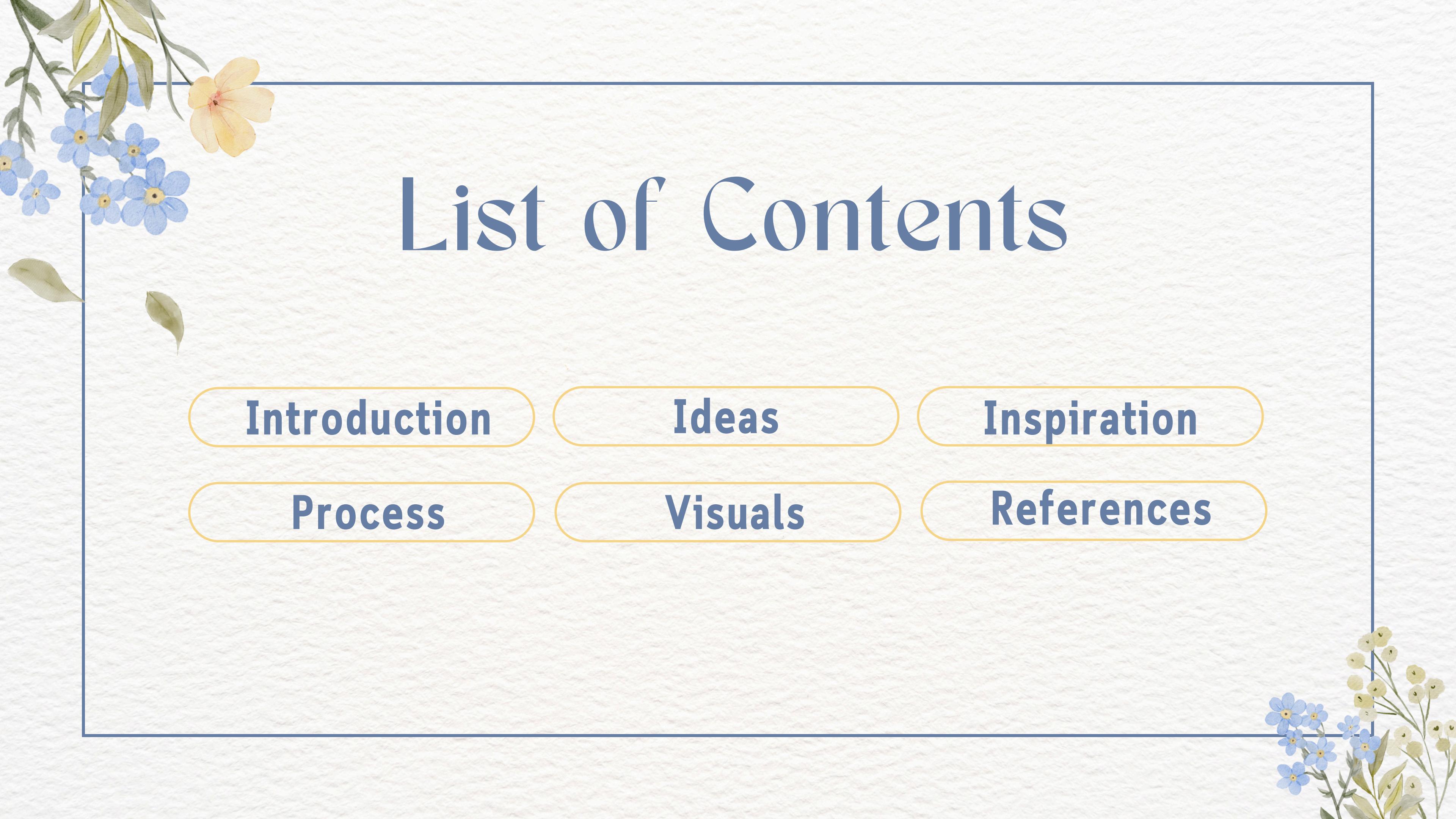
# From numbers to narrative:

A Fusion of Data Science and Creative Expression

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Big Data, The Self & Social Media

2024



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# Introduction

My project embarks on a creative journey combining data analysis, sentiment analysis and other forms of artistic representation.

## Overview & inspiration:

The main idea behind this project is to explore how numerical data, which is usually perceived as dry and mundane, can be transformed into something creative and emotional. By using stock-market data I was looking to create something enjoyable while also being useful to uncover hidden patterns. I also feel like the volatile nature of the stock market is comparable to the ebb and flow of human emotions, which is why I preferred to focus on the poems rather than the art as I feel like the different hidden meanings everyone gives poems can tell you a lot about a person, and having the poem created out of pure numbers even more so.

# Ideas

Initially, this project was going to be based on fashion retail sales and sentiment analysis to enable trend prediction, hoping to uncover consumer trends and emotions linked to different items. This approach had various significant challenges, the pre-made dataset I had access to was fraught with issues and I could not find much availability of the precise data I was looking for. This process highlighted the importance of reliable data and effective preprocessing methods.

As I encountered these issues I also started realising I wanted to do something with a little bit more of meaning/emotional depth to me. I didn't immediately settle upon using the stock market data, but I decided I did want to do something emotional that came out of numbers or to make something fun out of something mundane and one day talking with my dad about the stock-market the thought of how it is just numbers but also bears a resemblance to humans and emotions is what made me finally decide upon this idea.

# Inspiration

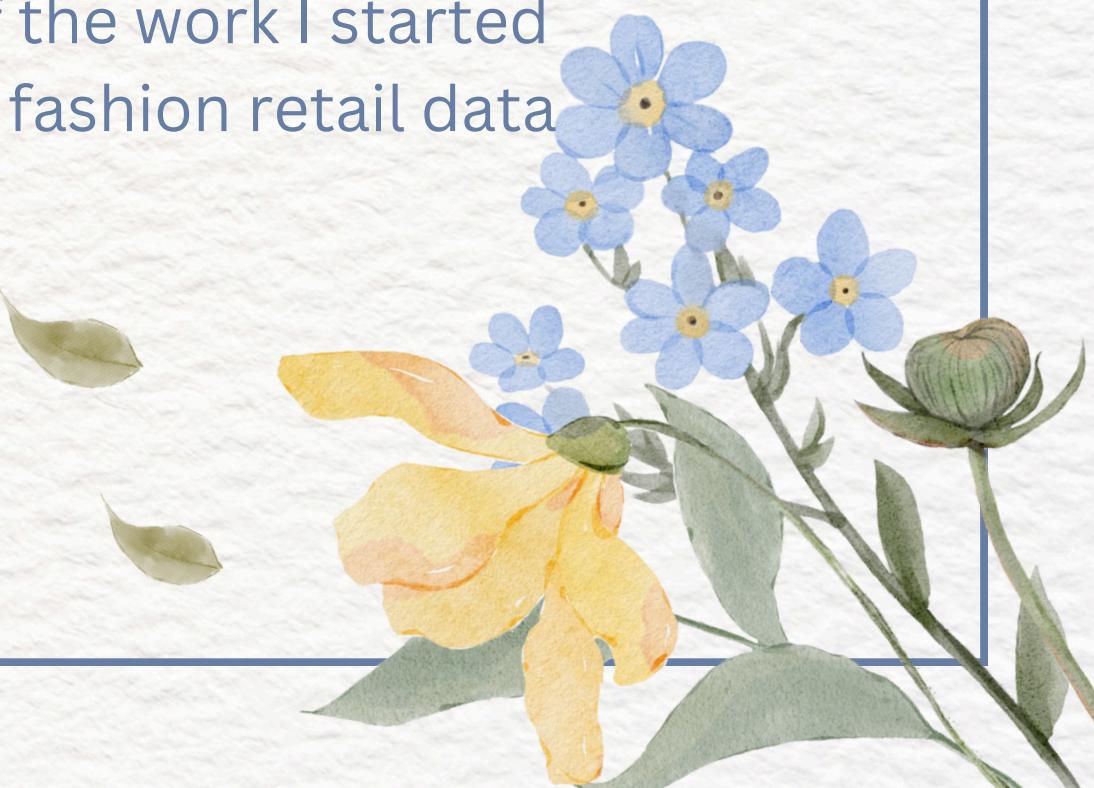
This whole idea was influenced by the works of artists and data scientists who have successfully bridged the gap between the technical and the creative.

Projects such as ‘Dear data’ where hand-drawn infographics are created from personal data, and looking up ‘data visualisation of art finance’ which is people transforming stock-market data into abstract art, this has showcased what I believed, that data serves as a powerful tool for storytelling.

```
1 import pandas as pd
2 import matplotlib.pyplot as plt
3 import seaborn as sns
4
5 try:
6     print("Loading dataset...")
7     df = pd.read_excel('Book_Details.xlsx', skiprows=1)
8
9     df.columns = [
10         'book_id', 'cover_image_uri', 'book_title', 'book_details', 'format',
11         'publication_info', 'authorlink', 'author', 'num_pages', 'genres',
12         'num_ratings', 'num_reviews', 'average_rating', 'rating_distribution',
13         'another_column'
14     ]
15
16     print("Dataset loaded successfully!")
17     print("Column names:", df.columns)
18     print("Number of columns:", len(df.columns))
19     print(df.head())
20     print("Cleaning data...")
21     df = df.dropna(subset=['book_id', 'author', 'average_rating'])
```

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Some of the work I started with the fashion retail data

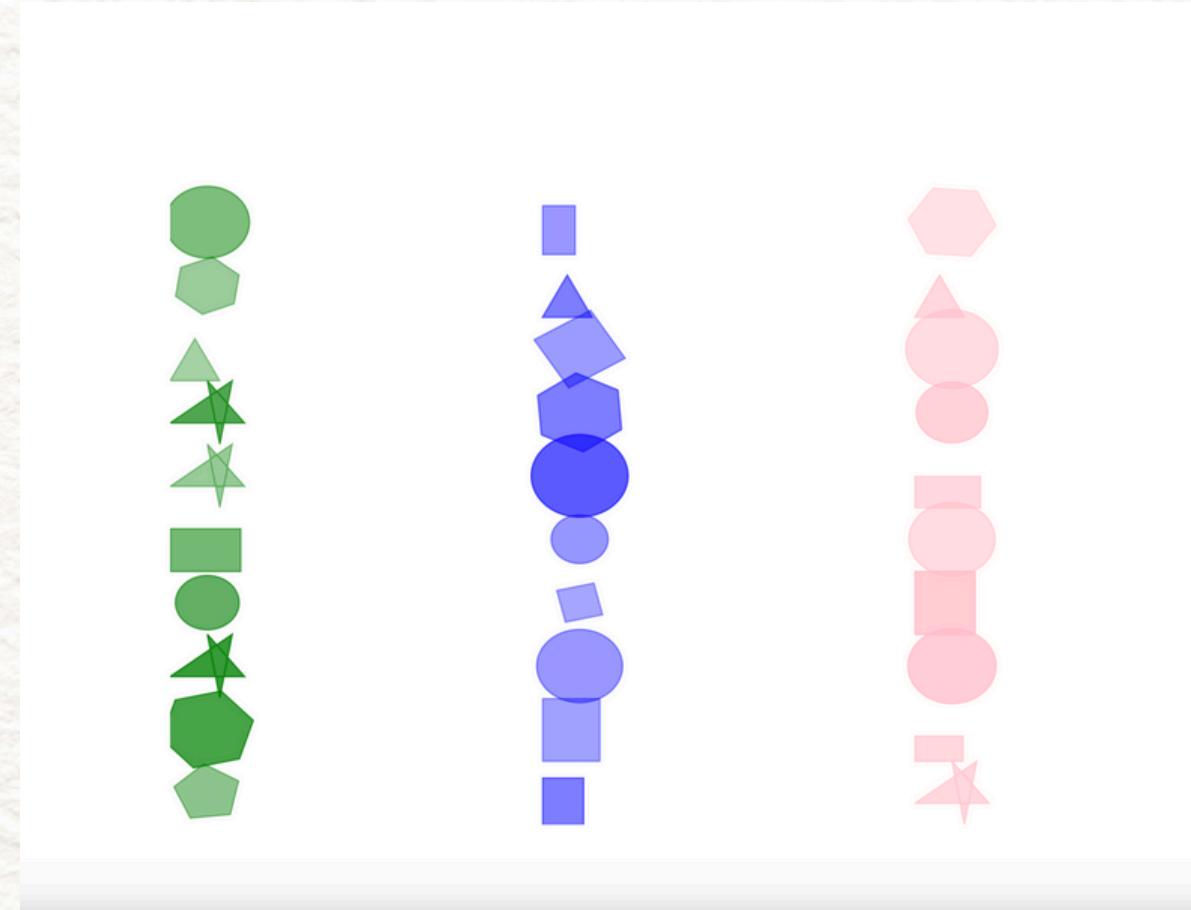
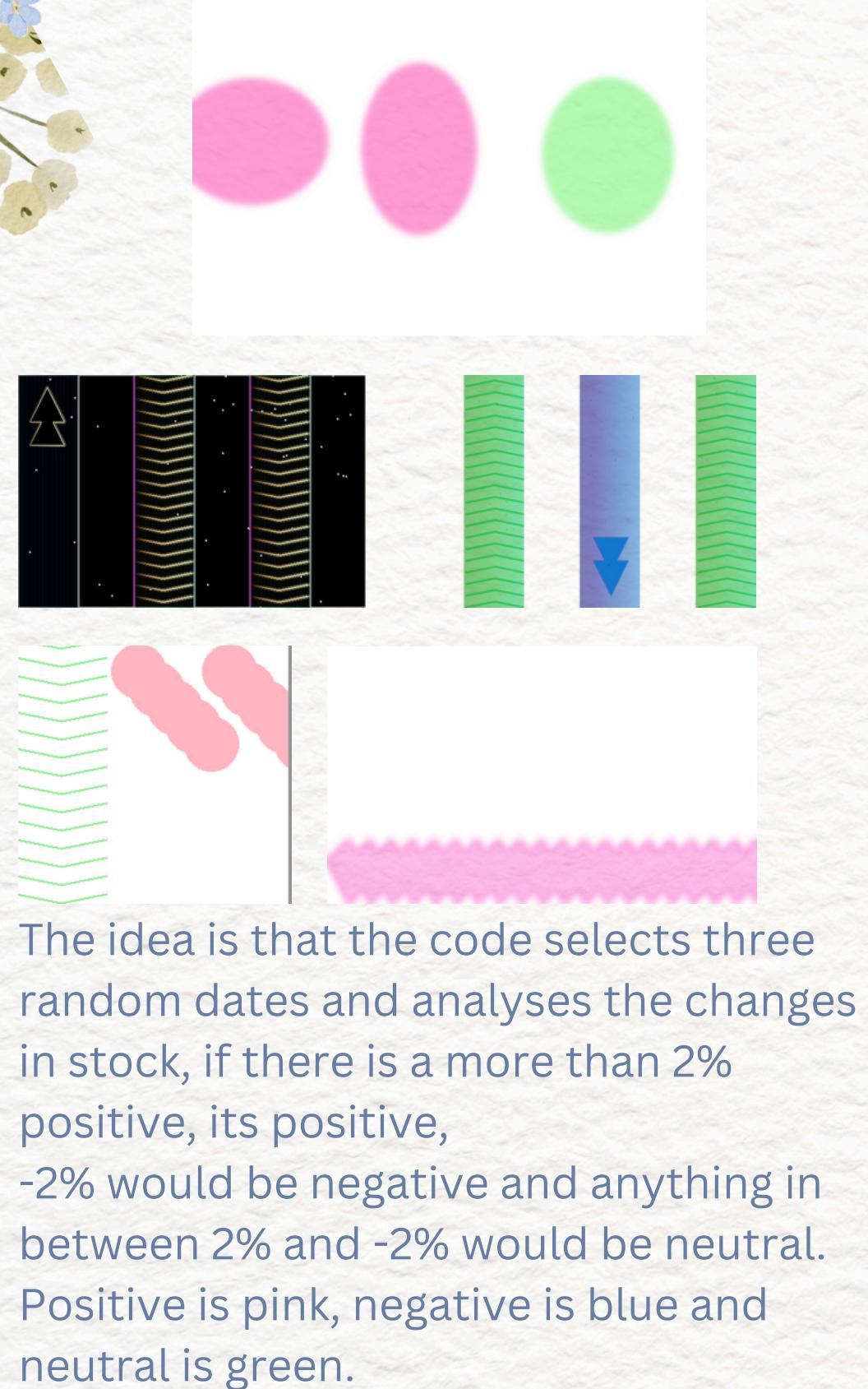


# Process & Difficulties

I already mentioned the issues I faced with the fashion retail initial project but I also faced some challenges, I tried finding datasets and webscraping data but thanks to research I found yfinance which made everything easier. Moving on I had some issues with getting the artwork exactly how I wanted to look until I realised that first of all I liked the abstract look and also I wanted my main priority to be the poems as I felt it resonated more with the intention of my project. I then focused more on the poems and spent many hours trying to load the .txt file on to an html to be able to style and edit, for some reason I wasn't able to. By the time I decided to try and do it manually there were so many poems and so many things I wanted to style that I was quickly running out of time.

# Visuals

The picture in the middle is the aesthetics that I finally settled upon



2023-01-03  
The calm grove grows under the sun,  
Whispers of a quiet day linger,  
A moment of peace, grows in the grove,  
Nature quiet, a beauty to ponder.

--  
2023-01-04  
The calm grove ripples under the sun,  
Whispers of a quiet day linger,  
A moment of peace, ripples in the grove,  
Nature quiet, a beauty to ponder.

--  
2023-01-05  
A quiet grove ripples softly,  
With calm light and a gentle breeze,  
The day ends in quiet quiet,  
Nature ripples through the trees.

--  
2023-01-06  
The calm grove ripples under the sun,  
Whispers of a quiet day linger,

Date: 2023-01-03  
Metadata: High=130.89999389648438, Low=124.16999816894533, Close=125.06999969482422,  
Volume=112117500

The a roaring forest grows under the radiant skies,  
Whispers of a quiet day linger,  
A moment of peace, whispering breeze through the day,  
Nature a roaring forest, a beauty to ponder.

--  
Date: 2023-01-04  
Metadata: High=128.66000366210938, Low=125.08000183105467, Close=126.36000061035156,  
Volume=89113600

The a bustling meadow grows under the serene skies,  
Whispers of a tranquil night linger,  
A moment of peace, gentle breeze through the day,  
Nature a bustling meadow, a beauty to ponder.

--  
Date: 2023-01-05  
Metadata: High=127.7699966438664, Low=124.76000213623048, Close=125.0199966438664,  
Volume=8962700

The a bustling meadow grows under the serene skies,  
Whispers of a quiet day linger,

above are two .txt files with the poems, the above is an initial one and the one below has metadata.