Myntra

<hacker-ramp/>

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Predicting Gen Z Fashion Trends Through Social Media Hashtags

SOLUTION

- The project focused on analyzing and forecasting hashtag trends through time series analysis, offering valuable insights for social media marketing.
- We have utilized the ARIMA time series model to predict trending hashtags based on a dataset of over 2,000 entries of frequency and time intervals for each hashtag.
- The proposed model will predict the top 10 hashtags that are expected to go trending the next 5 days.
- We faced challenges during data preprocessing, which were effectively managed, resulting in robust outcomes.

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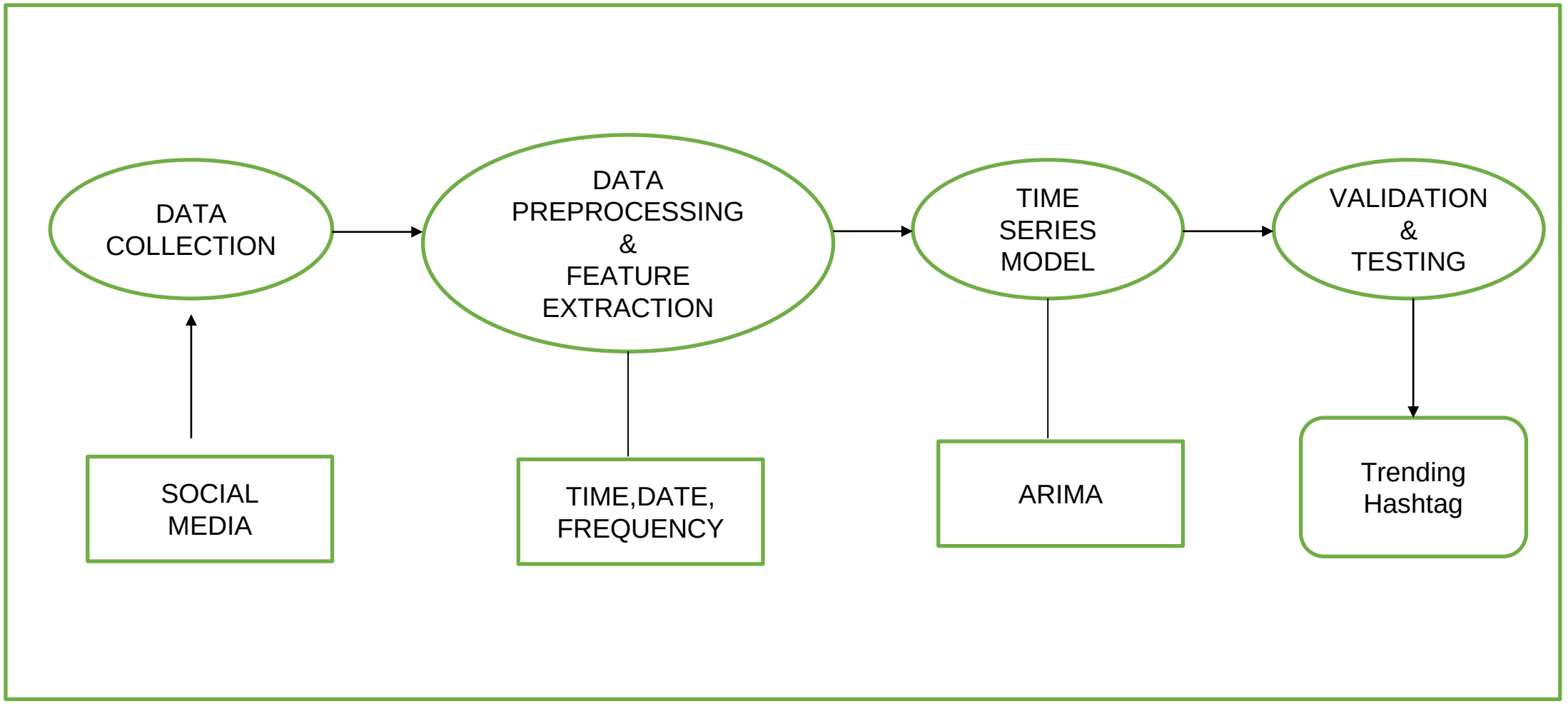
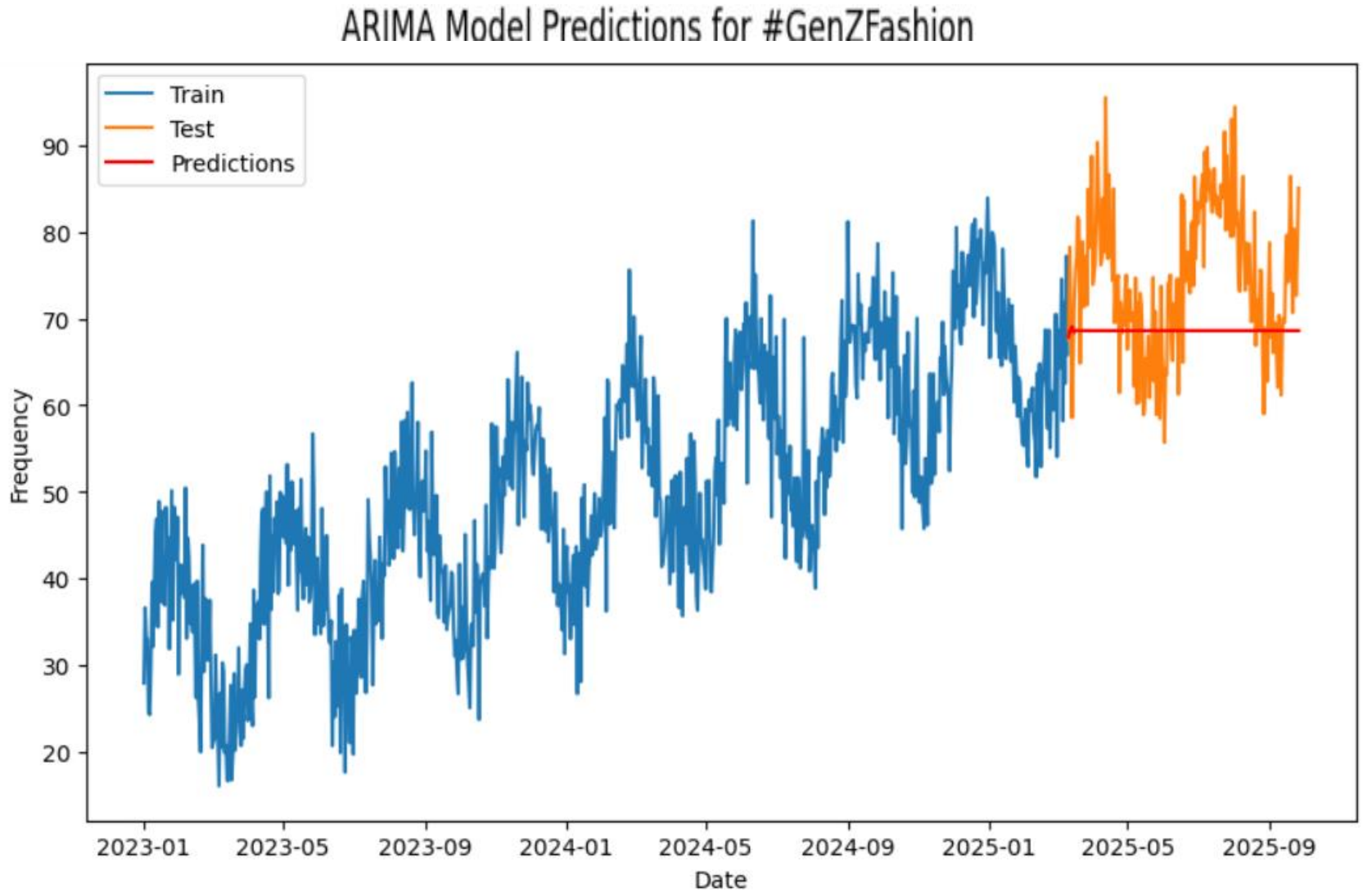
Methodology



Predictions



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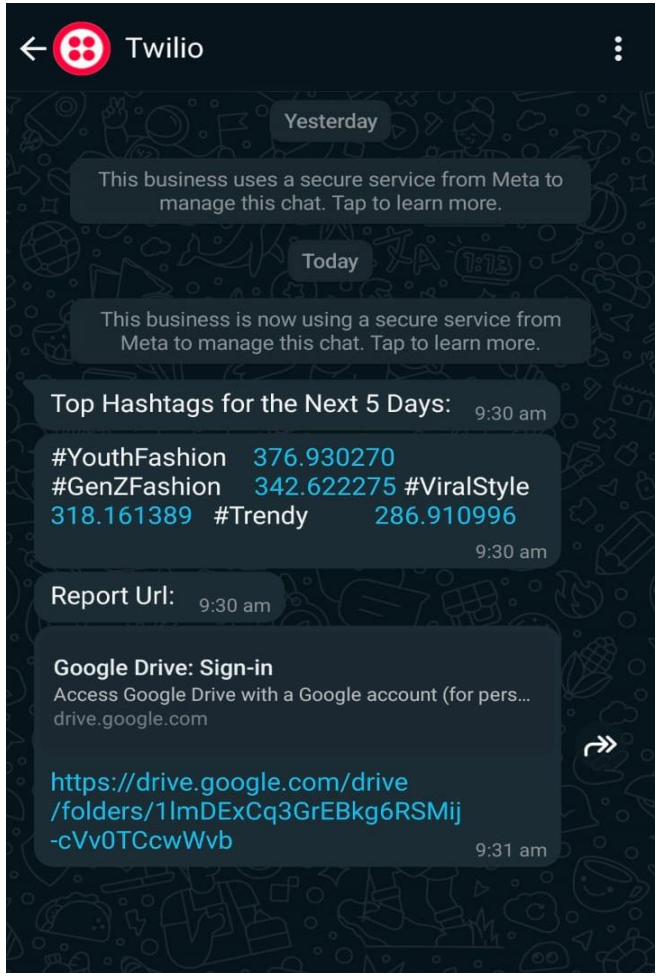
Output




```
Top 10 Hashtags for the Next 5 Days:
#YouthFashion    376.930270
#GenZFashion     342.622275
#ViralStyle      318.161389
#Trendy          286.910996
dtype: float64
```

ARIMA Model Summary:

SARIMAX Results

Dep. Variable:	Frequency	No. Observations:	800
Model:	ARIMA(5, 1, 0)	Log Likelihood	-3135.292
Date:	Mon, 15 Jul 2024	AIC	6282.585
Time:	03:47:22	BIC	6310.685
Sample:	01-01-2023 - 03-10-2025	HQIC	6293.380
Covariance Type:	opg		

	coef	std err	z	P>|z|	[0.025	0.975]
ar.L1	-0.8463	0.036	-23.417	0.000	-0.917	-0.775
ar.L2	-0.5771	0.047	-12.259	0.000	-0.669	-0.485
ar.L3	-0.2875	0.050	-5.797	0.000	-0.385	-0.190
ar.L4	-0.1612	0.045	-3.589	0.000	-0.249	-0.073
ar.L5	-0.0204	0.036	-0.566	0.572	-0.091	0.050
sigma2	149.7690	7.635	19.617	0.000	134.805	164.733

Ljung-Box (L1) (Q):	0.02	Jarque-Bera (JB):	0.16
Prob(Q):	0.89	Prob(JB):	0.92
Heteroskedasticity (H):	0.79	Skew:	-0.03
Prob(H) (two-sided):	0.05	Kurtosis:	2.96

Future works

- Focus on optimizing the model.
- Incorporating additional data sources.

THANK YOU

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