

COLOMBO STOCK MARKET PREDICTIVE SYSTEM

UI/UX DESINGES

USERS

1. Home dashboard

Sing In

- Dashboard
- Prediction
- Model Comparison
- News
- Report
- Heatmap
- Setting
- Admin

Stock Market Prediction

Forecasting the future price movements of Sri Lankan stocks

JKH + 1.8 %	COMB + 5.3 %	CTC -3.2 %
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Stocks				
Symbol	Price	Change	Volume(Rs)	
JKH	12.86	+1.8 %	1, 45, 789.00	
COMB	54.36	+5.3 %	95, 789.00	
CTC	105.90	-3.2 %	1, 65, 779.00	
DIAL	8.63	+9.56 %	2, 58, 400.00	
DIST	111.87	-4.22 %	81, 789.00	

Stock Performance	
Top Gainers	Top Losers
DIAL +9.56 %	DIST -4.22 %
COMB +5.3 %	CTC -3.2 %

Market Trend



2. Prediction

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Prediction

JKH +1.8 %

Search stock Prediction timeframe Next 30 days

Price Prediction

Jan 2023 01 Feb 2023 01 Ap 2023 01 Apr 2023 01 p

Model Explanation

Model used	Open price	Volume	LSTM
Input features	Volume	Previous Close	Previous
	Previous close	PE Ratio	Close

Feature Importance

Model used

Disclaimer: Predictions are based on historical data and machine learning models this system does not provide financial advice.

3. Model Comparison

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Model Comparison

Model	Accuracy	RMSE	MSE	MAPE
Linear Regression	0.93	3.60	1.68	4.48
Decision Tree	0.92	1.23	7.63	2.68
Random Forest	0.96	1.83	10.91	2.40
Artificial Neural Network	0.93	4.10	16.80	4.58

Model Performance

Model	0	10	20	30	40	50
Linear Regression	0.75	0.80	0.85	0.90	0.92	0.95
Decision Tree	0.75	0.80	0.85	0.90	0.92	0.95
Random Forest	0.75	0.78	0.80	0.82	0.83	0.83
Artificial Neural Network	0.75	0.80	0.85	0.90	0.92	0.93

4. News

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News

Latest CSE-related articles

JKH reports 10% increase in net profits
The Daily Express · 2 hours ago Positive
JKH, one of the largest conglomerates on the CSE, reported a 10% increase in net profits for the quarter.

CSE ends day on a positive
The Island · 4 hours ago Positive
The Colombo Stock Exchange closed the day's trading session on a positive note, with the ASPI and S&P SL20 Indices

LOLC announces earnings
Daily FT · 8 hours ago Negative
LOLC, a leading non-banking financial services company, announced an increase in earnings due to robust lending.

Economic crisis: Inflation rate surges
The Sunday Times · 1 day ago Neutral
The economic crisis has led to a surge in the inflation rate, reaching new highs according to the latest report.

Filters

Political
 Economic
 Company news

Search

Tags

LOLC Inflation
Interest rate
Central Bank

5. Report

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Reports

Reports Archive

Report Name	Period	Generated On	Size	Action
Market Summary	Weekly	Mar 1, 2025	2.3 MB	<button>Download ▾</button>
Daily Activity Report	Today		582 KB	<button>Download ▾</button>
Monthly Overview	Monthly	Feb 29, 2025	1.1 MB	<button>Download ▾</button>

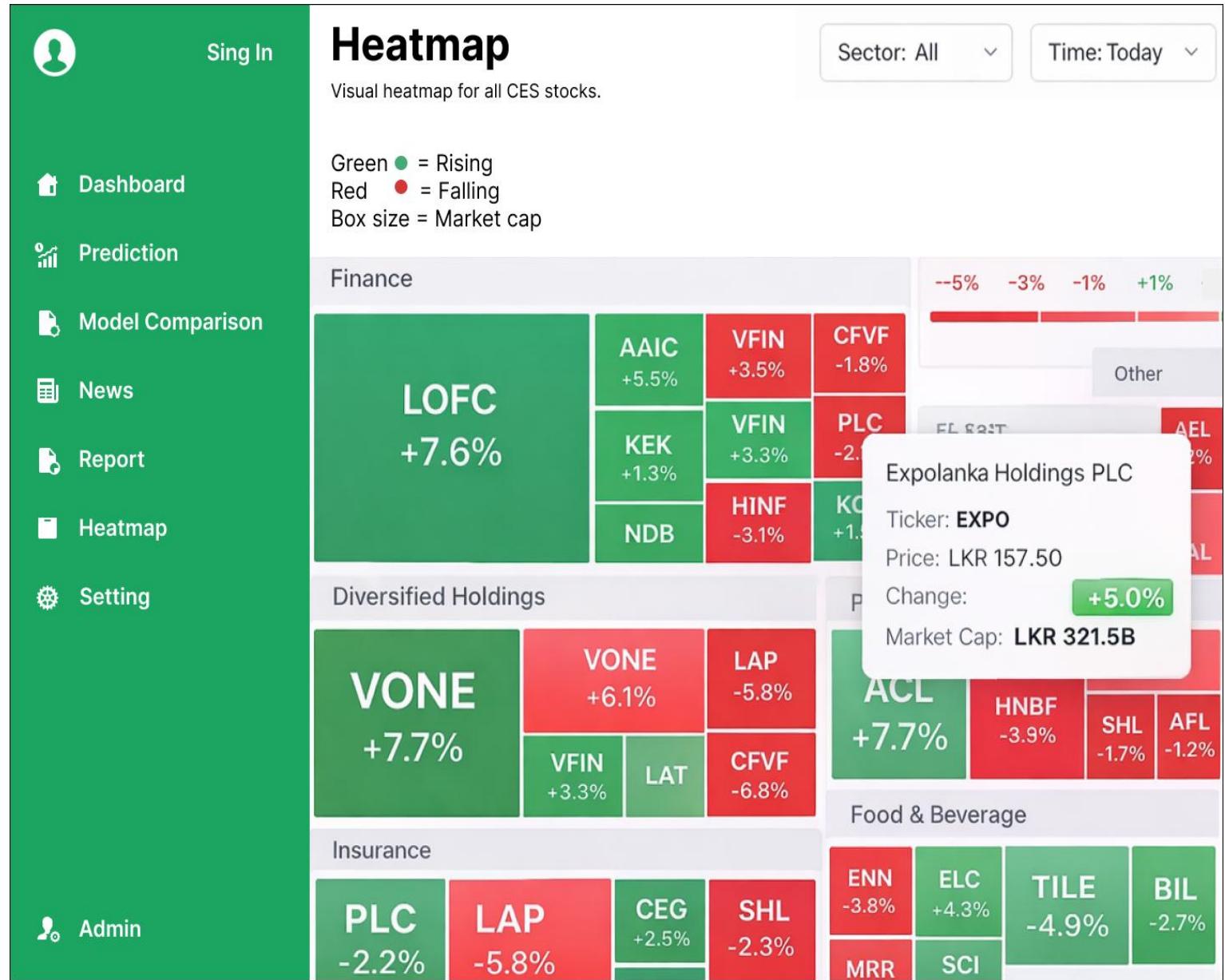
1–3 of 3 reports < >

Reports Archive

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Monthly Overview	Monthly	Feb 29, 2025	1.1 MB	<button>Download ▾</button>

1–3 of 3 reports < >

6. Heatmap



7. Setting

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Setting

Profile Setting



Full Name
N D Mathararachchi

Email
nethudil0909@gmail.com

Save Change

Theme

Light On

Dark Off

Notification Preferences

Stock Prediction Alerts

Market News Updates

Reports Notifications

 **Log Out**

ADMIN PANEL

1. Admin dashboard

Admin Dashboard

User Management

Stock Management

ML Model Management

Run Training

Admin Dashboard

 Total Users
1,103

 Active Users Today
146

 Total Stocks
05

System Health

API	● Online
ML Model	● Active
Database	Connected

Real -Time Alerts

[View all >](#)

 CTC	Significant Price Drop	05 mins ago
 COMB	High Trading Volume	20 mins ago
 DIST	Prediction Failed	50 mins ago

Latest Prediction Status

 Completed
 Running
 Failed

Last run: Today 09:30 AM

Server Performance

 CPU Usage
72%
Used: 13.0 GB / 20.0 GB

 Memory Usage
Used: 13.0 GB / 20.0 GB

2. User Management

 Admin Dashboard

 User Management

 Stock Management

 ML Model Management

 Run Training

User Management

Active

User	Email	Role	Status	Action
 John Doe john@email.com	john company.com	Admin	Active	...
 Jane Smith jane@email.com	Jane company.com	User	Inactive	...
 Mike Brown mike@email.com	Mike company.com	Analyst	Active	...
 Lisa White lisa@email.com	Lisa company.com	User	Inactive	...
 David Green david@email.com	David green.com	User	Active	...

3. Stock Management

Admin Dashboard

User Management

Stock Management

ML Model Management

Run Training

Stock Management

Add

Symbol	Company	Tracking	Sector
CSE	CSE Systems	Enabled	Technology
ABC	ABC Ltd	Disabled	Finance
XYZ	XYZ Industries	Enabled	Healthcare
DEF	DEF Corp	Disabled	Consumer Goods

4. ML Model Management

 Admin Dashboard

 User Management

 Stock Management

 ML Model Management

 Run Training

ML Model Management

Upload Model

Upload model

Select Active Model

LSTM RF ARIMA

Manual Predictions

Run Prediction

Model Accuracy & Errors

Accuracy	Error
88.7%	11.3%

5. Run Training

- Admin Dashboard
- User Management
- Stock Management
- ML Model Management
- Run Training

Run Training

Training Configuration

Select Dataset: stock_data.csv ✓

Epochs: 50

Batch Size: 32

Start Training **Stop Training**

Training Visualization

Loss Over Epochs

Epochs	Training Loss	Validation Loss
0	0.98	0.75
9	0.65	0.58
12	0.55	0.28
24	0.45	0.15
36	0.35	0.10
40	0.30	0.10
50	0.30	0.10

Accuracy Over Epochs

Epochs	Training Accuracy	Validation Accuracy
0	80%	55%
9	85%	65%
12	88%	82%
24	89%	85%
36	90%	87%
40	90%	88%
50	91%	88%

Live Logs

Status - Running Training

Epoch 1/50 | Loss: 0.812 | Accuracy: 72.0%

Epoch 2/50 | Loss: 0.701 | Accuracy: 76.3%

Epoch 3/50 | Loss: 0.642 | Accuracy: 78.9%

Epoch 4/50 | Loss: 0.598 | Accuracy: 81.2%

Epoch 5/50 | Loss: 0.561 | Accuracy: 83.0%

Model Saved Successfully