



# Frontend Team

## Week 4

Group Members:

Ayca Gökdağ

Doğa Güneş Karadağ

Salih Bulmaz

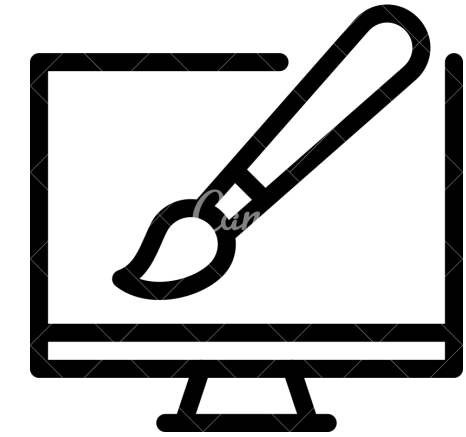
Semih Gençten

Baturalp İnce (Data Visualization)

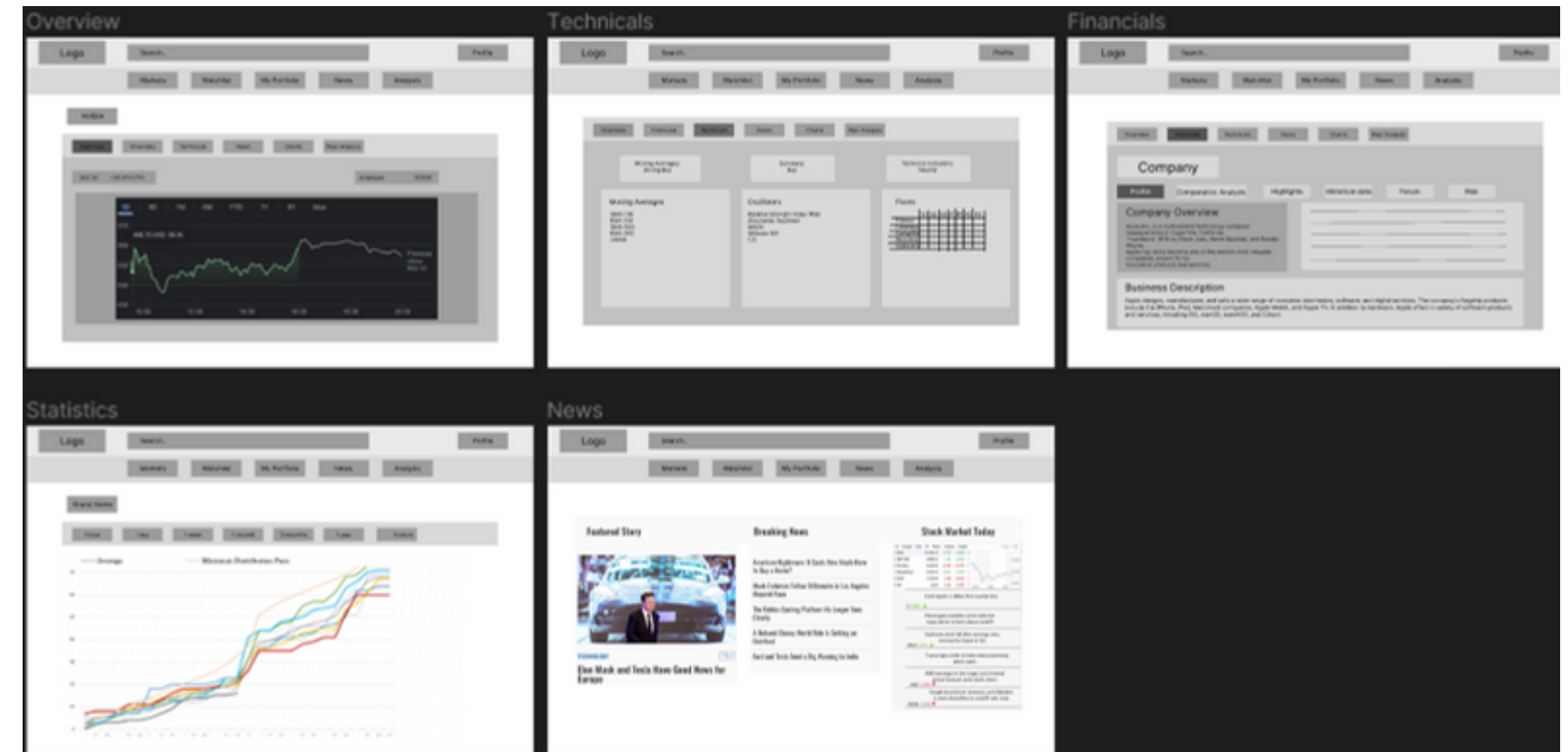
Ayberk Bozkuş (Data Visualization)

Nour Elhouda Znagui

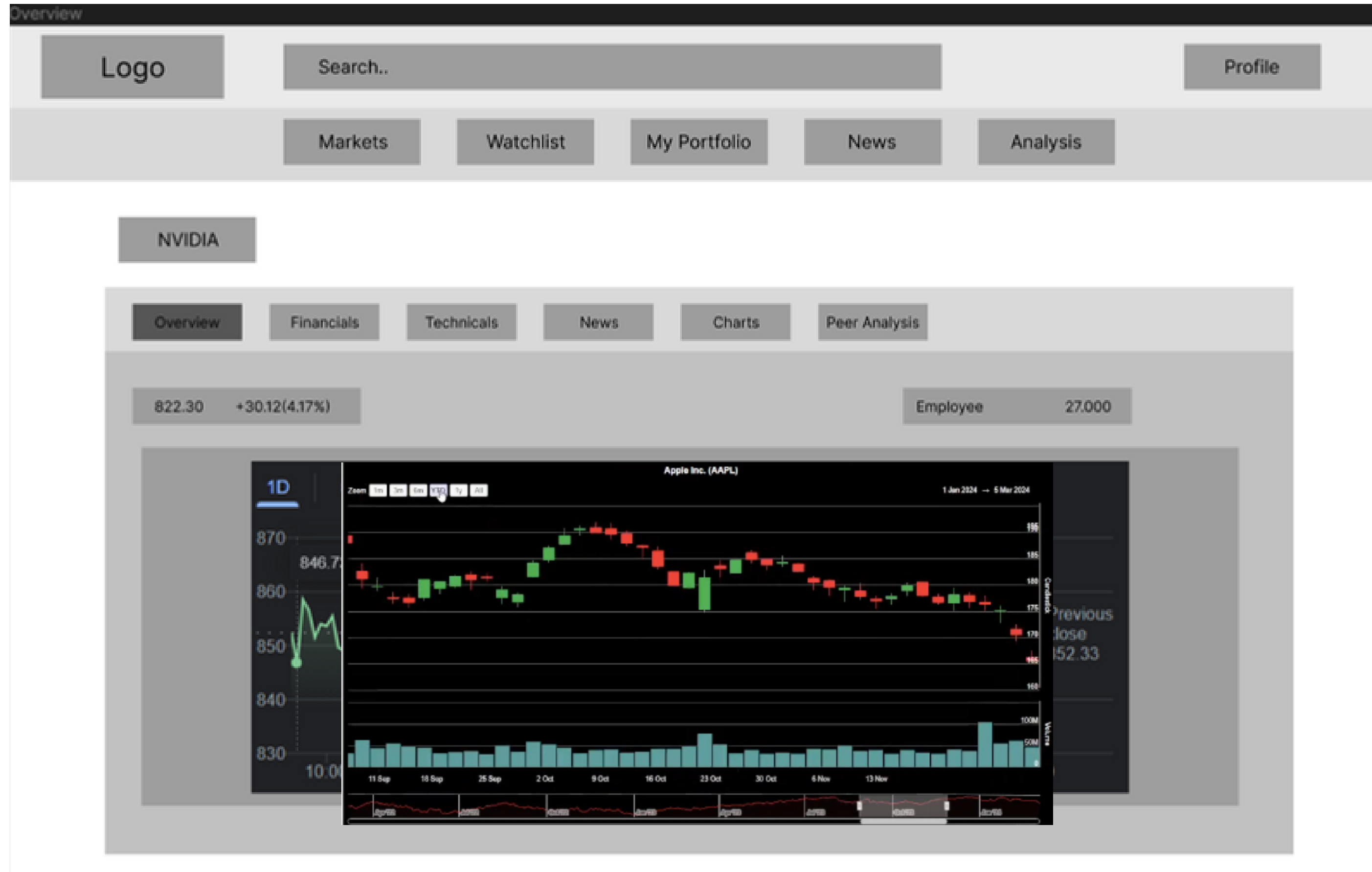
# Mock Up Designs and Hierarchy



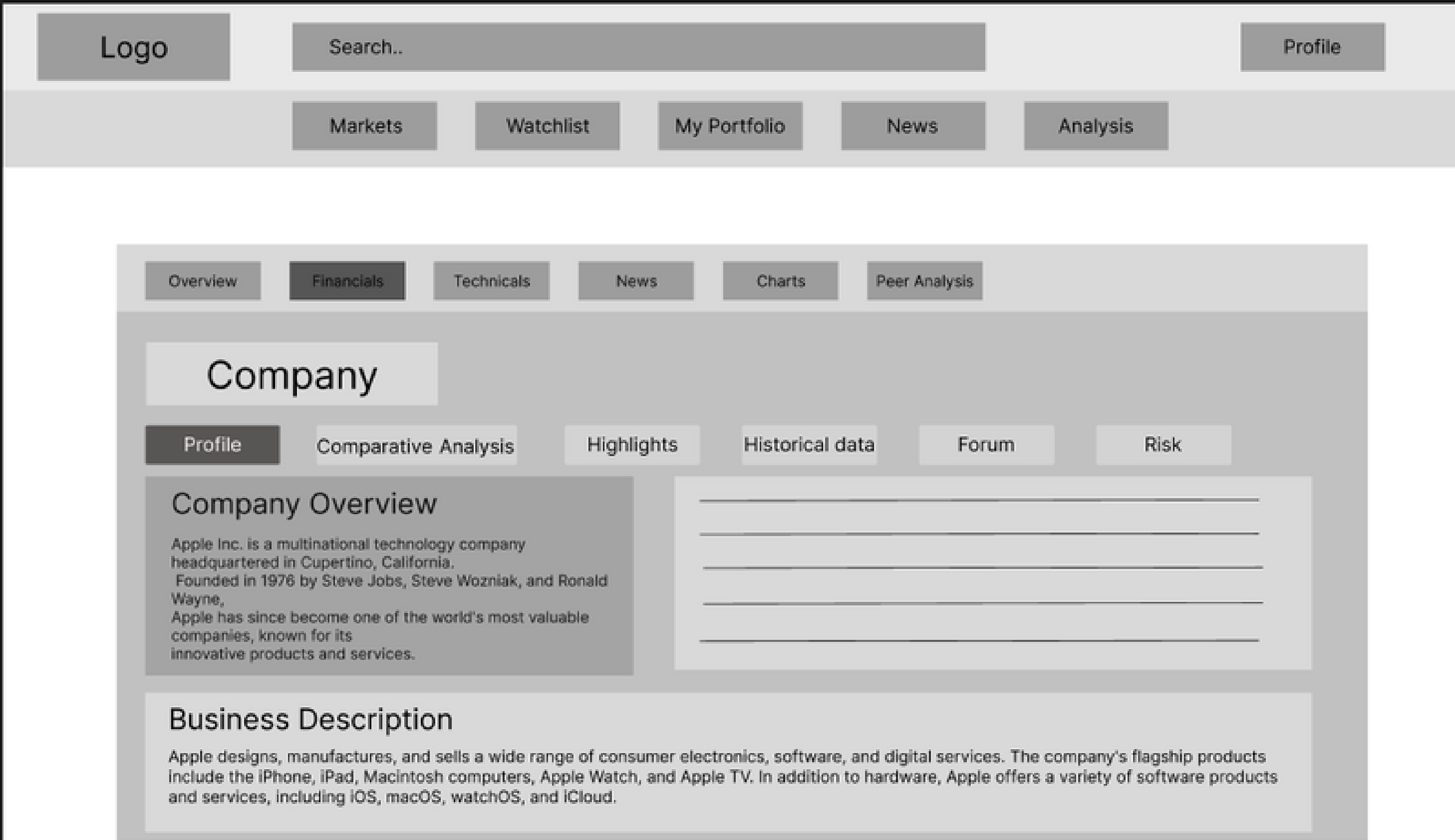
- Designed in Figma
- To show general concept
- To show hierarchy of pages
- More complex pages designed firstly



# Overview Page For a Stock



# Financials





# FINANCIALS

## Financial Statements

- Income Statement
- Balance Sheet
- Cash Flow Statement

## Historical Performance

- Historical data on the company's financial performance

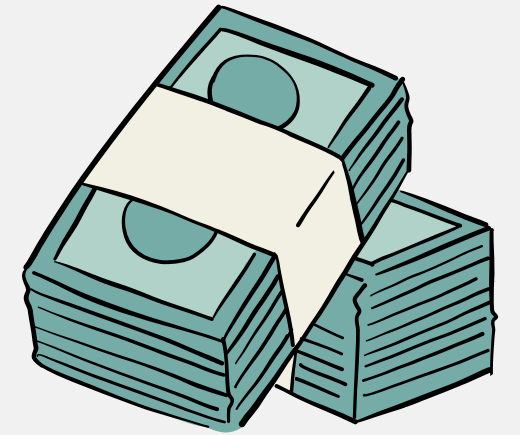
## Financial Highlights

- Revenue trends
- Profit trends
- Key financial achievements or challenges

## Comparative Analysis

- Industry Comparisons
- Sector Comparisons
- Competitor Comparisons

# FINANCIALS



## Profile

- Company's history, mission, and vision.
- Background
- Industry
- Fund Overview

## Forum

- Discussion Boards
- Customizable

## Dividends

- Dividend Sustainability
- Dividend History
- Dividend Policy

## Financial Forecasting

- Future financial performance through forecasting or analyst estimates.

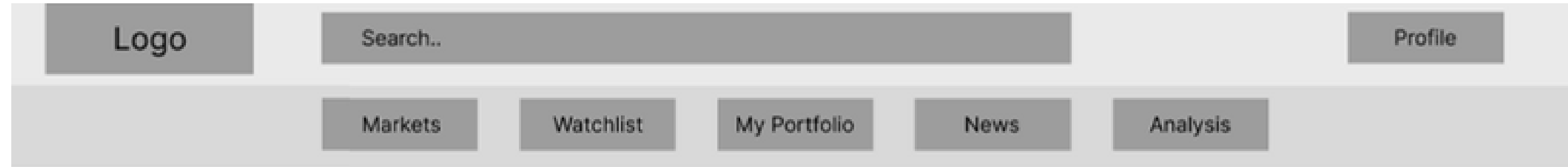


# Statistics

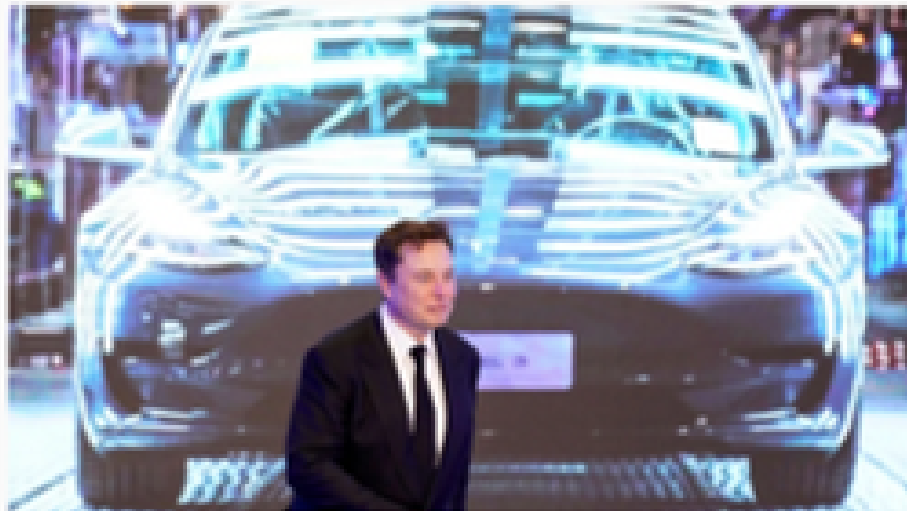




# News



## Featured Story



TECHNOLOGY

TSLA

## Elon Musk and Tesla Have Good News for Europe

## Breaking News

American Nightmare: It Costs How Much More to Buy a Home?

Musk Endorses Fellow Billionaire in Los Angeles Mayoral Race

The Roblox Gaming Platform No Longer Sees Clearly

A Beloved Disney World Ride Is Getting an Overhaul

Ford and Tesla Send a Big Warning to India

## Stock Market Today

| US        | Europe    | Asia  | FX     | Rates | Futures | Crypto | Stocks |
|-----------|-----------|-------|--------|-------|---------|--------|--------|
| Dow       | 24,385.13 | 47.35 | 0.20%  |       |         |        | 24,300 |
| S&P 500   | 3,893.12  | 1.64  | 0.06%  |       |         |        | 24,300 |
| Nasdaq    | 8,444.28  | -0.88 | -0.75% |       |         |        | 24,300 |
| GlobalDow | 2,431.19  | 24.41 | 0.14%  |       |         |        | 24,300 |
| Gold      | 1,722.00  | -1.80 | -0.10% |       |         |        | 24,300 |
| Oil       | 12.48     | -0.30 | -0.75% |       |         |        | 24,300 |

Ford reports 2 billion first-quarter loss

F -4.06%

Pence goes maskless as he visits the mayo clinic to learn about covid19

Starbucks stock fall after earnings miss, coronavirus impact in Q3.

SBUX -1.22%

Trump signs order to keep meat processing plants open . .

AMD earnings hit the target, but trimmed annual forecast send stocks down

AMD -1.73%

Google braved one recession, and Alphabet is more diversified as covid19 roils rivals

GOOG -3.01%

# Data Visualization

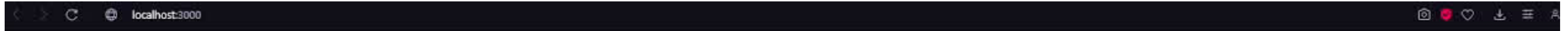
## HighCharts.js Implementation

- Candlestick and Volume Bar Graphs are displayed for sample AAPL Stock Data
- Light/Dark Modes are implemented

## Advantages

- Faster and more modular development
- Easier to customize compared to TradingView Lightweight
- Education (non-commercial) License upon registration

# HighCharts.js - Demo



Toggle Color Mode

Toggle Volume Indicator

Apple Inc. (AAPL)

Zoom 1m 3m 6m YTD 1y All

5 Sep 2023 → 5 Mar 2024



# HighCharts.js

## Data Format

Candlestick Graph uses the following series format: [date, open, high, low, close] for each entry

```
Candlestick:                                     GraphHighCharts.js:
▼ Array(502) 1
  ▼ [0 ... 99]
    ► 0: (5) [1646663400000, 163.36, 165.02, 159.04, 159.3]
```

Volume Bar Graph uses the following series format: [date, volume] for each entry

```
Volume Bar:
▼ Array(502) 1
  ▼ [0 ... 99]
    ► 0: (2) [1646663400000, 96418800]
```

- Data format structure could be changed based on Backend Team's design
- date = unix timestamp

## Roadmap

- Improving the HighCharts Implementation
- Creating add/remove Volume Bar or any other Technical Indicator functionality
- Refactoring graph component for dynamic data
- Updating style of the graph after receiving the feedback

# TradingView Implementation

- Candlestick and Volume Bar Graphs are displayed for sample stock data
- Light/Dark Modes are implemented

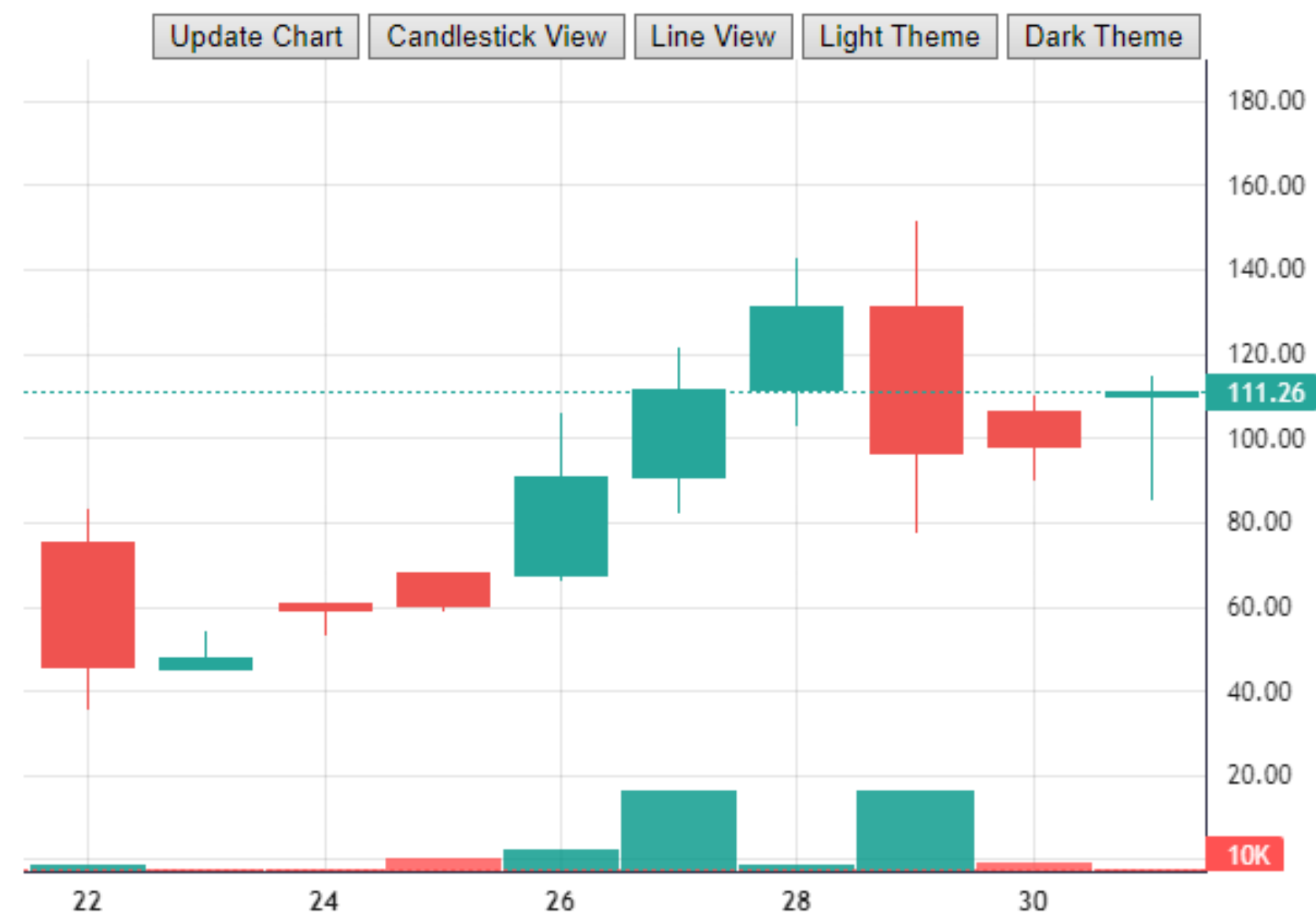
## Advantages

- Simpler when the requirements are not complex

## Disadvantages

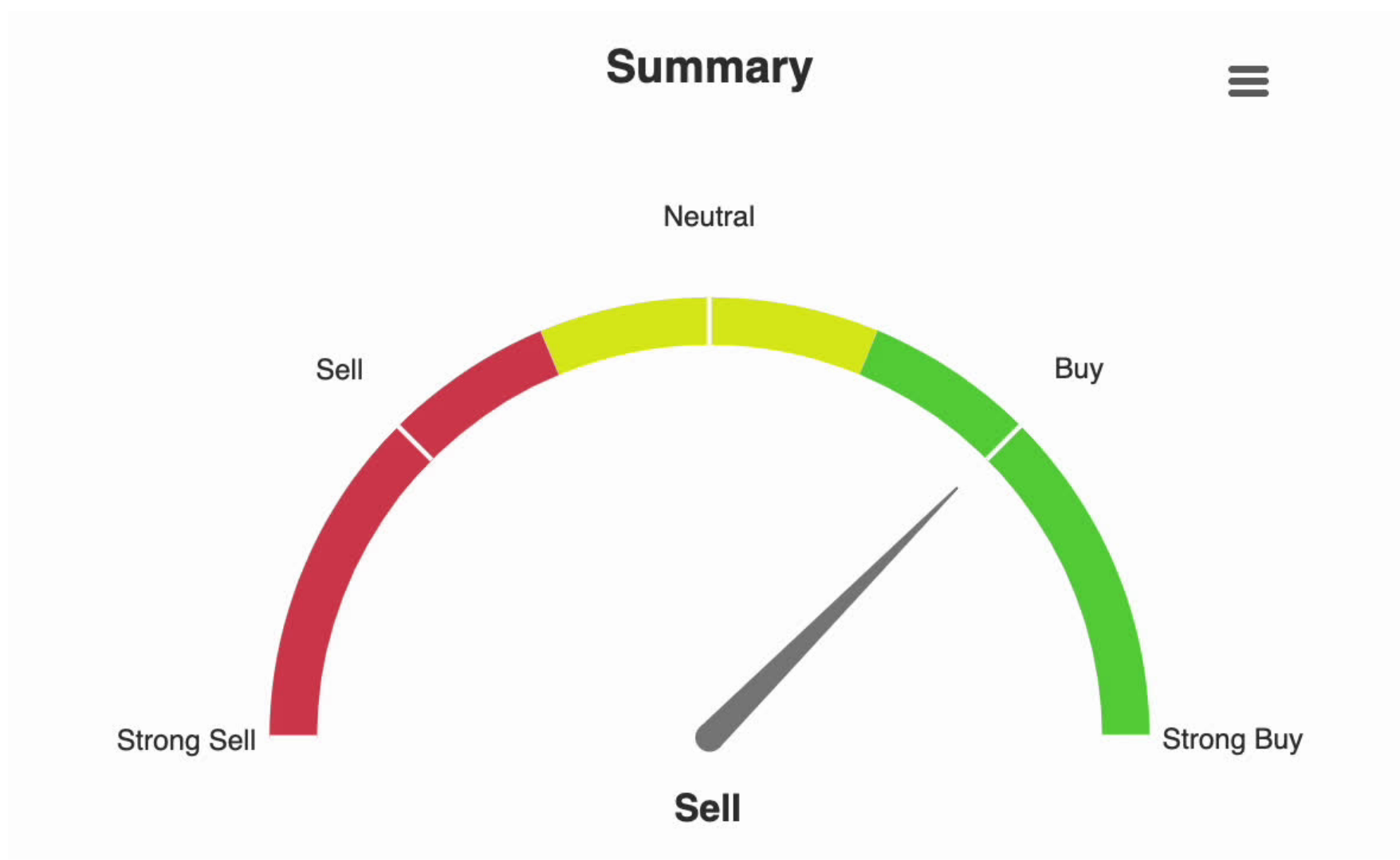
- Some crucial functions are not available such as crosshair synchronization, multiple (separate) graph support
- Potential to generate problems on dynamic data

# TradingView Lightweight - Demo





# HighCharts.js- Gauge Chart



**Oscillators:** Indicate overbought or oversold conditions by measuring the velocity and magnitude of price movements.

**Moving Averages (MAs):** Identify the direction of market trends by averaging prices over specific periods.

**Pivots:** Determine potential support and resistance levels using the previous period's high, low, and close prices.



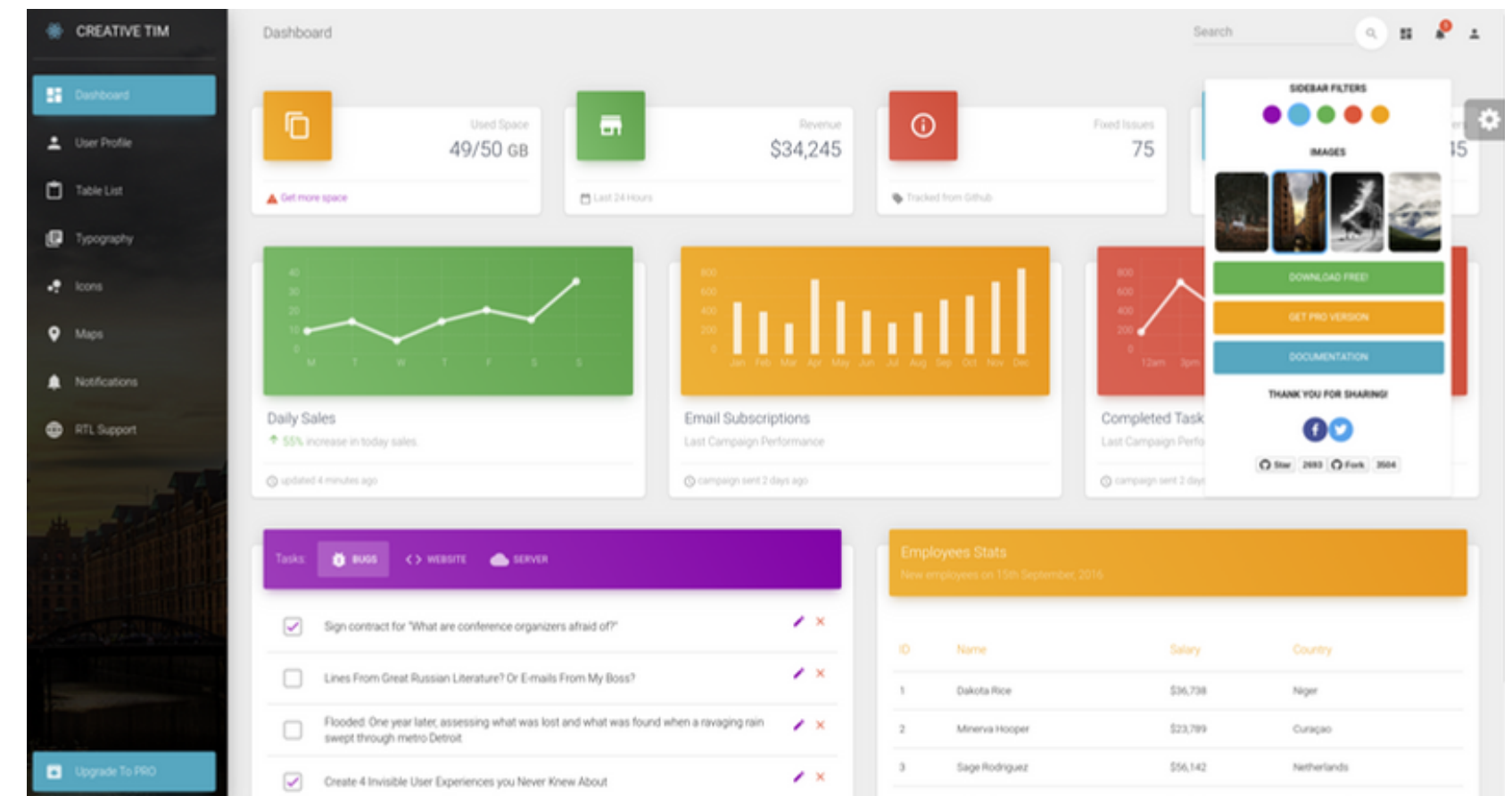
# UI Development

## Usage of Templates

- Template is a project that has pages and components implemented and ready to use.
- Templates we would like to choose are mainly used for dashboard intensive applications.

## Advantages

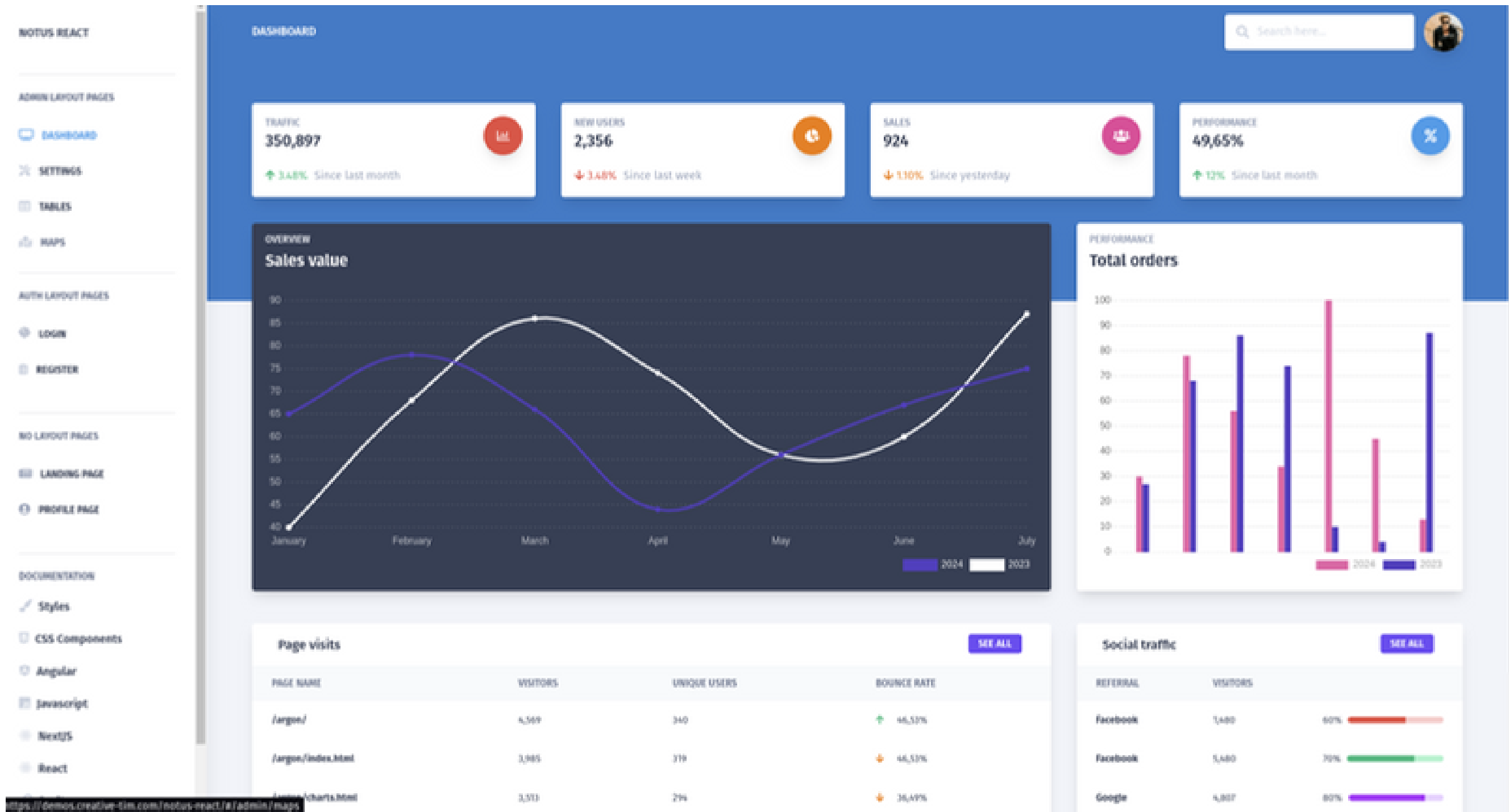
- Reducing the time to develop the UI
- Easier to sync page designs across different members of the team
- They are free to use



# Example Templates



# Example Templates



This week,

- we began creating the page details,
- prepared shared documents,
- selected the template we will use.

## **What we are planning for next week?**

- We will customize key elements of the website's structure such as the toolbar, menu, and footer.
- We will complete the design details of the subpages by assigning tasks and distributing responsibilities.