



**COLLEGE CODE : 953**

**COLLEGE NAME: ST.Mother Theresa engineering College**

**NM-ID ROLL NO: EC8D34823539226A7E44FC8D182401DF**

**DATE: 15/09/25**

**Completed the project named as Phase 2**

PROJECT NAME : Real time stock Tiker

**SUBMITTED BY,**

**NAME : N. Harish**

**MOBILE NO: 9092372652**

## 1. System Architecture Overview

The system will be a web-based WordPress application that integrates external APIs and plugins to provide a real-time stock ticker and dynamic user interaction features. It consists of the following layers:

Frontend (UI Layer):

WordPress-based theme.

Real-time stock ticker widget (JavaScript + AJAX/WebSockets).

Blog post pages with dynamic comments and review sections.

Backend (Business Logic Layer):

WordPress REST API.

Integration of review and comment plugins.

Custom plugins or themes for stock ticker display and comment moderation.

External APIs:

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Stock Price APIs (Alpha Vantage, Yahoo Finance).

WordPress REST API for comments/ posts.

## 2. Key Components and Their Roles

### Component Description

Real-time Stock Ticker Widget Fetches stock prices from external APIs and displays them dynamically without page refresh (via AJAX/ WebSocket).

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### Component Description

**Real-time Stock Ticker Widget** Fetches stock prices from external APIs and displays them dynamically without page refresh (via AJAX/ WebSocket).

**Comment & Review Plugin** Allows users to comment on posts and rate stock discussions in real time.

**Admin Moderation Dashboard** Admin interface to review, approve, edit, or delete inappropriate comments and reviews.

**API Integration** Handles external stock price API calls and interacts with the WordPress REST API to manage posts/comments. **Responsive Design** Ensures the application adapts to various screen sizes (mobile, tablet, desktop).

## 3. Database Design

### Posts Table (WordPress native)

Post ID, Title, Content, Date, Author, etc.

### Comments Table (WordPress native)

Comment ID, Post ID, Author, Content, Status (approved/pending), etc.

### Review Table (Custom or Plugin-managed)

Review ID, Post ID, User ID, Rating (1-5), Review Text, Date.

## 4. API Flow Example