Sprint 1 – Requirement Identification

System overview

The Share Price comparison Web Applications is made to allow different users to retrieve store and compare past share price data for the chosen companies over a specific time. The system focuses on architectural quality, modularity, and scalability rather than advanced UI design.

The application aims to:

• Get stock price history on a daily basis .

• Keep store pricing data locally.

• Show graphical representation of share performance.

• Lets you compare with another company

Functional Requirements

- Using a valid share symbol, a user will be able to retrieve daily historical prices of the share between two selected dates by the System (the maximum range is 2 years)
- Validation of date range shall mean 2 years only.
- The obtained share price data will be saved locally (e.g., SQLite or JSON file).
- The system must allow the user to access already stored data without an internet connection.
- The graphical representation of share price data will be displayed by the system.
- The users will be able to compare two different companies on the same graph through the system.

Non-Functional Requirements

- The system architecture must support extension (e.g., adding technical indicators in future).
- The components of the system that consist of UI, Service, and Data Storage; must be modular.
- Code should be clean and named appropriately for maintainability.
- The system should be able to retrieve and present an efficient display of data for the past two years.
- Data must remain accessible and correct when stored.

System Scope:

In scope

- Fetch share price history.
- Storing data locally.
- Data figuring out prices through analysis.
- A comparison of two companies.
- Preliminary verification of inputs.

Out of scope

- Livestock streaming in real time.
- The authentication process for users and accounts.
- Technical analysis undertaken with advanced strategies.
- Advanced user interface styling.
- Forecasting finances.

Assumptions

• An external API (e.g., Yahoo Finance) is available.

• The data source provides reliable daily closing prices.

• Users will input valid stock symbols.

Constraints

- The date range is restricted to two years.
- Developed using Java language.
- Must illustrate architectural principles.
- There are only three sprints.

Alignment to Project Goals

The requirements identified essentially help in delivering the scalable and modular Share Price Comparison Web Application. Core behaviour of the system is laid down by functional requirement. Architectural quality, maintainability, extendibility, etc are assured by non-functional requirement. Thus video management module 1 is to be taken for software architecture & design principles.