**Price Tracking Tool (Product Management System)**

**Problem Description**

This is a Price-Tracking Tool implementation with the user end and the admin end, with their associated terminals.

The user has to register in case his/her credentials are not already stored in the users.json file, while they can directly login if it is already validated.

DISCLAIMER: To login as admin; use the following username and password:

username:admin

password:admin\_password

There is only one admin as of now, and the role played by the admin is in the update of the prices. The admin receives a singleton sequence of

all product names and prices added by various users, and the admin performs the task of price tracking by changing the price of a given product,

based on scaled down version of web scraping from Amazon UI. Once the product price of a given product of a given user (identified by a distinct observer\_id),

is updated, the user is notified and the record is removed from the admin view.

**List Of Patterns Used**

1. Strategy Pattern – (Strategy pattern implementation using PriceUpdater() and Immediate Update())
2. Observer Pattern – (Observer pattern implementation - PriceTracker\_observer())
3. Singleton Pattern – (Singleton Pattern implementation - PriceFetcher())
4. Factory Pattern – (Factory pattern Implementation - Price Tracker Factory(), PriceTracker())
5. Decorator Pattern – (Decorator pattern - display\_title\_at\_top())

**UML Diagram**

**A screenshot of a computer screen

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**Class Diagrams**

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**Screenshots**

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