PRICE MONITORING BOT USING UIPATH

Problem Statement:

A price comparison website acts as a platform or medium between the consumers and the sellers. It allows consumers to see different lists of prices for the product chosen by user and it helps consumers to make an informed decision about which to choose in order to save money.

Abstract:

The rapid expansion of e-commerce platforms and online marketplaces has led to an immense variety of products available for purchase, accompanied by dynamic pricing strategies. To aid consumers and businesses in making informed purchasing decisions, an automated solution is needed to monitor and track price fluctuations of desired products. This paper presents the design and implementation of a Price Monitoring Bot using UiPath, a popular Robotic Process Automation (RPA) platform.

The Price Monitoring Bot is designed to periodically gather pricing information from selected e-commerce websites or APIs. It employs web scraping techniques to extract relevant data, including product names, current prices, historical prices, and any applicable discounts. The extracted data is then processed and analyzed to identify trends and patterns in pricing behavior.

The UiPath platform is utilized to create the automation workflow for the Price Monitoring Bot. The workflow encompasses multiple stages, including web navigation, data extraction, data manipulation, and notification generation. The bot is configured to execute its workflow at predetermined intervals, ensuring consistent and up-to-date pricing information.

To enhance usability and accessibility, the Price Monitoring Bot generates comprehensive reports and notifications. Users can receive customized notifications via email, SMS, or other communication channels, alerting them to significant price changes or attractive discounts for their monitored products.

The implementation of the Price Monitoring Bot provides several benefits, such as:

1. Efficiency: Automation reduces the manual effort required for tracking prices, allowing users to focus on decision-making rather than data collection.

2. Timeliness: Regular updates ensure that users are promptly informed about price fluctuations and discounts, enabling them to make timely purchasing decisions.

3. Accuracy: Automation minimizes the potential for human error in data extraction and analysis, resulting in more reliable insights.

4. Competitive Advantage: Businesses can leverage the bot's insights to adjust pricing strategies, monitor competitors, and identify market trends.

5. User Empowerment: Consumers can make informed decisions based on historical pricing data, ensuring they obtain products at the best possible prices.