Web Monitoring Software

There are multiple reasons that you need to monitor changes on a website, security, traffic, is the website up or down. In our project we are interested in websites that deal in rare items, items that are not easily available. Hence, we need a tool that will monitor such a website and let us know when a particular item has become available, or the quantity or price has changed. We may also be interested in the market value of a particular item, to determine the price we are willing to pay.

The software that we use needs to meet several criteria. It needs to be easy for the user to set up, it must be able to monitor the selected websites in real time, so any changes are available immediately, it needs to incorporate a visual display that shows a variety of information, websites tracked, items of interest, past prices of selected items and current prices of selected items as well as availability. All this information needs to be shown in a clear and concise format that is easy to read and analyze as well as incorporate future trends. The application must also inform the end user of any changes to product in question in real time. This can be done through SMS, popup, email, text or a combination. The whole purpose of the app is to inform the end user of immediate changes, so they can act accordingly.

The are many such systems on the market today, some free and some paid for. The first one we will look at is Distill web monitor, which is a Chrome plug in and runs in a web browser monitoring web sites for changes. It then sends SMS, email, pop ups and push notification to your phone as soon as a change is detected.

Some features of distill are free, but a fully paid enterprise edition is available.



Change Tower is a far more sophisticated cloud based monitoring application, that enables you to search any website and returns visual and text screenshots. You can narrow down criteria to any part of a page, keywords or sentences and you can stipulate certain elements to be notified on and send alerts. Watch Tower utilizes a predictive algorithm to help you predict future changes in the quality and price of the rare items you are interested in.

A simpler approach to our project would be a Python program. This would read the URL we wanted to monitor. It would then Hash (or snapshot) the entire website.

After a specified number of seconds which could be set up as a Cron job in Linux, the web site would be read again. The Hash would be compared, and any changes would be noted. Any changes between snapshots would be pushed to the end user. Simple but effective.

References:

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