Bluehost Data Puller

Executive summary:

Bluehost is an internets hosting business that specializes in helping customers have their own website. As a data analyst for Blue Host, I have to pull various amounts of employee performance data, on a daily basis. This often takes about an hour to pull data for any given project. The task was to automate the data collection process in order to reduce time and eliminate human errors. This project will save an estimate 1 hour of time every business day.

Implementation:

To accomplish this task the macro needed to login to a secure websites hosted by Bluehost and access this data. Once the data and been accessed It needed to clean up the data and present it in a usable form that then could be used to populate various reports. It also needed to be self-contained and user-friendly. This workbook will be shared with other employees of the company to pull data for them. To make it user friend the user will need to use two user forms to submit the information needed to get the required data. The first user form is for getting the user's login credentials. With this information the user can then access the secure websites and acquire the data. The Second user form is to specify what data the user wanted. This includes what data set to pull and what time period the user wanted. It is completely automate so that a user could pull as little as one day's data or as much as multiple years' worth of data if needed.

Logic Flow of Order of Events:

User inputs Login information => User form checks for errors and tries to login with those credentials. If not successful the user will be asked to input their credentials again.

If successful login is made, the user can then specify which report and data he/she wants in the user form. These settings are given to the macro.

Once the Macro has all the settings it proceeds to execute them one by one. It first logs into the web server and then will pull each report for each day that was passed to it. Please note that 2 of the report summarize the data for the entire month while others can be pulled for any individual day.

For every day of data and for every report a new tab is created and the data is imported on to that page. Before the program moves to pulling the next day's data it will then grab the data, clean up the report, and move the data to a tab that will be the end output of the process. The data tab is then deleted and the next day pull is performed.

The report will then continue pulling each report in turn and provide the requested data.

Learning Outcomes:

I ran into a lot of difficulties with logging into the secure server. I ended up creating two sub procedures to overcome these difficulties. The first one would test to see if I needed to login. It would open up the page and search for a key element that is required to login. If it was found it would send back a value that indicated that the users needed to login. Then the second sub procedure would fill in

the login information. This was a struggle because it sometimes required logins between every report, but the current solution will log the user in ever time it is required.

Another challenge that I ran into had to deal with making sure the user could only input correct dates. This included but was not limited to entering end dates that were before start dates. To solve this problem I had to limit what dates the user could pick on the user form and then account for different date combination possibilities when the report is run. The most difficult problem I had was making sure that I pulled ever day's work of data for a period that consisted of more than one year with different months and start and end dates. This was eventual overcome by me mapping out each possible combination of start and end dates and doing levels of conditional programing and loops to get every day in the time frame that would need to be pulled.

I also struggled a bit with byval clause on some of my data pulls. I could not let the dates that I pass into a given report change before I could provide them to all of the reports that were being pulled.