

## Budget & Spend Tracker

### 2.2 - EXECUTIVE SUMMARY

For my final project I created a budget and spend tracker to help individuals keep better track of their finances. In the past I had 3 different spreadsheets that were linked together with vLookups. It was a very time consuming and confusing process; it made updating your budget a big hassle. Due to these constraints my wife and I would often delay entering our expenses and not have an up-to-date view of our budget until it was too late. This new file uses user forms to speed up the process and track where the expenses are coming from. It then provides a visual summary of the budget and expenses to provide a quick view of where our finances stand.

This tool gathers the following pieces of information in two user forms and places them into an Excel table.

1. Description of the purchase
2. The amount of the purchase
3. What budget category it falls under
4. In what month it occurred
5. How you paid
6. Total allotted budget for each month

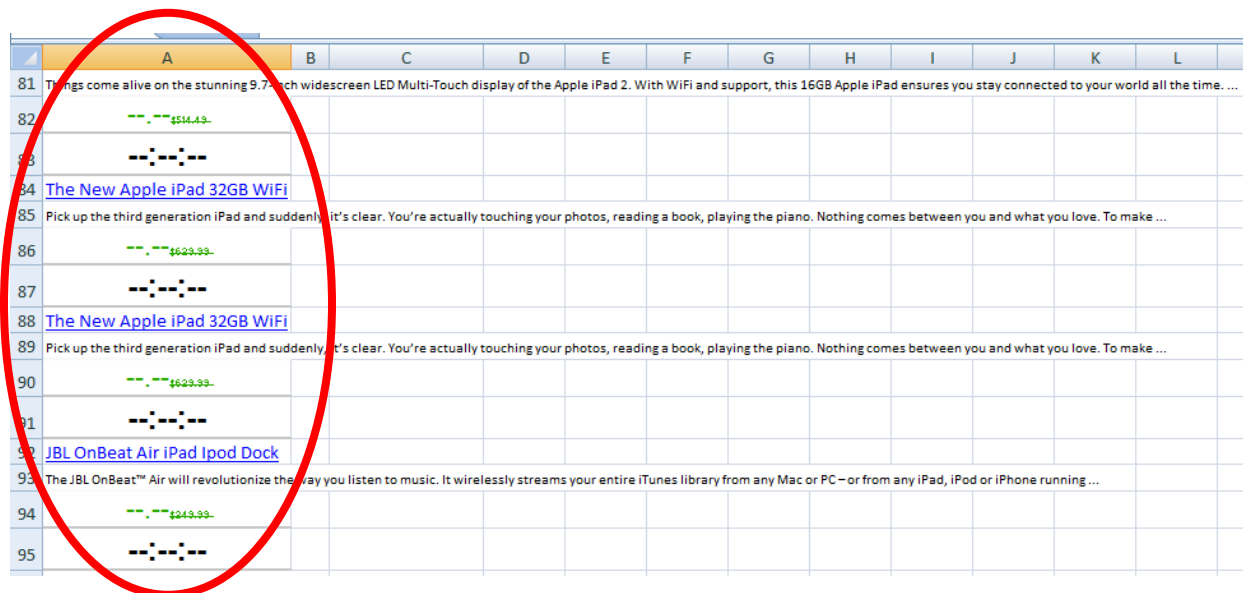
The user then has the option to save and close the user form or save and immediately add another purchase without clicking the button again. The file consists of two user forms, multiple tables, and four summarizing graphs. These graphs provide a high level overview of the user's spending trends from four unique views.

1. Expenses by Category
2. Expenses by Month
3. Payment Type Breakdown
4. Remaining/Overdraft Amount

There are also four buttons added to the ribbon to provide easy access for the user. ***The data entered is only there to serve as a placeholder.***

*Note:*

Initially I had planned on making a budget tool that would pull from my bank account in order to update my budget. However, a couple weeks after having that approved I spoke with Dr. Allen and received permission to create a file that would pull data from Quibids.com and find the times and values of different items that had sold on that site. This would provide insight into the best times to go online and bid for items based on the times when the products tended to sell for the least amount of money. I planned on having a search feature that allowed you to enter a product's name and then go onto the website to pull the historical information and build an analysis. However, in the past few days something changed on the website that makes it impossible to import historical data into Excel. The following screen shot shows an example of how the data appears in Excel.



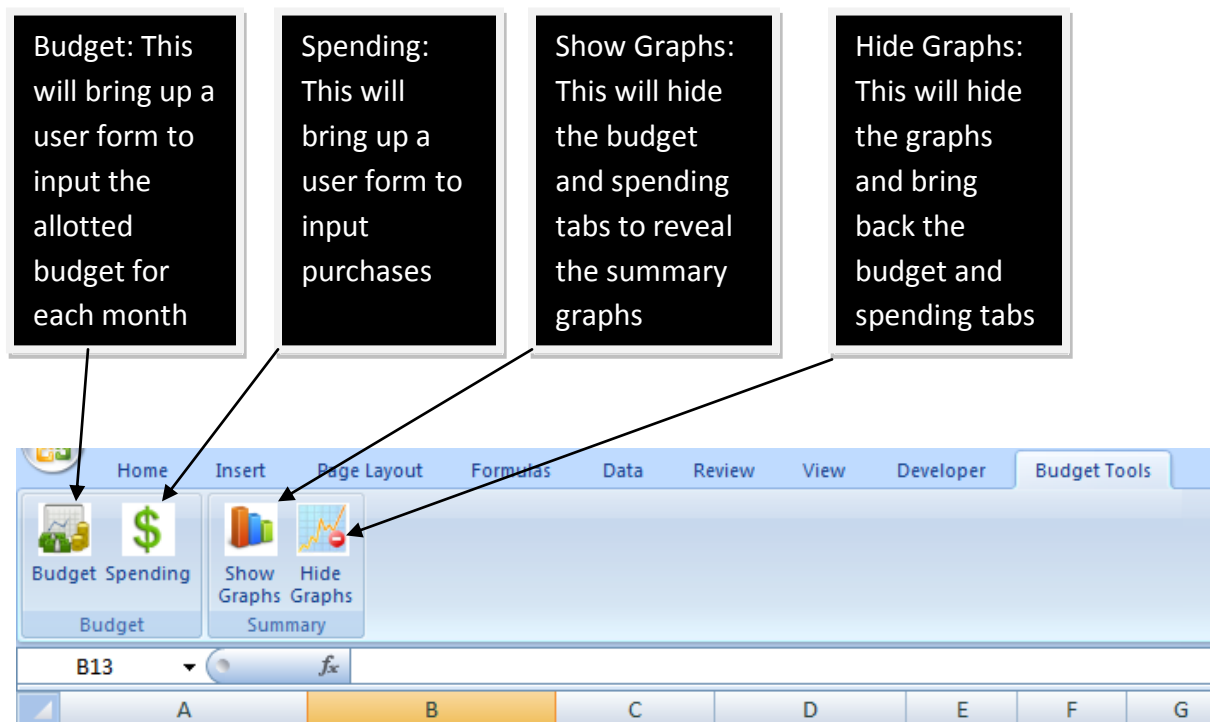
	A	B	C	D	E	F	G	H	I	J	K	L
81	Things come alive on the stunning 9.7-inch widescreen LED Multi-Touch display of the Apple iPad 2. With WiFi and support, this 16GB Apple iPad ensures you stay connected to your world all the time. ...											
82	--, --\$544.43-											
83	--, --											
84	<a href="#">The New Apple iPad 32GB WiFi</a>											
85	Pick up the third generation iPad and suddenly, it's clear. You're actually touching your photos, reading a book, playing the piano. Nothing comes between you and what you love. To make ...											
86	--, --\$623.99-											
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88	<a href="#">The New Apple iPad 32GB WiFi</a>											
89	Pick up the third generation iPad and suddenly, it's clear. You're actually touching your photos, reading a book, playing the piano. Nothing comes between you and what you love. To make ...											
90	--, --\$623.99-											
91	--, --											
92	<a href="#">JBL OnBeat Air iPad Ipod Dock</a>											
93	The JBL OnBeat™ Air will revolutionize the way you listen to music. It wirelessly streams your entire iTunes library from any Mac or PC—or from any iPad, iPod or iPhone running ...											
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I realized this issue early this week and had to switch back to my original plan of creating a budget spreadsheet. However, due to the short amount of time left I wasn't able to add an online agent to the file as originally planned. This is why the scope is slightly less inclusive than the original plan. However, the file is still functional and able to be used in a way that has drastically improved the process of updating money spent and tracking that against our budget.

## 2.3 IMPLEMENTATION DOCUMENTATION:

As mentioned in the Executive Summary this is a tool to simplify the user's efforts for tracking one's personal finances/budget. The Ribbon has been adjusted to provide easy use and access to the Macro. These buttons can be found by clicking on the "Budget Tools" tab inside of the Excel Workbook. The buttons are divided into two groups:

1. "Budget" - to input budgeted amounts and actual spending
2. "Summary" - to access or hide the graphs.



### Step 1:

The first time each month that the user accesses the file they will click on the "Budget" button on the "Budget Tools" tab. This will pull up the user form below.

The 'Budget Entry' user form is a small dialog box with a title bar that includes a close button (X). It contains the following fields and buttons:

- Month:** A dropdown menu with a downward arrow.
- Amount:** A text input field.
- Buttons:** Two buttons at the bottom: 'Save & Close' and 'Save & Add'.

Here the user will choose the current month from the drop down box and then enter the amount of money that they have available to spend during the month. The user then has the option to save and close the user form or add another month's allotted budget by pressing "Save & Add." The data will then be transferred to the table located on the "Budget" tab and will be automatically fed into the summary graphs.

**Budget Table from worksheet**

Month	\$ Budget
January	\$ 2,000.00
February	\$ 1,800.00
March	\$ 2,100.00
April	\$ 2,400.00
May	\$ 1,000.00
June	\$ 2,000.00
July	\$ 1,800.00
August	\$ 2,100.00
September	\$ 2,400.00
October	\$ 1,000.00
November	\$ 2,000.00
December	\$ 1,500.00

## Step 2:

After the user has entered and saved their budget they will click the "Spending" button on the "Budget Tools" to add new entries that document purchases. When the user clicks on the button the following user form will open.

The screenshot shows a window titled "Spending Update". Inside, there are several input fields and a group of radio buttons. The "Input Number" field contains the value "11". The "Description" field is empty. The "\$ Amount" field is empty. The "Category" field is a dropdown menu. The "Payment Type" section has four radio buttons: "Southwest Visa", "Debit", "Cash", and "Check". The "Month" section has twelve radio buttons arranged in a 3x4 grid: "Jan", "May", "Sep", "Feb", "Jun", "Oct", "Mar", "Jul", "Nov", "Apr", "Aug", and "Dec". At the bottom of the form are two buttons: "Save and Close" and "Save and Add".

This form allows the user to write a description of what the money was used for, how much money was spent, what category it belongs to (ie. gas, food, rent, etc.), what method of payment was used, and in what month the spend took place. They may enter just one and choose to “Save and Close,” or they can input multiple entries consecutively by choosing “Save and Add.” The information will be loaded into the table located on the “Spending” tab and will be automatically fed into the summary graphs.

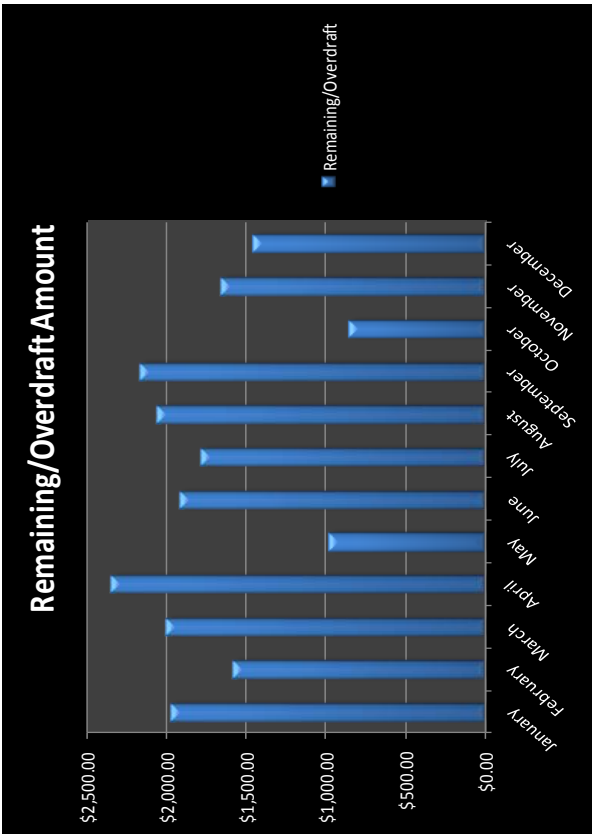
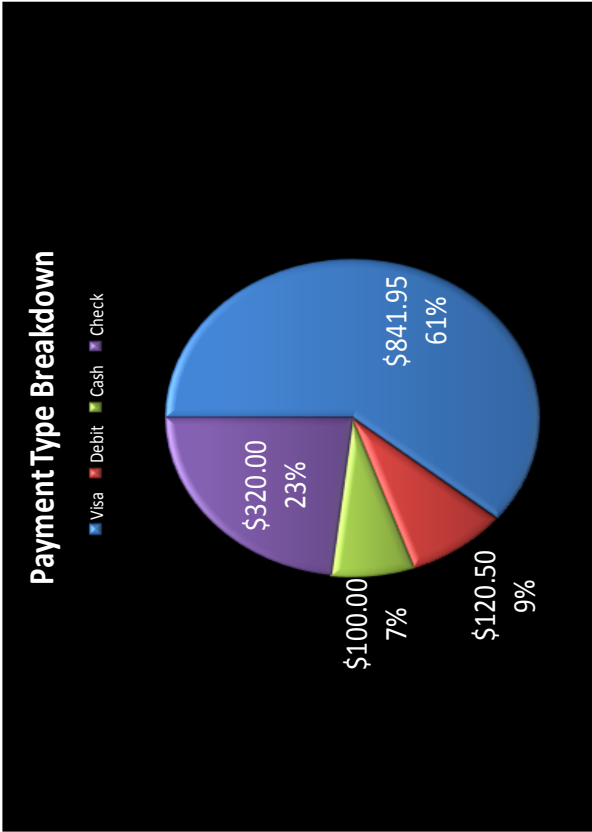
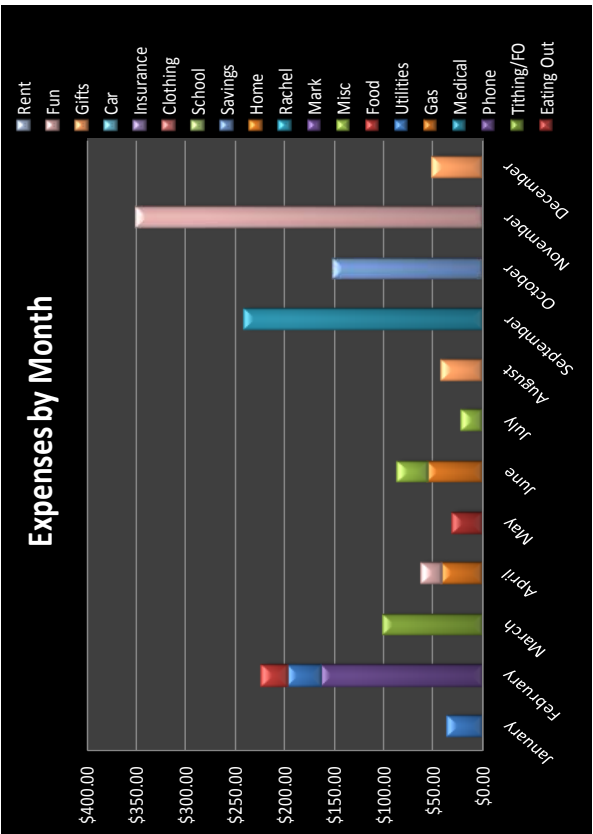
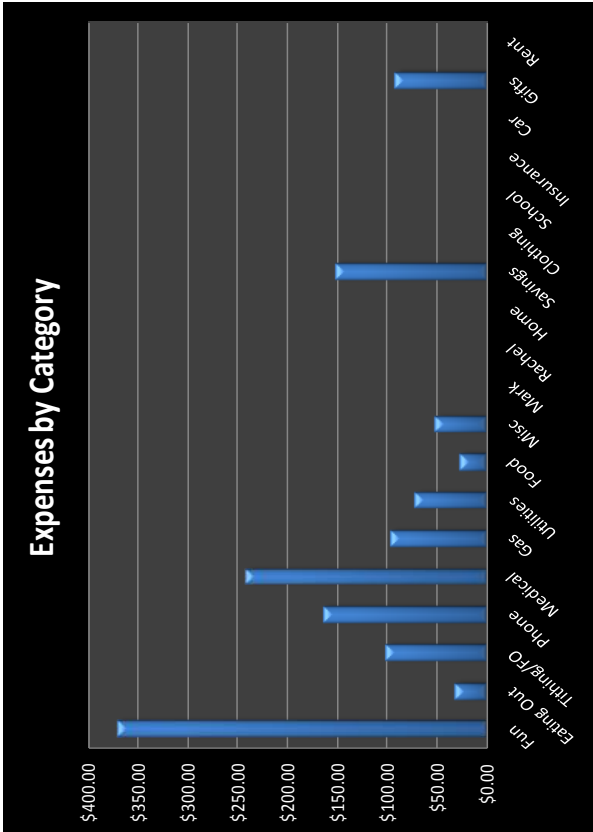
**Spending Table from Worksheet**

Description	Category	\$ Amount	Payment Type	Month
Macy's	Food	\$ 25.50	Debit	February
ESPN Insider Payment	Misc	\$ 19.95	Visa	July
TGIF's Restaurant	Eating Out	\$ 30.00	Visa	May
Maverik	Gas	\$ 55.00	Debit	June
Verizon Phone Bill	Phone	\$ 162.00	Visa	February
Chevron	Gas	\$ 40.00	Visa	April
Power bill	Utilities	\$ 35.00	Check	January
Gas Bill	Utilities	\$ 35.00	Check	February
Golf	Fun	\$ 20.00	Cash	April
The mall	Misc	\$ 30.00	Cash	June

### **Step 3:**

After the user has updated the spend history and budget they can access the updated graphs. This is done by clicking on the “Show Graphs” button on the “Budget Tools” tab in the ribbon. This will hide everything else in the document and bring forward four graphs that will allow the user a quick summary view of how money is being spent. The four graphs that are shown are:

1. Expenses by Category – This shows how much money has been spent in each of the categories during the year.
2. Expenses by Month – This shows how much money you have spent each month of the year.
3. Payment Type Breakdown – This provides detail around how much money you have spent using your different payment options.
4. Remaining/Overdraft Amount – This shows how much money you have left or have over spent in any given month.



#### ***Step 4:***

Once the user has finished viewing these summary graphs they will push the “Hide Graphs” button on the “Budget Tools” tab in the ribbon. This will hide the graphs and bring them back to the “Spending” tab where they will be able to input more spend data or close the file.

## **2.4 DISCUSSION OF LEARNING**

This project challenged me as I learned the hard way that you really need to research the feasibility of a project before getting too involved. I spent a lot of time on a project that I was unable to finish because of data that I needed from an outside source. This also means that you need to think ahead about what data may or may not be available in the future. You could spend hours preparing a file only to have a website or a data provider change the way their data is shown and processed. This can ruin all of your hard work and so it is important to be aware of the risks at hand.

After changing my project I had the opportunity to work a lot more with user forms on this project and was able to improve that skill set. One thing that I was challenged with and struggled to find was the use of radio buttons. I spent a lot of time trying to figure out how to make check boxes that would allow for only one box to be selected at a time. Finally I came across the radio buttons. I then had to change all of the check boxes on the form and in my code to get the functionality that was needed.

Another thing that I was able to learn really well was making changes to the ribbon. I was unable to get the Custom UI Editor to work on my file. I tried multiple ways to make it work. This included taking the exact code from other student’s functioning files and placing it in my own. Even this wouldn’t work in my file. I finally tried to input them using the Ribbon Wizard and was able to get them to be fully-functional. This wizard makes adding tabs, groups, and buttons much easier and is definitely something that I can see myself using in the future.

## **2.5 ASSISTANCE**

On this project I didn’t receive a large amount of help from anyone. I did ask several people including James some small questions.