

## Executive Summary

### Problem

One evening, several months ago, my grandparents called me and asked me to help them configure the new computer they had recently purchased. I was surprised when they asked me to show them how to turn the computer on. Upon learning this, I felt that further inquisition into the extent of their computer skills was needed. I discovered, much to my chagrin, that they had purchased the computer in order to do their genealogy, but they had no idea how to do a simple internet search. As I continued to talk with them about their experience and that of their friends, I realized that there is large market that desires to do genealogical research but lacks the technical skill to do so.

### Solution

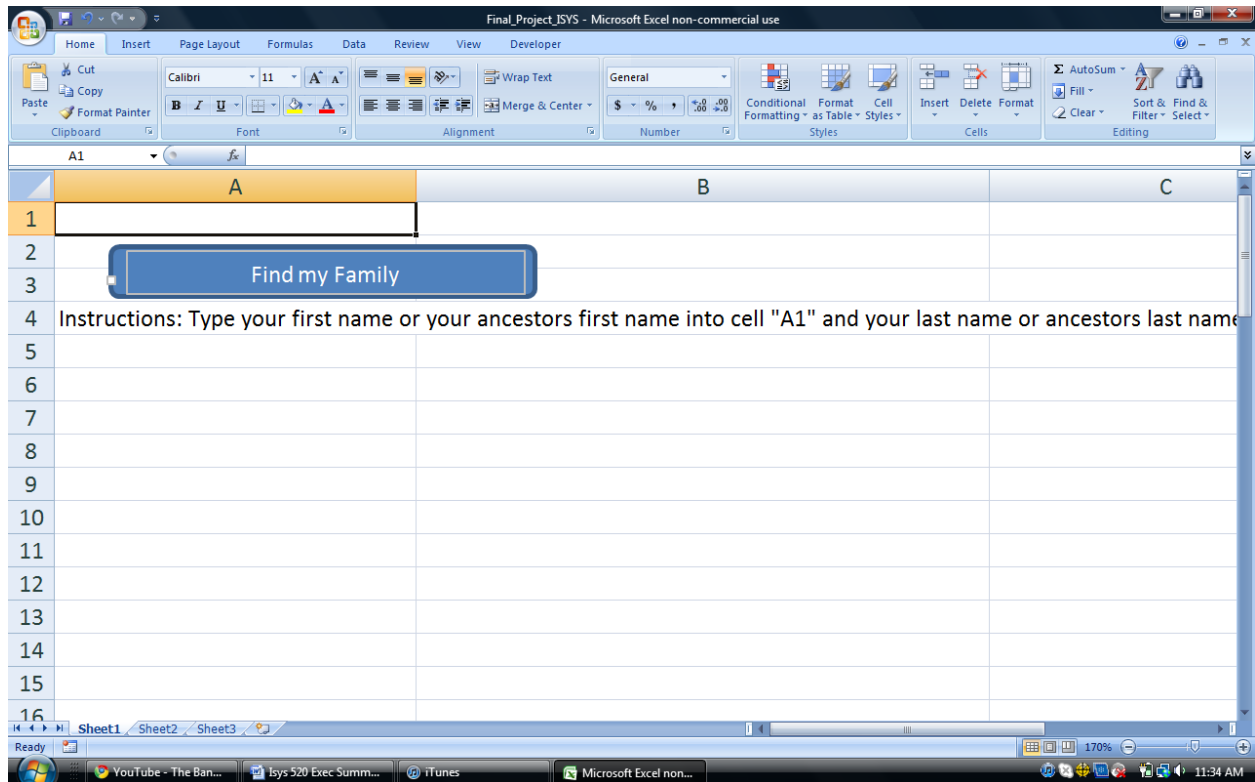
In order to solve this problem I decided to create a spreadsheet that even the most computer-illiterate could use. This spreadsheet was built with simplicity and ease of use being the chief design characteristics. It allows the user to type their name and download their family history into excel with the push of a button.

## Write Up

*Note to Professor Allen: This project is for a B in the class. I came into your office and explained my situation to you, and you said that as long as I wrote a program that took information that the user enters into excel and goes on the internet and uses that data to pull relevant information back into excel then you would be very comfortable giving me a “B”.*

In the church there are many people who have been strongly touched by the “Spirit of Elijah” and desire to do their genealogy. The internet is a wonderful tool that greatly facilitates this important work. Unfortunately, the people who are often most interested in genealogy are the people who are least adept at using the internet.

I solved this problem by creating an excel workbook that the technically incompetent can use.



As can be seen above, all this spreadsheet requires the user to do is enter their family name and push a button. I automated it so that when the user clicks this button, excel pulls their family data from a genealogy website and puts it in a new worksheet.

|    | A                                | B  | C                                 | D                      | E                       | F                     |
|----|----------------------------------|--|-----------------------------------|------------------------|-------------------------|-----------------------|
| 10 |                                  |  |                                   |                        |                         |                       |
| 11 | Mitchel Beck                     |  |                                   |                        |                         | Ordinances may be nee |
| 12 | Four Stars                       |  |                                   |                        |                         | Ordinances may be nee |
| 13 |                                  |  |                                   |                        |                         |                       |
| 14 | Mitchel Beck                     |  |                                   |                        | William Beck            | Ordinances may be nee |
| 15 | Four Stars                       |  |                                   |                        |                         | Ordinances may be nee |
| 16 |                                  |  |                                   |                        |                         |                       |
| 17 | Mitchell Roberts Beck            | about 1882   | 19-Aug-70                         | RUTH Eleanor Davis     | John Forsythe Beck      | Ordinances may be nee |
| 18 | Four Stars                       | Spanish Fork,Utah,Utah                               | Torrance, Los Angeles, California |                        | Grace Darling Robertson | Ordinances may be nee |
| 19 |                                  |  |                                   |                        |                         |                       |
| 20 | Mitchel Andrew Beck              |  |                                   | Sally Pearce           |                         | Ordinances may be nee |
| 21 | Four Stars                       |  |                                   |                        |                         | Ordinances may be nee |
| 22 |                                  |  |                                   |                        |                         |                       |
| 23 | John Mitchell Beck               | February 1849  | 1901                              | Caroline Matilda Wiles | George                  | Ordinances may be nee |
| 24 | Four Stars                       | Wurtenburg, Ill.                                     |                                   |                        | Mary                    | Ordinances may be nee |
| 25 |                                  |  |                                   |                        |                         |                       |
| 26 | Margret Beck                     | 19 August 1842                                       | 1918                              | John Ling              | Mr. Mitchell            | Ordinances may be nee |
| 27 | Four Stars                       | England  | Battle Creek, Calhoun, Mich.      |                        | Isabel Beck             | Ordinances may be nee |
| 28 |                                  |  |                                   |                        |                         |                       |
| 29 | Catherine Mitchel Hedering Black | 1816   |                                   | Thomas Day             |                         | Ordinances may be nee |
| 30 | Four Stars                       | <Wolverhampton At Ettingshall Lanes, Staff, England> |                                   |                        |                         | Ordinances may be nee |
| 31 |                                  |  |                                   |                        |                         |                       |
| 32 | John Mitchell Beck               | 15-May-09  | 6-Feb-91                          |                        | William Henry           | Ordinances may be nee |
| 33 | Four Stars                       | Wills Point, Kaufman, TX                             |                                   |                        | Mary Ethel Coussins     | Ordinances may be nee |
| 34 |                                  |  |                                   |                        |                         |                       |
| 35 | Inez Mitchell Beck               | 27-Oct-01  | 30-Aug-40                         |                        |                         | Ordinances may be nee |
| 36 | Four Stars                       | Shelley, Bing, Ida                                   |                                   |                        |                         | Ordinances may be nee |

Not only will this help those who desire to do their genealogy and lack the technical skills to use the internet, but also it will make genealogy more accessible to those who are kept from doing it due to the time commitment usually required to search for family names. If the time and technical barriers can be mitigated, I believe more people will enter the ‘genealogy market’.

This project presented some technical difficulties, many of which were centered on the issue of working with the church’s genealogy website.

The first thing I had to do get Excel to automate a login:



**FAMILYSEARCH™**  
Welcome to the new FamilySearch

We are changing the sign-in system so that one user name and password works for participating FamilySearch Web sites. From now on, please use your LDS Account for new.familysearch.org. If you don't have an LDS Account, enter your new.familysearch.org user name and password, and we'll help you upgrade.

User name

[Forgot?](#)

Password

[Forgot?](#)

[? Having trouble signing in?](#)

I accomplished this by adapting the parsing agent to this particular website:

```
Sub login()  
  
fp.visible = True  
fp.openpage "https://new.familysearch.org/en/action/unsec/welcome"  
fp.explorer.document.all("j_username").Value = "mitchellvernbeck"  
fp.explorer.document.all("j_password").Value = "nederland1"  
'agent1.explorer.document.all("fm1").submit  
fp.explorer.document.all("signIn").Click  
fp.waitForLoad  
fp.savePage  
search  
End Sub
```

I then had to figure out how to take the information that the user entered into excel and make that interact with the website:

---

☒ Multiple name field
 ☐ Single name field
 [Clear form](#)

---

**Ancestor's first name**

**Last name**

**Gender** <Select> ▼

**Father's first name**

**Last name**

**Mother's first name**

**Last name**

I accomplished this by once again adapting the agent, through trial and error to this website:

```

Sub search()
Dim fname As String
Dim lname As String
fp.waitForLoad
fp.explorer.navigate "https://new.familysearch.org/en/action/namepiecesearch?sv=1"
fname = ActiveSheet.Range("A1").Value
lname = ActiveSheet.Range("B1").Value
fp.waitForLoad
fp.explorer.document.all("namePiece1").Value = fname
fp.explorer.document.all("namePiece2").Value = lname
fp.explorer.document.all("doSearch").Click
fp.waitForLoad
fp.importPage "result"
Delete_Column_Excel_VBA
End Sub

```

After this it was simply a matter to of parsing the correct fields and importing them into Excel.

While this does not sound like a tall order, this is actually the step that took the most time. One of the problems that I ran into was that I was trying to use the web query wizard to import a specific table that I wanted, but this was causing problems because regardless of the information on the screen it would import the initial query that I recorded. However, after a lot of time I came to the realization that I could work around using the web query wizard, and in so doing, make this a dynamic search that downloaded different information based on the inputs into the original Excel sheet.

|   |  |                                      |   |                    |   |
|---|--|--------------------------------------|---|--------------------|---|
| FAMILYSEARCH. Mitchell Vern Beck                                  |  |                                      |   |                    |   |
| Home Me and My Ancestors Search Add Information Temple Ordinances |  |                                      |   |                    |   |
| Print Help  |  |                                      |   |                    |   |
| Refine Search New Search  |  |                                      |   |                    |   |
| Previous 1 2 3 4 5 6 7 8 9 10 Next                                |  |                                      |   |                    |   |
|   | Name   | Birth or Christening                 | Death or Burial                                     | Spouse             | Parents                                       |
| What You Searched For   |  |                                      |   |                    |   |
|   | mitch beck                                     |                                      |   |                    |   |
| Close Matches: 24   |  |                                      |   |                    |   |
| Go to   | <a href="#">Mitchel Beck</a><br>★★★★☆          | 1835<br>Woodstock,, Wisc, Usa        | 1891<br>Wisconsin, United States                    | Susan A. Snodgrass | Josiah Beck<br>Mary                           |
| Go to   | <a href="#">Mitchel Beck</a><br>★★★★☆          | 1848<br>, Wilkinson, Georgia         |   | Sara Holder        | William Beck<br>Ellifair Nalus                |
| Go to   | <a href="#">Mitchel Beck</a><br>★★★★☆          |                                      |   |                    |   |
| Go to   | <a href="#">Mitchel Beck</a><br>★★★★☆          |                                      |   |                    | William Beck                                  |
| Go to   | <a href="#">Mitchell Roberts Beck</a><br>★★★★☆ | about 1882<br>Spanish Fork,Utah,Utah | 19 August 1970<br>Torrance, Los Angeles, California | RUTH Eleanor Davis | John Forsythe Beck<br>Grace Darling Robertson |

Although more could be done to increase the value of this project, I believe that it will be a great help to people like my grandmother who desires to be involved in genealogy work, but has a difficult time turning on a computer.