**Prenatal and Lead Excel File Comparer Application**

## Background

Every month Paul Beach, hereto referred to as the client, manually compares two pairs of Excel documents which contain various pieces of information including delivery dates, entry dates and addresses. Each pair contains different data, but each file within the pair have similar data columns. For instance, files 1 & 2 are similar and files 3 & 4 are similar but each pair 1&2 and 3&4 are different. The client uses the previous month’s Excel file and compares it to the current month’s Excel file to find any new additions and then forwards a new, separate Excel document to the appropriate stakeholders for them to fit lead filters to their taps.

### Excel File Headings

#### Births and Lead

|  |  |  |  |
| --- | --- | --- | --- |
| CR Birth Date | Address Line 2 | Address Line 3 | Address Line 4 |

#### Prenatal and Lead

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Opened Date | Expected Delivery Date | Address Line 2 | Address Line 3 | Address Line 4 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |

## Assumptions

1. The headings (columns) will not change from month to month.
2. Excel documents will always be in XLSX format
3. Spelling corrections on fields will count as additions.
4. Fields to compare will never change.
5. Data must not be uploaded or used across the internet (must be run locally).

## Proposed Solution

The application will utilize a web browser like Google Chrome or Mozilla Firefox. It will be a file that when opened, will load a web page in the web browser. The program will be developed using the professional version of Visual Studio 2015 by Microsoft.

The languages necessary to complete this project are HTML5, Bootstrap, JavaScript, and JQuery. HTML5 is a markup language that will be used to create the layout of the web application. Bootstrap will be used to add a professional look to the application. JavaScript and JQuery define the functionality of this tool. JavaScript is the main programming language while JQuery provides some additional functionality.

The application will have a specific workflow that is accomplished with a single web page. First, the user will load the web page. Once loaded, the user will be presented with two options, Birth and Lead or Prenatal and Lead. The option is selected by ticking a circle. After a selection is made two sections will appear that will allow two separate Excel documents to be uploaded. Files are uploaded by clicking a button for each file. Next, a submit button will be made clickable. Once clicked, the application will compare the two files to isolate new lines, then the file will be made available for download. Lastly, download the file by clicking on the download button. After the file has been downloaded, the application may be closed. The new Excel file will have the same number of columns as the originals.

## Assets, Timeframe and Tasks

### Assets

1. Paul Beach (Client)
2. Joe Seeber (Programmer)
3. Johnathan Policicchio (Programmer)
4. Matthew Willcock (Programmer Lead)

### Tasks

|  |  |  |
| --- | --- | --- |
| Asset | Task | Time (in Hours) |
| Paul Beach | 2. **Consultation**  2.1 Design consultation  2.2 Functionality consultation | 1  0.5  0.5 |
| Johnathan Policicchio | 1. **Planning**    1. Proposal    2. Workflow diagram    3. Define Completion time 2. **Consultation**   2.1 Design consultation  2.2 Functionality consultation   1. **Develop layout**   3.1 Build layout with HTML5  3.2 Apply Bootstrap design  3.3 Finalize layout   1. **Develop functionality**    1. Develop app workflow    2. Read an Excel document    3. Create an Excel Document    4. Add input validation    5. Testing | 14  6  6  2  1  0.5  0.5  20  10  2  8  76  8  24  24  12  8 |
| Matthew Willcock | 2. **Consultation**  2.1 Design consultation  2.2 Functionality consultation | 1  0.5  0.5 |
|  | **Total time** | 111 |

## Deliverables

1. This document, completed with your proposed solution, Assets, Timeframe and Tasks completed
2. UML Diagram to accompany the solution
3. A working, well-formed and well-documented application which meets all the requirements.