

COSC 380

Company: Definitive Logic

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Definitive Logic Summary

- Size of about 500 employees and is quickly growing
- Consulting company that mainly contracts with the government, but occasionally with the private sector
- Specializes in automation and analytics



Project Summary

- Assigned to a project working with the National Defense University
- Improve the efficiency of multiple business processes (New employee onboarding, allocation of hours, etc.)
- Responsible for data analytics (mainly data manipulation)



Project Summary

- Created and sent surveys to staff members at NDU to gather data
- Organized data in Excel using Visual Basic (Excel's default language)
- Used 2-D arrays mainly for organization
- Had to organize about 40-50 worksheets, each with 5000+ lines of data



```
Microsoft Visual Basic for Applications - debugging.xlsm - [Sheet1 (Code)]
File Edit View Insert Format Debug Run Tools Add-Ins Window Help
CommandButton1 Click
Option Explicit
Private Sub CommandButton1_Click()
    Dim i As Integer, j As Integer
    For i = 1 To 2
        For j = 1 To 5
            Cells(i, j).Value = WorksheetFunction.RandBetween(20, 100)
        Next j
    Next i
End Sub
```

Challenges

- I was very new to Visual Basic, and had to learn it quickly
- Did some occasional work in Power BI and Tableau, which were also new to me
- Time differences between coworkers



Classroom

- Linear algebra and data structures/algorithms were the most helpful
- Transposed large amounts of data using 2-D array
- Classroom also provided confidence in ability



Lessons/Skills Learned

- Communication skills: don't be afraid to ask questions
- Visual Basic
- Data visualization
- Presentation skills

