Executive Summary

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April 7, 2017

CSCI 3020 – 001

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# Overview

A summary of the database purpose, and how it will be used. Describe the business environment briefly.

Needing to keep track of their ~100,000 potential donors and donations, the Development Office of Beta University called upon us to build a database for these purposes. Currently, the donor data is stored in a spreadsheet and is used by Suzanne Hayes.

Over the course of the fiscal year, Suzanne Hayes sends letters to donors, urging potential donors to donate and come to events. Class coordinators for each class also send letters to potential donors soliciting for larger donations. During the annual Phonothon, Ms. Hayes asks students and others to volunteer in calling potential donors; by the end of May, those not donated will be called again by either the class coordinator or Ms. Hayes herself.

# Planning

Process of planning completed in Deliverable 1

Before even designing and implementing the database, we set up a Slack group to discuss and plan our project streamlining our conversations and work. Thought most of our work was done individually, we however coordinated our work through Slack, making sure we didn’t over-step our bounds in work others were doing.

Charles Wigle created the outer Tables, Employee, Business, Alumni, GradStudent, and Parents. He also opened communication and helped create a sense of direction for the project. Matt created the Address, Donation, Payment Method, Employers, Event, EmployerPayment, and Payment tables. Crystal created and revised the design of the ERD and creation script. And Jonathan compiled the separate table create scripts into a single script, added comments, and added tables EventDonors and Donor.

# Initial Testing

Note how you accomplished the loading of test data into the database, and how you plan to use that for testing.

After receiving feedback from our last deliverable, we changed items in the ERD to better fit the requirements given by the customer. We removed the table PaymentMethod and tables describing other Donors: Employee, Business, Alumni, GradStudent, and Parents. We then added two unary relationships to the donors table: Coordinator and Spouse; not to mention two new Foreign Keys referencing said Coordinator and Spouse IDs. Also after the feedback, Crystal added a GitHub Repository, ridding us the problem of source control.

Using data generation websites like Mockaroo, we added insert statements for the tables. Jonathan added 25 inserts for the Address table. And while Matt made the Event inserts, Employer inserts, and 12 more Address inserts, Charles made the Donor Inserts and compiled them.

While there were some issues with the Event data due to size constraints by which the mock data creation site gives us, it was an easy fix.

# Infrastructure Plan

Include brief expectations of the size of the database. Discuss the infrastructure required for the transactional database (e.g., database server specifications), and what infrastructure requirements the customer might need if they want to do data warehousing or data mining.

### Size

The testing insert data doesn’t nearly compare to the potential size of the database in production. Seeing as how our database at the writing of this paragraph has 70 total row entries, versus 100,000 donor row entries, the comparable size would be immense to our tiny amount of row entries.

### Database Specs

For the Donor table, we will need to implement a procedure/trigger in calculating the total donations a Donor gives that is eventually stored within the Donor table.

### Data Mining Requirements

For

# Reporting Capabilities

This is a description of what reports the database will contain and how the user will run them. (At this stage, reports will be manifest as PROCEDUREs in the database.)

• Annual Report to Donors This report was described previously. It lists names only, not amounts. However, the names have to be categorized as indicated. The report also includes summaries, including the total amount raised from all sources, the total for each class, the percent participation for each class, the total for each category, the grand total for each donor circle, and the class total for each donor circle. It is an important fundraising tool for the following year’s drive, since it is mailed to each potential donor.

• Monthly Report This is an internal report that Suzanne uses to evaluate the progress of the fundraising for the year so far. It gives the totals and percentages of pledges and gifts received for the current month in all categories. Payments Due Report Suzanne would like a report each month listing the pledge payments that were due that month but were not received. It should list the donor’s name and address, the amount due, the date due, the amount of the pledge, the amount received so far, and the date of the previous payment, if any.

• Event Report In this report, Suzanne would like to generate whoever attends each of the fundraising events, and what pledges and gifts were received from the attendees.

• Class Representative Contact List For each class representative, Suzanne would like a list of classmates to be contacted, including the name, address, telephone number, last year’s donation information, and this year’s donation information.

• Phonothon Volunteer Contact List For this report, each volunteer caller is given a list with information about the potential donors he or she is expected to call, including the name, telephone number, address, category, year (if applicable), and last year’s donation information.