CS CAPSTONE REQUIREMENTS DOCUMENT

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ANCESTRY DATA VIEWER

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1 Introduction

1.1 Purpose

The purpose of this project is to create a program that will open GEDCOM files and show the data contained in a clear and easy to read manner.

1.2 Scope

The software will open and get data from GEDCOM file and use the data to produce the required features. These features include full tree view, direct lineage view, 3D view, and also the ability to find the common ancestor of two people(node) in the tree.

1.3 Definitions, acronyms, and abbreviations

Tree : is actually refers to the tree data structure for displaying data. Elements in the tree is refer to as nodes. Every persons name in the GEDCOM file will be a node on our tree diagram.

Graph: A graph is a superset of Trees. Whereas a node trees can hold only two children per node, a graph is capable of holding as many nodes as desired.

1.4 References

1.5 Overview

Our project will create an application that is capable of reading and parsing GEDCOM files. After parsing the files, it will generate a graph, with each node representing one member of the family. The graph will be arranged in a legible fashion, which displays each person chronologically and connects them. Our project will also allow users to quickly search for common ancestors, and see the direct lineage of a given person. Finally, our project will allow the user to view it in VR if they have a headset available.

2 Overall Description

2.1 Product perspective

This project is to create an Ancestry data viewer for our client to use. Its also available for everybody out there because the code is open sources(GITHUB). The user will interface with our software through a laptop or desktop with Linux or Windows operating system. The user will need to have their own GEDCOM file and open the GEDCOM file in our software. The software will run an algorithm to obtain the data and display it in a clear and easy to read manner.

2.2 Product functions

Our product should be capable of reading GEDCOM files, then displaying them. It should also be capable of displaying every person included in the GEDCOM file, and should be able to filter out people who arent directly related to the selected person. The application will highlight the nearest ancestor of two selected people.

2.3 User characteristics

Our user is Ashley McGrath, who is our client. While our users is likely to be standard denizens of the Internet, we are primarily designing our application for our client.

A standard user should not need to have great technical knowledge in order to successfully use the application. They should be able to read and understand basic computer terminology, such as clicking, and moving the mouse, and should be able to read and follow simple instructions.

2.4 Constraints

We are required to create a 3D view of the family tree. The 3D view can only be accessed with the VR devices.

2.5 Assumptions and dependencies

We are dependent on pre-existing VR frameworks in order to implement VR functionality. If not, we will not be able to create our own, as this would be too complicated and time-consuming.

3 Specific requirements

- Our application must be capable of opening and displaying GEDCOM files.
- Our application must be able to run on Linux and Windows operating systems.
- Our application must be VR compatible
- Our application must include the ability to find the nearest ancestor of two given people.
- Our application must be able to highlight direct relatives of a given person

Appendix