Software requirement specification Venn Diagram 2311

Jeffrey Walker

Joseph Spagnuolo

Marco Carusoni

Arjun Kaura

Supervised by: Dr Vassilios Tzerpos

**1. Introduction**

**1.1 Purpose of this Document**

This document is intended to outline the requirements set by the customer and the software developer(s).

**1.2 Overview**

The Venn Diagram software is intended to construct venn diagram images by utilizing an effective GUI.

**2. General Description**

**2.1 Product Features**

The Venn Diagram software features will give the user the ability to create, save, load, and print venn diagrams all with customizable options. The base case of every venn diagram will include 2 large circles that intersect each other. This will also include a title for each circle and insertable text specified by the user. But the most important design aspect of the software is giving the user every tool to customize their desired venn diagram. Some features include, resizing of each individual circle, defining a colour scheme for each circle while defining a unique contrast for the intersection, and selecting desired font.

**3. Acceptance test cases**

**3.1 Selecting Title**

The following buttons “Title”, and “Subtitles” (highlighted in red) are selected to insert main title and subtitle within each circle.

Expected result (highlighted in blue): “Insert Title Here” should display to prompt the user. Clicking text box will let user input desired text.

A close up of a mans face

Description automatically generated

**3.2 Inserting text**

The following entry line (highlighted in red) is where text can be entered, user can then confirm desired text by pressing “enter” on keyboard. Once complete, text will appear on side menu. “Test text 1”, “Test text 2” were entries from this user. After this step, user can then drag and drop text to specified circle (highlighted in green). In this scenario, user used the drag and drop function for “Test text 2” into right circle.

Expected result (highlighted in blue): “Test text 1”, “Test text 2”, (example text) should display to scene, then dragged to desired circle.

A close up of a device

Description automatically generated

**3.3 Selecting Colour**

The following button (highlighted in red) “#ccffcc”, “#ffb8b8” is selected to change colour of circle 1 and 2, user can then choose desired colour depending on which button is used. A popup window will display available colours to choose from.

Expected result (highlighted in blue): Colour of circle 1 should change to lime green. Colour of circle 2 should remain the same since unchanged.

A picture containing screenshot

Description automatically generated

**3.4 Saving File**

The following menu button (highlighted in red) “save as” is selected to save the current state of the user’s progress.

Expected result (highlighted in blue): A new window will appear to prompt the user to save current file in specified location.

**A picture containing screenshot

Description automatically generated**

**3.5 Open File**

The following menu button (highlighted in red) “open” is selected to open the previous state of a user’s progress.

Expected result (highlighted in blue): A new window will appear to prompt the user to open file in specified location.

A picture containing screenshot

Description automatically generated

**4. Use Cases**

This section describes the set of objectives and requirements for the system from the user's perspective.

**4.1 Open Venn Diagram**

Precondition: Venn Diagram software is running, preexisting file exist locally.

1. Select “File” button from menu bar in top right corner
2. Select “Open…” button from drop down menu bar
3. New display will be opening, user will then select location of preexisting venn diagram file

Postcondition: User has opened a venn diagram file.

**4.2 Save Venn Diagram**

Precondition: Venn Diagram software is running.

1. Select “File” button from menu bar in top right corner
2. Select “Save…” button from drop down menu bar
3. New display will be opening, user will then select location of where to save venn diagram file

Postcondition: User has saved a venn diagram file

**4.3 Insert text into diagram**

Precondition: Venn Diagram software is running.

1. Select desired circle in drop down menu
2. Enter text
3. Select “Add new text” button to insert text

Postcondition: User has inserted text object into desired circle

**4.4 Start new diagram**

Precondition: Venn Diagram software is running. At least one change has been made to original file.

1. Select “File” button from menu bar in top right corner
2. Select “New” button from drop down menu bar
3. New display will be opening, user will then be prompted to save current diagram state before starting new project

Postcondition: User has started a new project

**4.5 Edit current diagram**

Precondition: Venn Diagram software is running.

1. Drag slider bar to edit individual circle sizes
2. Select desired circle name under “subtitle button” to change colour
3. New display will be opening, user will then be prompted to select desired colour.

Postcondition: User has edited a current project file.

**5. Appendices**

Specifies other useful information for understanding the requirements. (\*intended for future use\*)

**5.1 Definitions, Acronyms, Abbreviations**

Provides definitions of unfamiliar definitions, terms, and acronyms.