

## Software Requirements Document (Version vF) - Group 17

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## Venn Diagram Visual Tool

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#### 1. System Purpose

The purpose of the Venn Diagram Visual Tool is to allow users to organize their information visually into three categories, consisting of sections of two circles and a section where the two circles overlap another. Users are able to see the relationships between the sets of information and identify similarities and differences.

All essential features of the system are described in this document.

## 2. System Features

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The System Features of the Venn Diagram Visual Tool.

- User can customize the visual look of the application to their preference
  - Customizable background color of application
  - Customizable menu button colors
  - Customizable menu color
- User is able to customize their Venn diagram to their preference
  - Customizable color of each circle
  - Customizable size of the application/diagram
  - Customizable titles of the visual diagram
- User can add customizable text elements, which include text element title and extra information box, to the three segments of the Venn diagram
  - Text elements can be added
  - Text elements are able to be dragged and dropped to preferred diagram sections
  - Customizable color of text element
  - Customizable color of font
- User can activate and deactivate textboxes being anchored in fixed positions inside the venn diagram conjunctions
- User can clear all the work and reset the application
- User can export a screenshot .PNG file of the Venn Diagram
- User can Import past projects to continue on
- User can save their work on local directory
- User can Undo their recent actions in the application
- User can Redo their recent actions in the application

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## 3. Acceptance Requirements

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The Acceptance Requirements met by the Venn Diagram Visual Tool.

- User interface includes a two-circle Venn diagram visual with a title, and subtitles above each circle
- Texts of titles are editable to user
- Venn Diagram allows user to add Text Boxes into three separate conjunctions
- Text boxes can be put in fixed places or according to the user's preference and the options can be toggled
- The user interface includes a text adder window, located in the top left corner
- Buttons and text fields in the text adder will allow the user to do the following:
  - 'textbox name' text field
    - Allows users to add a name/title to the textbox to be created
  - green round '+' button
    - Allows user to create a new text box to the left side of the user interface which will then be available for dragging into the diagram sets
  - This button is also replacable with the 'Enter' key when the user is selecting the 'textbox name' text field
  - 'Box Color'
    - Gives user ability to change the color of the textbox to be created
  - 'Font Color'
    - Gives user ability to change the color of the text in the textbox to be created
  - 'More' / 'Less' button
    - Allows user to expand and shrink the text adder window to reveal or hide the extra information text field
  - 'Extra information' text field
    - Allows users to add extra information attached to the textbox to be created
- The textboxes created will allow the user to do the following when hovered over with mouse:
  - 'Text Edit'

- Allows user to edit the textbox name of the  
textbox hovered over

- 'Box Color'
  - Gives user ability to change the color of  
the textbox hovered over

- 'Font Color'
  - Gives user ability to change the color of  
the text in the textbox hovered over

- 'Trashcan'
  - Gives user ability to discard the textbox  
hovered over

- The user interface includes right side panel of operates icons  
which expands when hovered over with mouse

- Buttons in the right side panel will allow the user to do the  
following:

- 'Anchoring'
  - Allows user to turn anchoring on and off
    - When anchoring is on, text boxes will  
move to preprogrammed positions when dragged within the circles and  
the screen will stay maximized.  
This also means only a fixed amount of text boxes can be dragged into each  
region.
    - When anchoring is off, text boxes can  
be dragged anywhere the user prefers and the screen can be resized  
according to the user's  
preference

- 'Screenshot'
  - Lets users save a screenshot image, default  
in .png file format, of the diagram which will be saved in the directory  
from  
where the program was run or of users  
choice

- 'Reset'
  - Allows users to clear all user action and  
reset the application to it's default state

- 'Import'
  - Allows users to open and load an exisiting  
venn diagram project file

- 'Export'
  - User can save the project process in a text  
file which can then be opened again through the 'Import' function

- 'Undo'

- Lets user undo their latest action in the application window
- 'Redo'
  - Lets user redo their latest redo action in the application window
- 'Compare'
  - Allows users to compare two different venn diagram projects in these aspects:
    - Comparing title of the diagram
    - Comparing circle titles
    - Comparing textbox texts
    - Comparing textbox positions (left, right, centre)
- 'Right Circle Color'
  - Gives user ability to change the color the right circle of the diagram
- 'Left Circle Color'
  - Gives user ability to change the color the left circle of the diagram
- 'Background Color'
  - Gives user ability to change color of the background of the application
- 'Button Color'
  - Gives user ability to change color of the buttons in the application
- 'Text Adder Background'
  - Gives user ability to change color of the text adder, located in the left top corner, background
- Text boxes are held either in the section it is dropped into by user, or the preprogrammed positions depending on whether anchoring is on or off.
- Text boxes exist in a list on the left side of the interface prior to dragging into diagram.
- The different circles have the same radius.
- The circles have a set radius (depending on the screen size).

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1. Click on the green round '+' button located in the

- (list on the left side of the window)

'box 1-5'.

- 'Date of Birth' with white text

title

1. Hover the mouse over the text box wishing to change
2. Click the 'T' button
3. Enter "Hello World" and press 'Enter' key

The text of the text box now says 'Hello World'

- Move a text box to the right circle of the Venn Diagram
  1. Click on the text box
  2. Drag the text box to the right circle
  3. Drop the text box

diagram

The text box is now in the right circle of the Venn

- Delete a text Box
  1. Hover over the text box with mouse
  2. Click the 'trashcan' button

The text box is no more.

- Changing the title of the Venn diagram to 'My Venn Diagram'
  1. Left click on the title
  2. Enter 'My Venn Diagram' and press 'Enter' key

The title is now changed to 'My Venn Diagram'

- Changing the title of the right circle to 'Things I'm Good At'
  1. Left click on the right circle title.
  2. Enter 'Things I'm Good At' and press 'Enter' key

At'

The right circle title is now changed to 'Things I'm Good

- Saving a screenshot of the diagram named 'VD\_1.png'
  1. Hover the mouse above the right side panel
  2. Click the 'Screenshot' button
  3. Name the file 'VD\_1'
  4. Select '.png' for file type and save it in desired local directory location

Screenshot 'VD\_1.png' is saved

- Clear all of the textboxes and reset to the default application settings
  1. Hover the mouse above the right side panel
  2. Click the 'Reset' button

- Change background color of application to white
  1. Hover the mouse above the right side panel
  2. Click the 'Background' color picker
  3. Click the white color from the color palette

The background of the application is now white

- Move 3 textboxes from universal list to right circle
  1. Click on the text boxes one after the other
  2. Drag the textboxes to the right circle
  3. Drop the textboxes

The 3 textboxes have been moved to the right circle

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