Venn Diagram Application

Software Requirements Document

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Project Information

The Venn diagram is an application whose purpose is to assist clients, who can be students, teachers, Managers to assist in helping them organize data. The Venn diagram runs on customer needs to help interact with customers to create the desired Venn Diagram. Through our software application clients would be able to store and organize and save data. Clients also could revisit saved stored data. Through our application we hope clients can store data more effectively and efficiently.

System Use Cases

This section will outline different use cases and present the requirement specification that will show how user(s) will interact with the Venn-diagram application to achieve a goal. This section will describe and go over the system step-by-step to show how a user can optimize the use of this interface. This application is designed for anyone who intends to organize information virtually to help show the relationship between 2 different topics.

Case #	Use Cases Description
1	**Inputting Data** · Clients can use software to input desired data input · The software allows clients to make changes to desired input . Clients can input topics for the venn diagram in other for it to have a header . Clients are allowed to input a title for the Venn diagram and also change it . . Clients can input date in the various subsets of the Venn diagram and also adjust the number of elements in a subset
2	**Relocation Size** · User can use software to change the desired size of circle to accommodate Client needs · Users can set the size of the Venn diagram with the use of a slider. Sizes range from 150 to 250.

	· Clients can also use the desired size to also change size of data input · Data in the subset should fit any desired size of the Venn diagram. · Users can change the font size of the title on the left top corner using the Set Title Font Size slider. Size range from 15 to 40 · Users can change the font size of the topic on the left top corner using the Set Topic Font Size slider. Size range from 15 to 20
3	**Saving Data** · Clients can save data from the Venn Diagram application as either a .txt or .jpg file · The .txt file will store important features of the Venn diagram each on a new line. · These features include: ● Title ● Topic titles ● Circle sizes ● Circle colours ● Individual points · The .jpg file will save the entire Venn-diagram as a screen shot for use of display or presentation purposes.
4	**Changing Colors** . Clients can choose from a desired number of colors to satisfy customer needs.

	· Due to the use of the colorPicker function on Javafx, an infinite value of colours can be chosen. · Clients can alternate the colours of the Venn diagram subsets. For example, the first subset is of color red and the second green. · Clients should be able to use various colors at any time.
5	**GUI** · The User interface should be easy to use. . The User interface should contain all the functions which are stated. . The user interface should work properly as expected. . The user interface should be precise in terms of positioning of elements and functions in the Venn diagram.
6	**Selecting number of points** · Clients can select the number of points they would like to include in the Venn diagram . Implementation of points should be easy to implement by client. · Clients should be able to input any number of points they wish that fit into the Venn diagram size of their choosing. · Clients can also remove points fully if they do not wish to use that many points.

Acceptance Test Cases

The acceptance test cases will act as a test that the user must complete in order to do the next thing with the Venn-diagram application. Since this is the case, the first test case will check if the user has filled out information for all the designated categories on the first panel.

Test Case 1:

- Clients can launch the application without any errors
    - The first screen should pop up when the application is launched.
    - User Input prompt screen should pop up to input the desired data.
    - User clicks on the Construct Venn diagram and the application should start.
    - Users can also click on the import button if they wish to import old data without any errors.

Test Case 2:

- Properly formatted Circle to User size and color
    - Users can select their desired color for the specified topic when selected from the list of colors.
    - Users can change color at any point during the application launch.
    - Users can select various sizes using the slider to change the size of the topic and title.
    - Users can select from a list of colors to change the color of the topic.
    - Users can select from a list of colors to change the color of the font.

Test Case 3:

- User can select input data to edit to desired input data
    - When a user edits the input data the software should be able to change, and update the input with the new data.
    - Editing of data should be easily implemented.

Test Case 4:

- User can save Data

- When the user has saved the data by clicking the “Save as .txt” button, the data should get saved into a stored file.
- The user should be able to see the saved data and import it later to work on the application again.
- When the user has saved the data by clicking the “Save as .jpg” button, the entire Venn diagram application should be saved as a screen shot which can be later accessed and displayed.

Test Case 5:

- User Can modify Venn application to desired size of data input
  - Users can select the size method to modify size of data and the number input of data points.

Conclusion

Although the user manual is available for reference, the venn diagram should be easy to implement by the user at any point. Editing and saving data should also be easily done as well by the user giving the user a variety of options when constructing a descriptive venn diagram which can be used for various professional and learning purposes.