**Qwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklztjjjjjjjjjjgffg6486xctehhvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmrtyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmrtyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmrtyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmrtyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmrtyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmrtyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmrtyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnm**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SRS First Draft  Phase 1 SRS  11/1/2014  Delivered to :  TA: Omar Khaled Ali ([o.khaled@fci-cu.edu.eg](mailto:o.khaled@fci-cu.edu.eg))   |  |  | | --- | --- | | Team Members | | | Mohammed Al\_shaheri | 20110522 | | Abdullah Fadhel Al\_Omaisi | 20120589 | | Nada Mustafa Al\_Ademi | 20120592 | | Bothaina Gamil Noman | 20120594 | |

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Chapter 1 : introduction

1.1 purpose of the system

The purpose of the project is to design charts for any data

that user enter it to the system and this charts are three types:

pie chart, line chart, bubble chart. And every one of them has

its procedure to represent data. And the advantage of

representing data in chart is the observer can know by

observing how many data or the percentage of the data

Without having to calculate it. And Chart Component

organizes all data of chart to be easily modeling.

1.2 scope of project

This software system will be Chart Component . And this

software system responsible for holding data points,

annotations, color, label and various necessary properties.

Chart component support various types of chart [line chart, pie chart, bubble chart].

Chart component allows easy addition of new charts types:

• A pie chart shows percentage values as a slice of a pie.

• A line chart is a two-dimensional scatter plot of ordered observations where the observations are connected following their order.

Chapter 1 : introduction

• A bubble chart is a two-dimensional scatter plot where a third variable is represented by the size of the points.

And the Chart Component view is to provide drawing to supported charts [line chart, pie chart, bubble chart].

1.3 Definitions Acronyms, and Abbreviations

line chart, pie chart, bubble chart

they are types of chart.

1.4 References

<http://www.tmssoftware.com/site/advchart.asp>

<https://klipfolio.uservoice.com/knowledgebase/articles/62221-how-to-build-bar-line-chart-components>

<https://developers.google.com/chart/interactive/docs/gallery/bubblechart>

1.5 review

The next chapter is overall description section of this document

gives an overview of the functionality of the product.

The third chapter Requirements Specification section and it write in technical terms Both sections of the document describe the same software product.

Chapter 2 : Over all description

2.1 Product perspective

The charts component very useful .the aim of charts system is to provide developers the path to include into their dashboards the basic chart types. there are clearly defined interfaces for the different systems .The most attractive feature of chart is the huge customization capability.

2.2 product function

In software engineering and organizational theory is

a chart which shows the breakdown of a system to its lowest manageable levels they are used in structured programming to arrange program modules .one type of charts is line it represent the connection and or ownership between activities and sub activities they are used in organization charts.

Chapter 2 : Over all description

**Use case diagrams for chart component system**

|  |  |  |
| --- | --- | --- |
| Actors name | Use case | Steps |
| **students** | Representing apiece of data | 1.choose the type of chart.  2.adding values  3.change the data. |
| **business** | Representing the changes that occurred to the data in a certain period. | 1.views the data in previous period and the data now and compare between them by enter the values |
| **Programmer** | 1.Add another chart.  2.delet chart.  3.change the form when representing data by charts. | They make all thing in system by using programming with language that used in system |

2.3 User characteristic:

There is several users of the chart component system

Programmer:

Easy to maintain the whole system because they know all the details of how the system work and they have the authority to do any change in system .

**Other user like students ,businesses, professors** they only represent the data by the values they want and with any type of chart that is in system

Chapter 3 : Specific Requirements

3.1Functional requirements

The user of the system needs first to specify how he wants to represent his data to be visualized ?

For example he might want to see a pie chart, line chart, or a bubble chart representation.

After choosing the type of chart he wants, he must enter the required, and suitable inputs for each.

Once the inputs are entered the system starts to draw and match the suitable points to form the visualized charts that can be helpful in solving the problem through representing the information in a manner so that they can be easily compared.

3.2 Quality requirements

Chart must be represented clearly with colors as much best as possible, the system must produce the output as the user presses the button

No memory needed since the information is easily computed, and we just need the user to only produce the input to get the output immediately any time.

Variables must be represented under or next the chart, so that’s we can identify them on the chart.

Chapter 3 : Specific Requirements

3.3 Process requirements

* The product is free and any one can use it for personal use, but not for financial goals.
* The product will go through multiple stages before it can be finally completed and produce.
* Each chart component has its own characteristic.
* Each method for developing the chart must follow the known features of each so that they will be displayed as described.