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Content

1. Mermaid Graph

1.1 Basic Graph

```
graph TD
A[Start] --> B[Step 1]
B --> C[Step 2]
C --> D[Step 3]
D --> E[End]
```

1.2 Graph with Conditionals

```
graph TD
A[Start] --> B{Decision}
B -- Yes --> C[Step 1]
B -- No --> D[Step 2]
C --> E[End]
D --> E[End]
```

1.3 Looping for Graph

```
graph TD
A[Start] --> B{Condition}
B -- True --> C[Action]
C --> B
B -- False --> D[End]
```

1.4 Subgraph

```
graph TD
A[Start] --> B[Step 1]
B --> C[Step 2]
subgraph SubProcess
C --> D[Step 3]
D --> E[Step 4]
end
```

```
E --> F[End]
```

1.5 Parallel Paths for Graph

```
graph TD
A[Start] --> B[Step 1]
B --> C1[Step 2.1]
B --> C2[Step 2.2]
C1 --> D[Step 3]
C2 --> D[Step 3]
D --> E[End]
```

1.6 Different Node Shapes for Graph

```
graph TD
A([Start]) --> B[Step 1]
B --> C{Decision}
C -->|Yes| D[Square Node]
C -->|No| E((Round Node))
D --> F[End]
E --> F
```

1.7 Left to Right Directions for Graph

```
graph LR
A[Start] --> B[Step 1]
B --> C[Step 2]
C --> D[End]
```

2 Mermaid Pie Chart

Start with ``pie`` keyword to begin the diagram.

``showData`` to render the actual data values after the legend text, this is OPTIONAL

Followed by ``title`` keyword and its value in string to give a title to the pie-chart. This is OPTIONAL

Followed by `dataSet`. Pie slices will be ordered clockwise in the same order as the labels.

label for a section in the pie diagram within `" "` quotes.

Followed by `:` colon as separator

Followed by positive numeric value (supported up to two decimal places)

Example Pie chart like below

pie title Key elements in Product X

"Calcium" : 42.96

"Potassium" : 50.05

"Magnesium" : 10.01

"Iron" : 5

3 Mermaid Mindmap

Example Mind map with 3 layers . layer1(root), layer2(A,B,C), layer3(A1,B1,C1). Space is used to separate a layer.

mindmap

Root

A

A1

B

B1

C

C1

4 Mermaid XY Chart

4.1 Orientations: The chart can be drawn horizontal or vertical, default value is vertical.

``xychart-beta horizontal`` or ``xychart-beta vertical`` or ``xychart-beta``

4.2 Title: The title is a short description of the chart and it will always render on top of the chart.

4.3 x-axis: The x-axis primarily serves as a categorical value, although it can also function as a numeric range value when needed.

`x-axis title min --> max` x-axis will function as numeric with the given range

`x-axis "title with space" [cat1, "cat2 with space", cat3]` x-axis if categorical, categories are text type

4.4 y-axis: The y-axis is employed to represent numerical range values, it cannot have categorical values. `y-axis title min --> max`

y-axis title it will only add the title, the range will be auto generated from data.

4.5 Bar chart: A bar chart offers the capability to graphically depict bars.

```
bar [2.3, 45, .98, -3.4]
```

4.6 Both x and y axis are optional if not provided mermaid will try to create the range

```
xchart-beta
```

```
title "Sales Revenue"
```

```
x-axis [jan, feb, mar, apr, may]
```

```
y-axis "Revenue (in $)" 4000 --> 9000
```

```
bar [5000, 6000, 7500]
```