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# Draw Diagrams With Markdown

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Typora supports some Markdown extensions for diagrams, once they are enabled from preference panel.

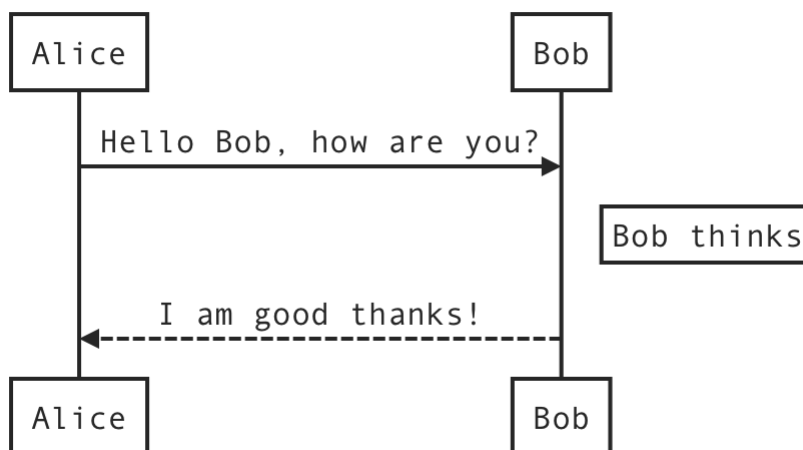
When exporting as HTML, PDF, epub, docx, those rendered diagrams will also be included, but diagrams features are not supported when exporting markdown into other file formats in current version. Besides, you should also notice that diagram is not supported by standard Markdown, CommonMark or GFM. Therefore, we still

recommend you to insert an image of these diagrams instead of write them in Markdown directly.

# Sequence Diagrams

This feature uses [js-sequence](#), which turns the following code block into a rendered diagram:

```
```sequence
Alice->>Bob: Hello Bob, how are you?
Note right of Bob: Bob thinks
Bob-->>Alice: I am good thanks!
```
```

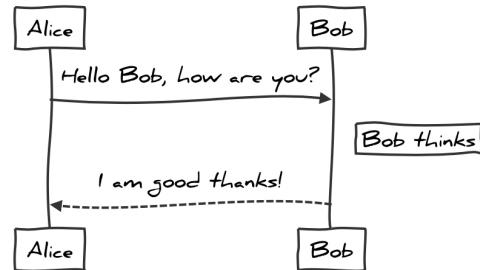
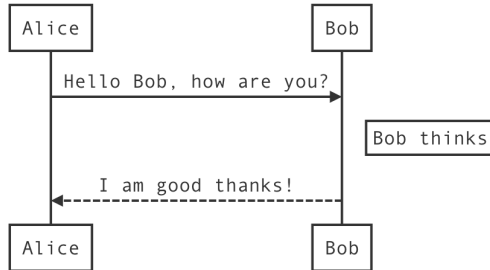


For more details, please see [this syntax explanation](#).

## Sequence Diagrams Options

You could change CSS variable `--sequence-theme` to set theme for sequence diagrams, supported value are `simple` (default) and `hand`. For example, add following CSS in [Custom CSS](#), and you will get:

```
:root {
  --sequence-theme: hand
}
```

**-sequence-theme: simple****-sequence-theme: hand**

# Flowcharts

This feature uses [flowchart.js](https://github.com/typora/flowchart.js), which turns the following code block into a rendered diagram:

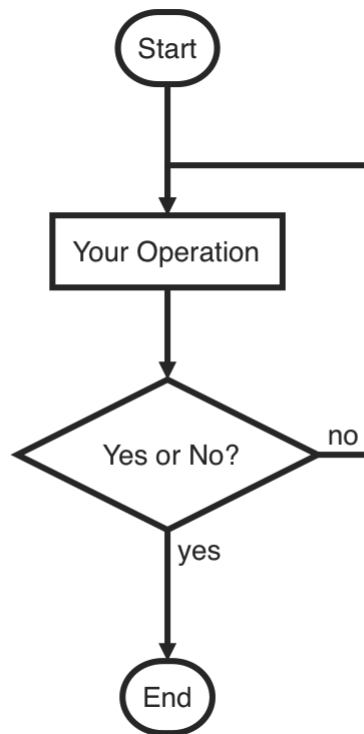
```

```flow
st=>start: Start
op=>operation: Your Operation
cond=>condition: Yes or No?
e=>end

st->op->cond
cond(yes)->e
cond(no)->op
```

```





# Mermaid

Typora also has integration with [mermaid](#), which supports sequence diagrams, flowcharts, Gantt charts, class and state diagrams, and pie charts.

## Sequence Diagrams

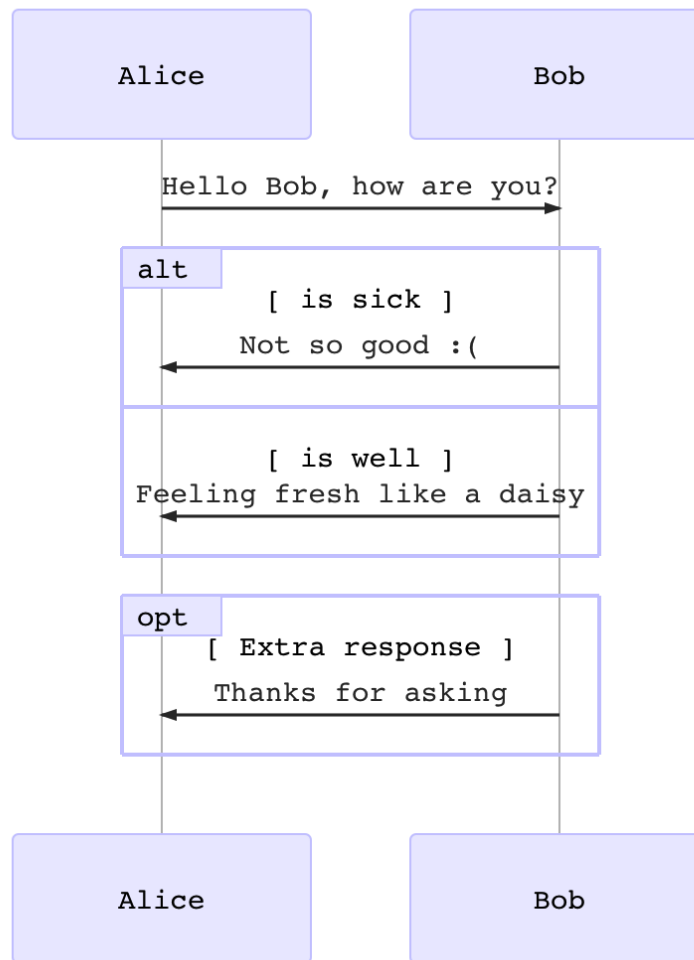
For more details see [these instructions](#).

```
```mermaid
%% Example of sequence diagram
sequenceDiagram
    Alice->>Bob: Hello Bob, how are you?
    alt is sick
        Bob->>Alice: Not so good :(
    else is well
        Bob->>Alice: Feeling fresh like a daisy
    end
    opt Extra response
```



Bob->>Alice: Thanks for asking  
end

...



## Flowcharts

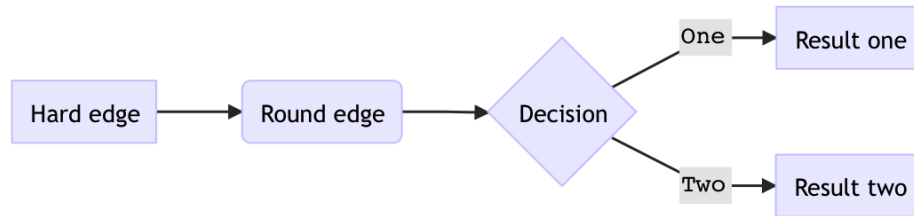
For more details see [these instructions](#).

```

```mermaid
graph LR
A[Hard edge] -->B(Round edge)
    B --> C{Decision}
    C -->|One| D[Result one]
    C -->|Two| E[Result two]
  
```

...





## Gantt Charts

For more details see [these instructions](#).

```
```mermaid
```

```
%% Example with selection of syntaxes
```

```
gantt
```

```
dateFormat YYYY-MM-DD
```

```
title Adding GANTT diagram functionality to mermaid
```

```
section A section
```

```
Completed task           :done,      des1, 2014-01-06,2014-06-01
```

```
Active task              :active,    des2, 2014-01-09, 3d
```

```
Future task              :           des3, after des2, 5d
```

```
Future task2             :           des4, after des3, 5d
```

```
section Critical tasks
```

```
Completed task in the critical line :crit, done, 2014-01-06,2014-06-01
```

```
Implement parser and json           :crit, done, after des1, 2014-01-09, 2014-01-10
```

```
Create tests for parser              :crit, active, 3d
```

```
Future task in critical line         :crit, 5d
```

```
Create tests for renderer            :2d
```

```
Add to mermaid                      :1d
```

```
section Documentation
```

```
Describe gantt syntax                :active, a1, after des1, 2014-01-09, 2014-01-10
```

```
Add gantt diagram to demo page      :after a1 , 20h
```

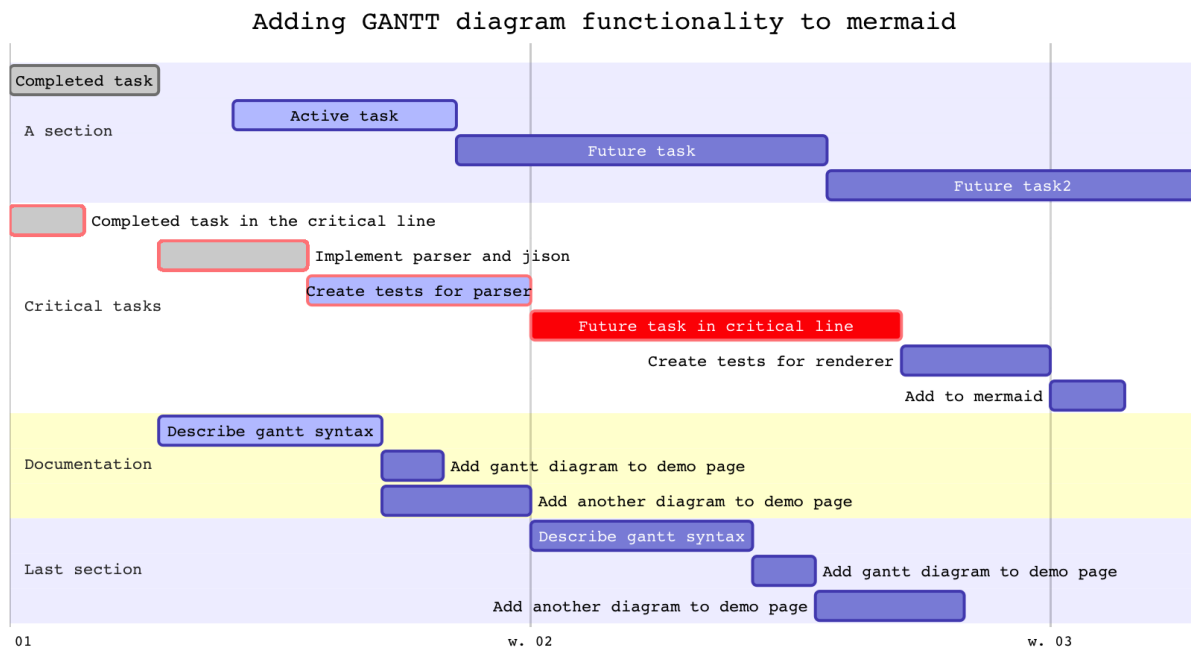
```
Add another diagram to demo page    :doc1, after a1 , 48h
```

```
section Last section
```



Describe gantt syntax :after doc1, 3d  
 Add gantt diagram to demo page : 20h  
 Add another diagram to demo page : 48h

...



## Class Diagrams

For more details see [these instructions](#).

```
```mermaid
```

```
classDiagram
```

```

    Animal <|-- Duck
    Animal <|-- Fish
    Animal <|-- Zebra
    Animal : +int age
    Animal : +String gender
    Animal: +isMammal()
    Animal: +mate()
    class Duck{
        +String beakColor
        +swim()
        +quack()
    }
    class Fish{

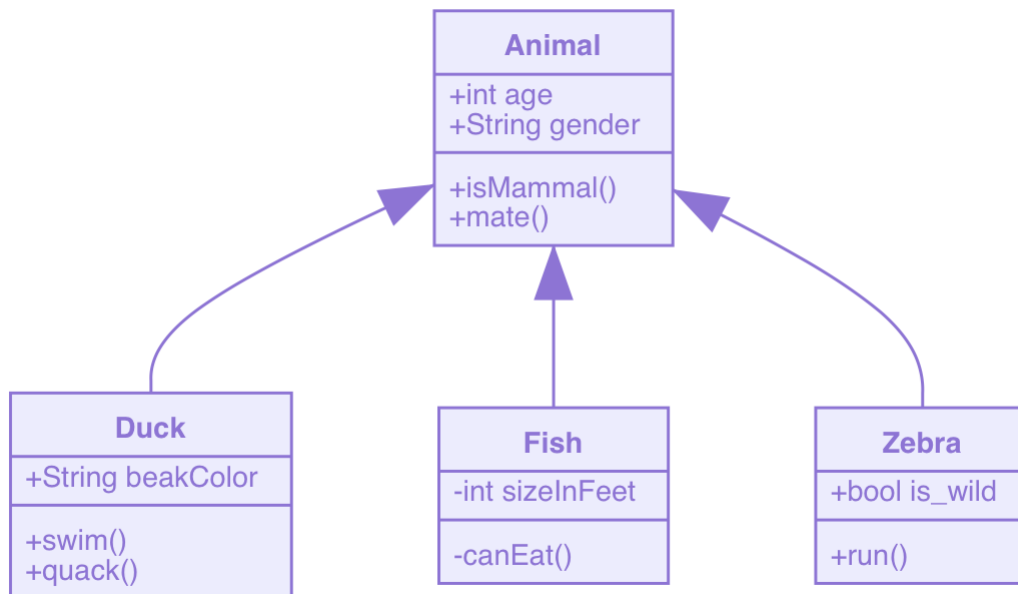
```



```

        -int sizeInFeet
        -canEat()
    }
    class Zebra{
        +bool is_wild
        +run()
    }
    ...

```



## State Diagrams

For more details see [these instructions](#).

```

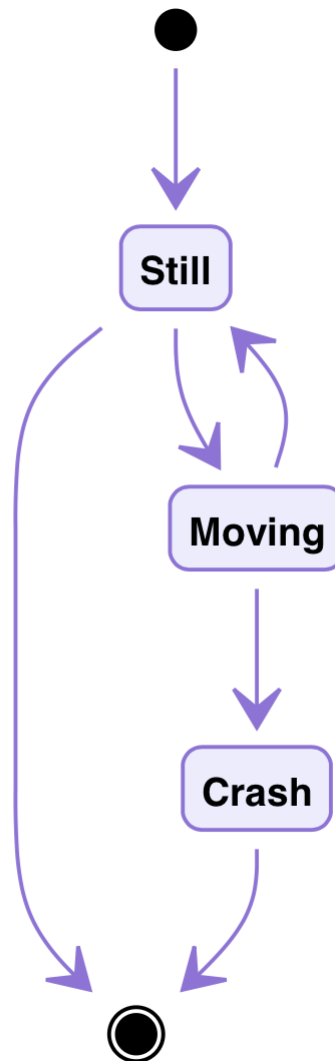
```mermaid
stateDiagram
    [*] --> Still
    Still --> [*]

    Still --> Moving
    Moving --> Still
    Moving --> Crash
    Crash --> [*]
    ...

```



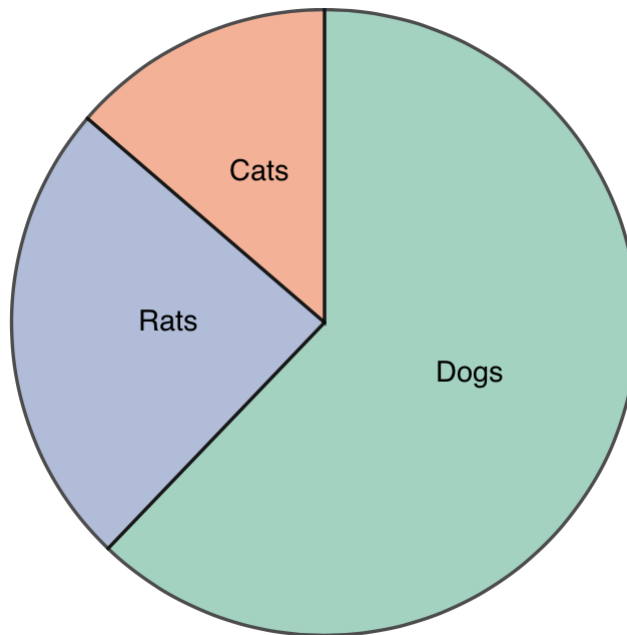




## Pie Charts

```
```mermaid
pie
    title Pie Chart
    "Dogs" : 386
    "Cats" : 85
    "Rats" : 150
```
```





## Mermaid Options

### Overview

You can change Mermaid options by adding [Custom CSS](#), supported options include:

```
:root {  
  --mermaid-theme: default; /*or base, dark, forest, neutral, night */  
  --mermaid-font-family: "trebuchet ms", verdana, arial, sans-serif;  
  --mermaid-sequence-numbers: off; /* or "on", see https://mermaid-  
js.github.io/mermaid/#/sequenceDiagram?id=sequencenumbers*/  
  --mermaid-flowchart-curve: linear /* or "basis", see  
https://github.com/typora/typora-issues/issues/1632*/;  
  --mermaid-gantt-left-padding: 75; /* see  
https://github.com/typora/typora-issues/issues/1665*/  
}
```

Please note that if you export document with other themes than currently used one, some mermaid options will not be applied to exported HTML / PDF / Image. For example, if you currently use them Github, but while export to PDF, you set theme YYY for PDF export, and YYY.css defines `--mermaid-sequence-numbers: on`, then the `--mermaid-sequence-numbers: on` would not be applied to exported PDF.

### Mermaid Theme

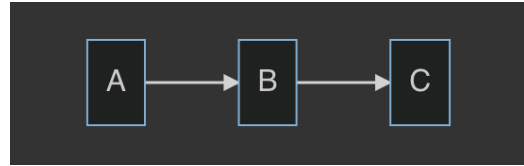


Added `--mermaid-theme` css variable to quickly define a mermaid theme that fits your theme, the value can be `base`, `default`, `dark`, `forest`, `neutral`, `night` (the one used in night theme), for example:

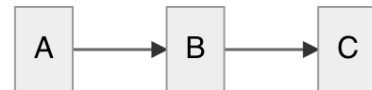
## CSS

## Mermaid Demo

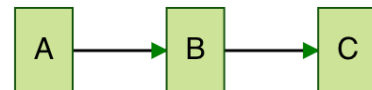
```
:root {--mermaid-theme:dark;}
```



```
:root {--mermaid-theme:forest;}
```



```
:root {--mermaid-theme:neutral;}
```

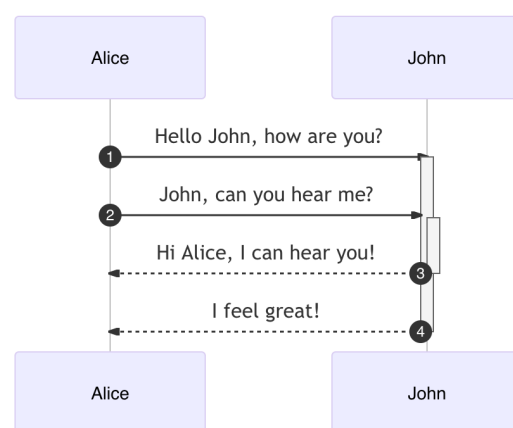
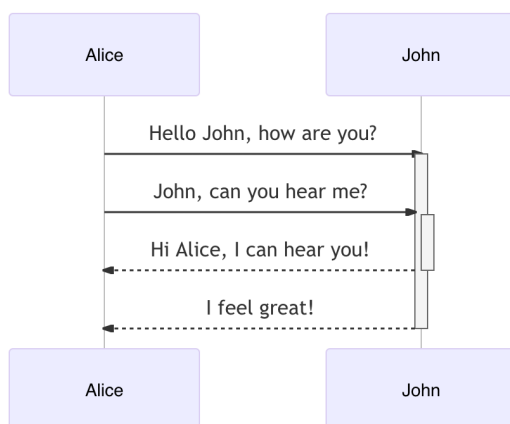


## Auto Numbering

Add `--mermaid-sequence-numbers: on;` in [Custom CSS](#) will enable auto numbering for sequence in mermaid:

`--mermaid-sequence-numbers:off`

`--mermaid-sequence-numbers:on`



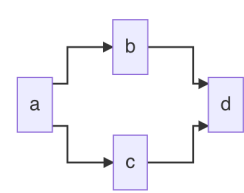
## Flowchart Curve

Add `--mermaid-flowchart-curve: basis` to get other type of curves.

```

    -mermaid-
    flowchart-curve:
        step;

```



```
-mermaid-gantt-left-padding:200
```

