Awesome Mermaid Diagrams

Author: **Kuan Cheang**

Reference: **ITD-001**

Version: **v1.0**
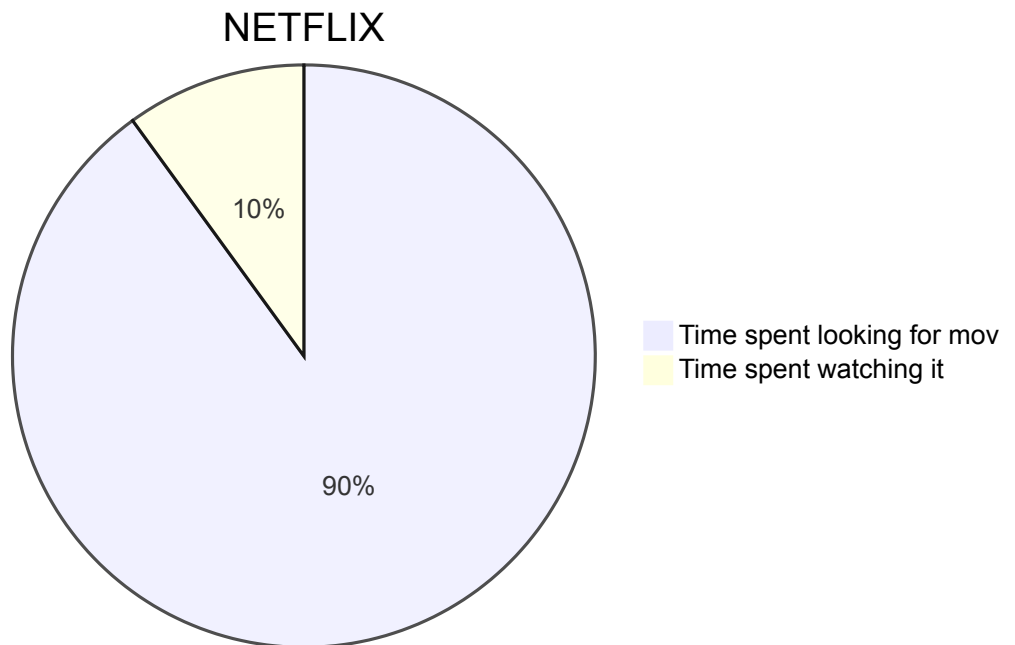
Date: **3/8/2022**

Generating Mermaid Diagrams

Converting code block which has a keyword `mermaid` to a diagram with `svg` format.

Examples

Basic Pie Chart

```mermaid
pie title NETFLIX
        "Time spent looking for movie" : 90
        "Time spent watching it" : 10
```


Basic sequence diagram

```mermaid
sequenceDiagram
    autonumber
    Alice->>John: Hello John, how are you?
    loop Healthcheck
        John->>John: Fight against hypochondria
    end
    Note right of John: Rational thoughts!
    John-->>Alice: Great!
    John->>Bob: How about you?
    Bob-->>John: Jolly good!
```

The sequence diagram:

Alice → John: **Hello John, how are you?** (1)

loop [Healthcheck]

John → John: **Fight against hypochondria** (2)

Note: Rational thoughts!

John ⇠ Alice: **Great!** (3)

John → Bob: **How about you?** (4)
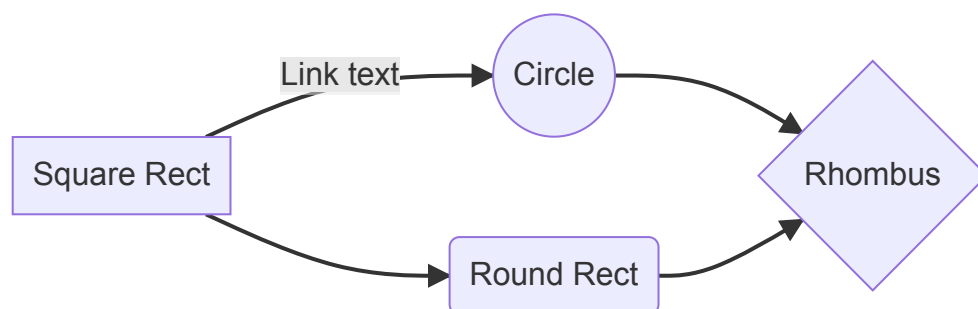
Bob ⇠ John: **Jolly good!** (5)
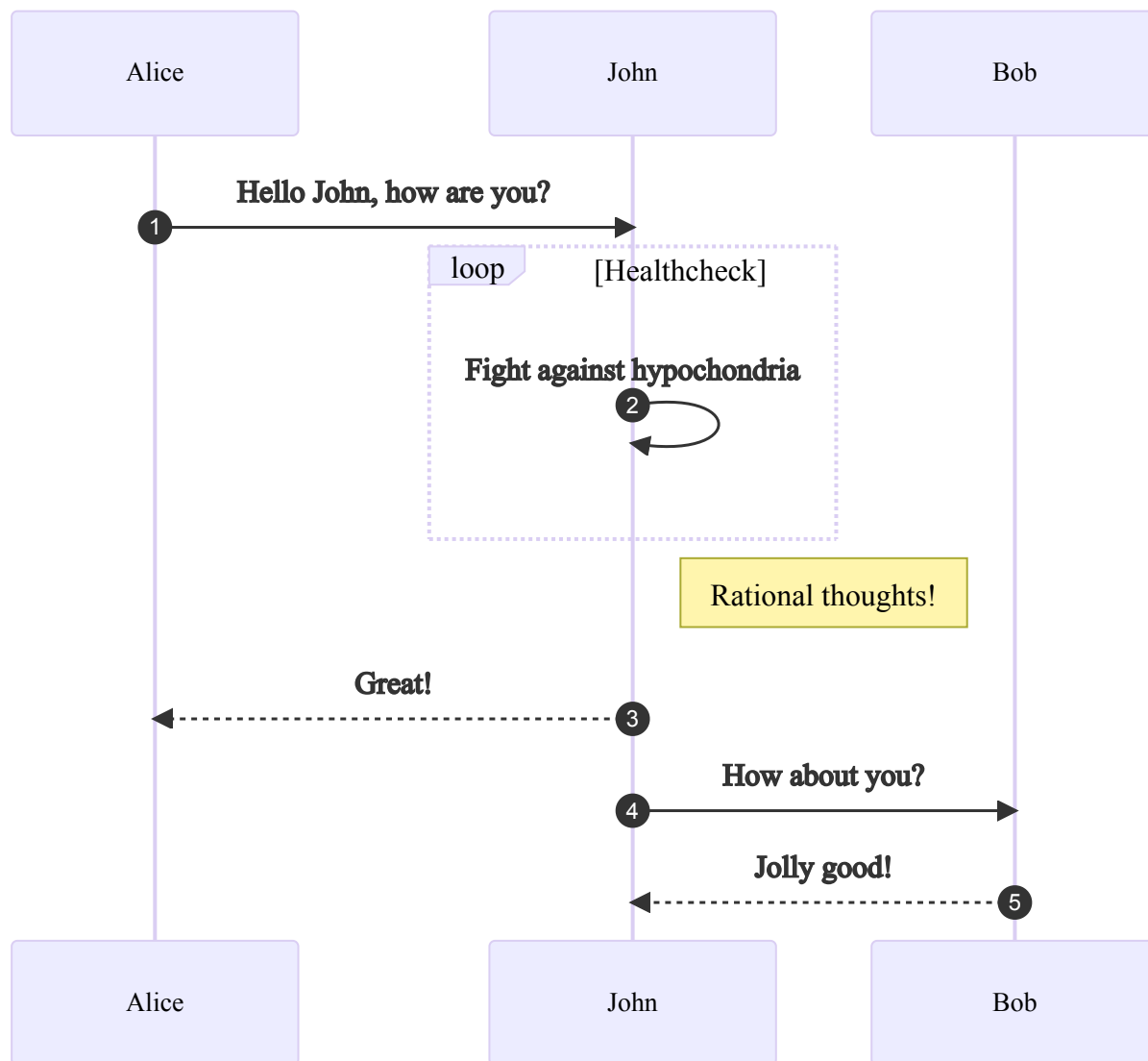
Basic flowchart

```mermaid
graph LR
    A[Square Rect] -- Link text --> B((Circle))
    A --> C(Round Rect)
    B --> D{Rhombus}
    C --> D
```

Larger flowchart with some styling

```mermaid
graph TB
    sq[Square shape] --> ci((Circle shape))

    subgraph A
        od>Odd shape]-- Two line
edge comment --> ro
        di{Diamond with
 line break} -.-> ro(Rounded
square
shape)
        di==>ro2(Rounded square shape)
    end

    %% Notice that no text in shape are added here instead that is appended further down
    e --> od3>Really long text with linebreak
in an Odd shape]

    %% Comments after double percent signs
    e((Inner / circle
and some odd
special characters)) --> f(,.?!+-*ℹ)

    classDef green fill:#9f6,stroke:#333,stroke-width:2px;
    classDef orange fill:#f96,stroke:#333,stroke-width:4px;
    class sq,e green
    class di orange
```
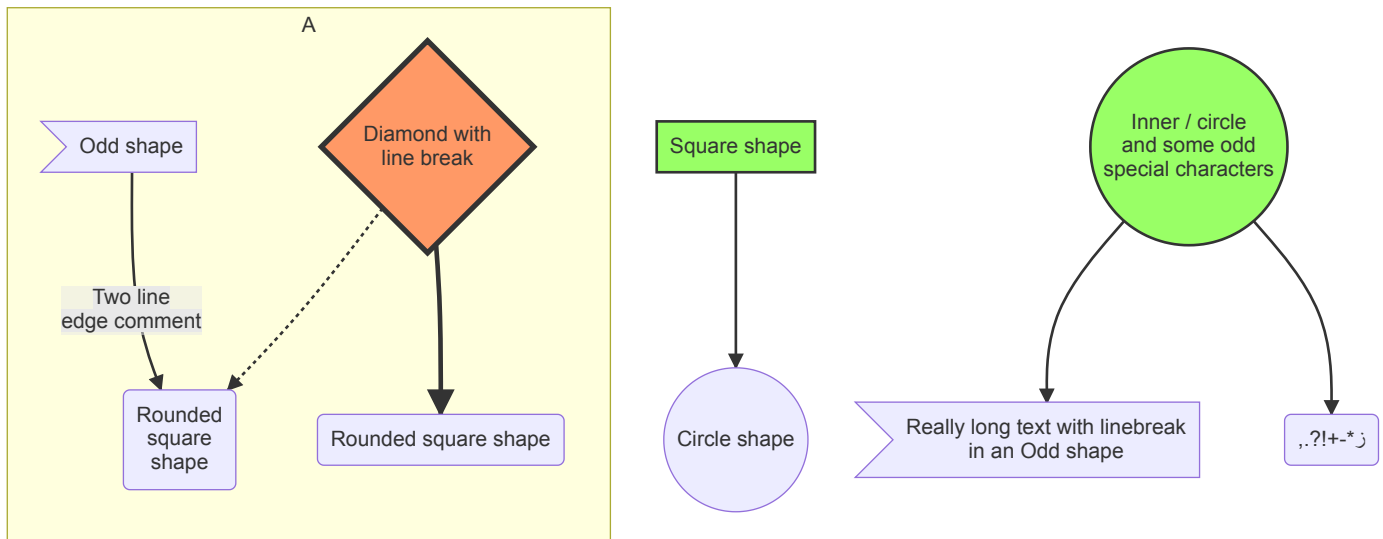

User Journey Diagram

```mermaid
journey
    title My working day
    section Go to work
```
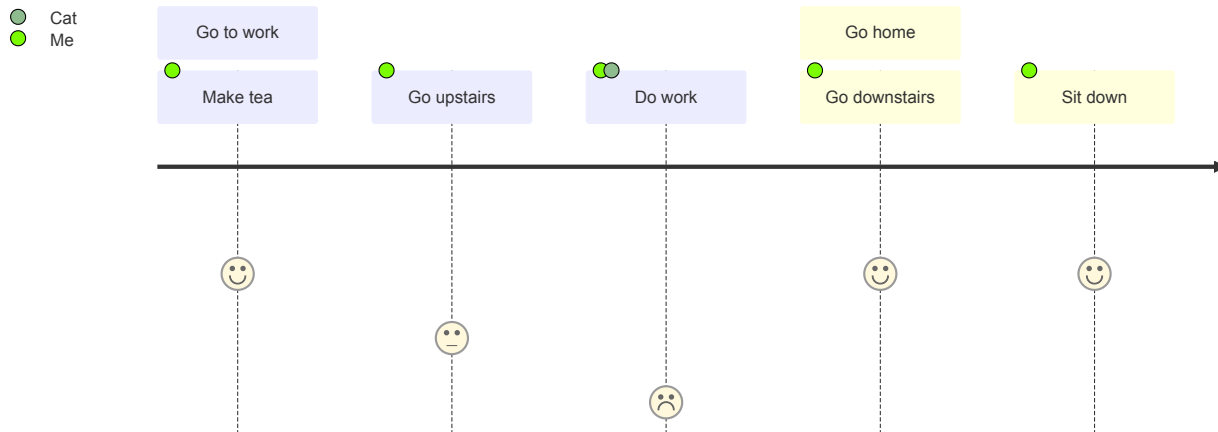
```
        Make tea: 5: Me
        Go upstairs: 3: Me
        Do work: 1: Me, Cat
     section Go home
        Go downstairs: 5: Me
        Sit down: 5: Me
```
```

## My working day



## State diagrams

```mermaid
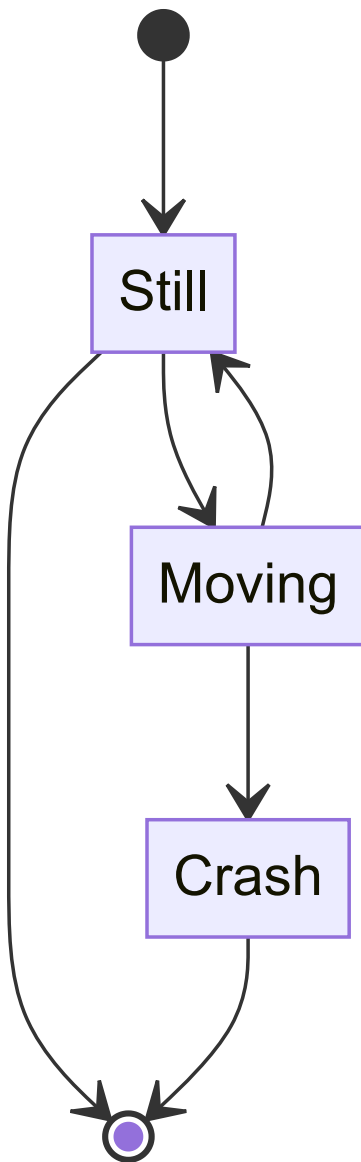stateDiagram-v2
    [*] --> Still
    Still --> [*]

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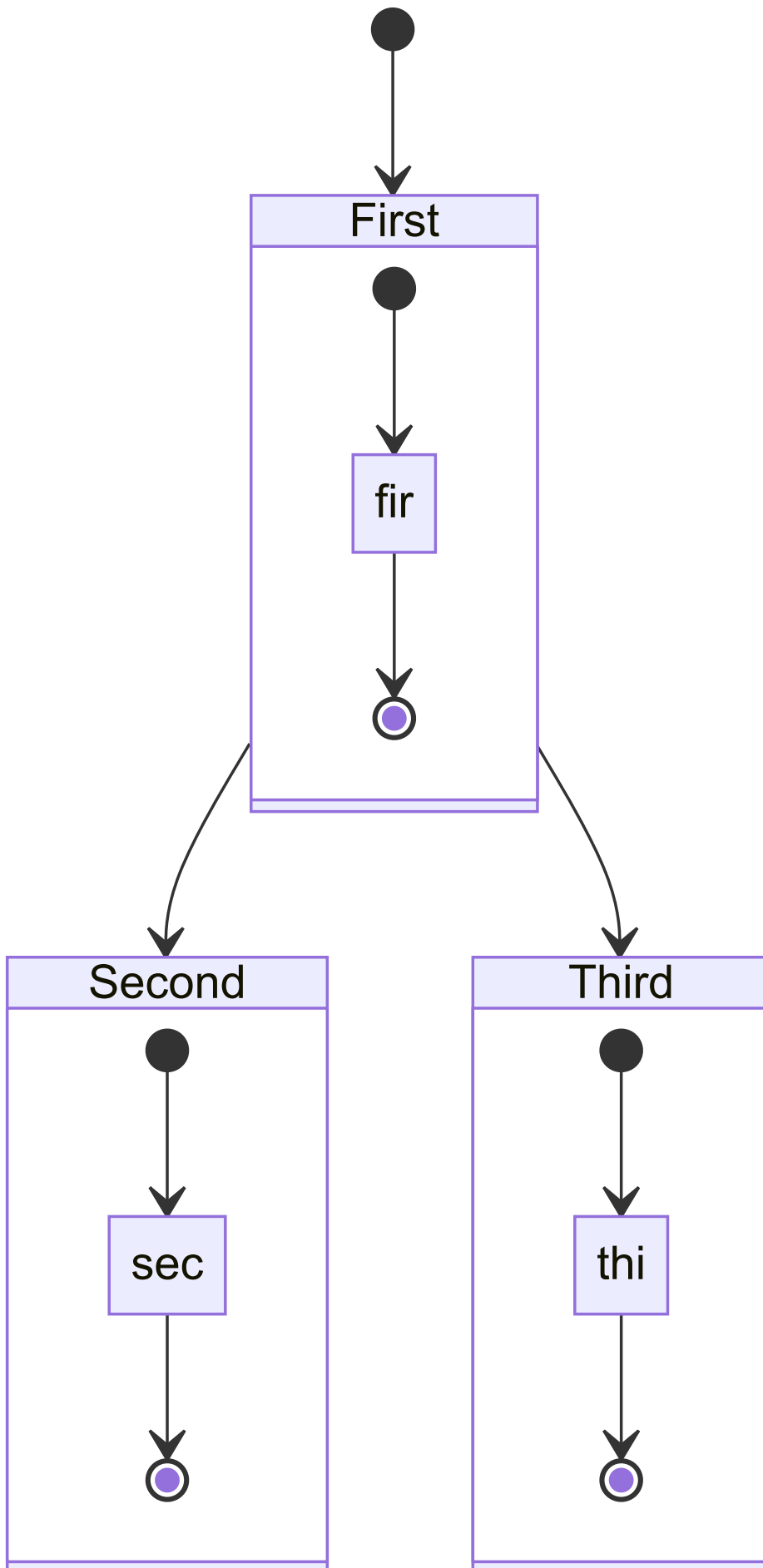    Crash --> [*]
```

Composite state diagram

```mermaid
stateDiagram-v2
    [*] --> First
    First --> Second
    First --> Third

    state First {
        [*] --> fir
        fir --> [*]
    }
    state Second {
        [*] --> sec
        sec --> [*]
    }
    state Third {
        [*] --> thi
        thi --> [*]
    }
```

First

fir

Second

sec

Third

thi

Concurrency

```mermaid
stateDiagram-v2
    [*] --> Active

    state Active {
        [*] --> NumLockOff
        NumLockOff --> NumLockOn : EvNumLockPressed
        NumLockOn --> NumLockOff : EvNumLockPressed
        --
        [*] --> CapsLockOff
        CapsLockOff --> CapsLockOn : EvCapsLockPressed
        CapsLockOn --> CapsLockOff : EvCapsLockPressed
        --
        [*] --> ScrollLockOff
        ScrollLockOff --> ScrollLockOn : EvCapsLockPressed
        ScrollLockOn --> ScrollLockOff : EvCapsLockPressed
    }
```
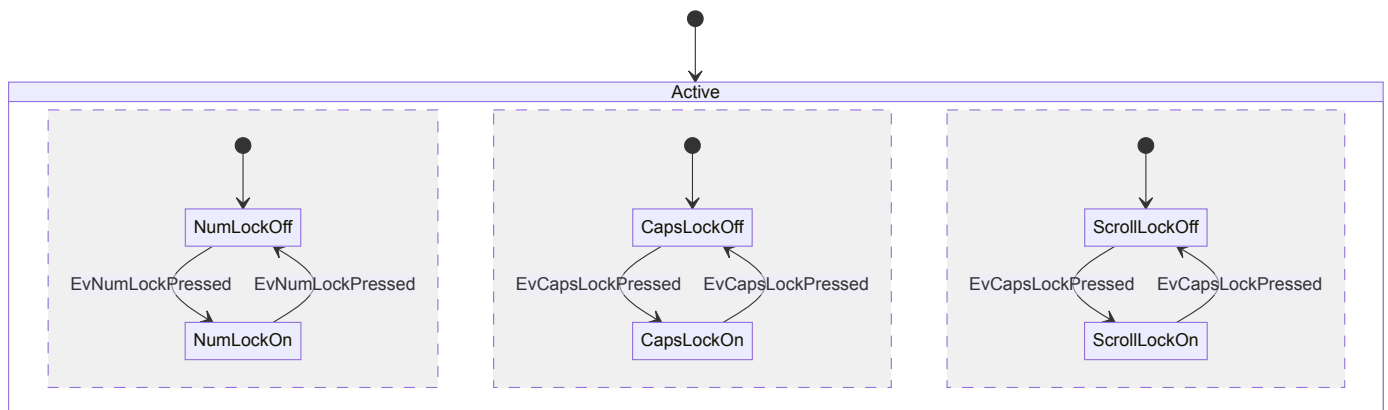

Gantt

```mermaid
gantt
    dateFormat              :YYYY-MM-DD
    title                   :Adding GANTT diagram functionality to mermaid
    excludes                :excludes the named dates/days from being included in a charted task
    section A section
    Completed task          :done,    des1, 2014-01-06,2014-01-08
    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, 2014-01-06,24h
    Implement parser and jison          :crit, done, after des1, 2d
    Create tests for parser             :crit, active, 3d
    Future task in critical line        :crit, 5d
    Create tests for renderer           :2d
    Add to mermaid                      :1d
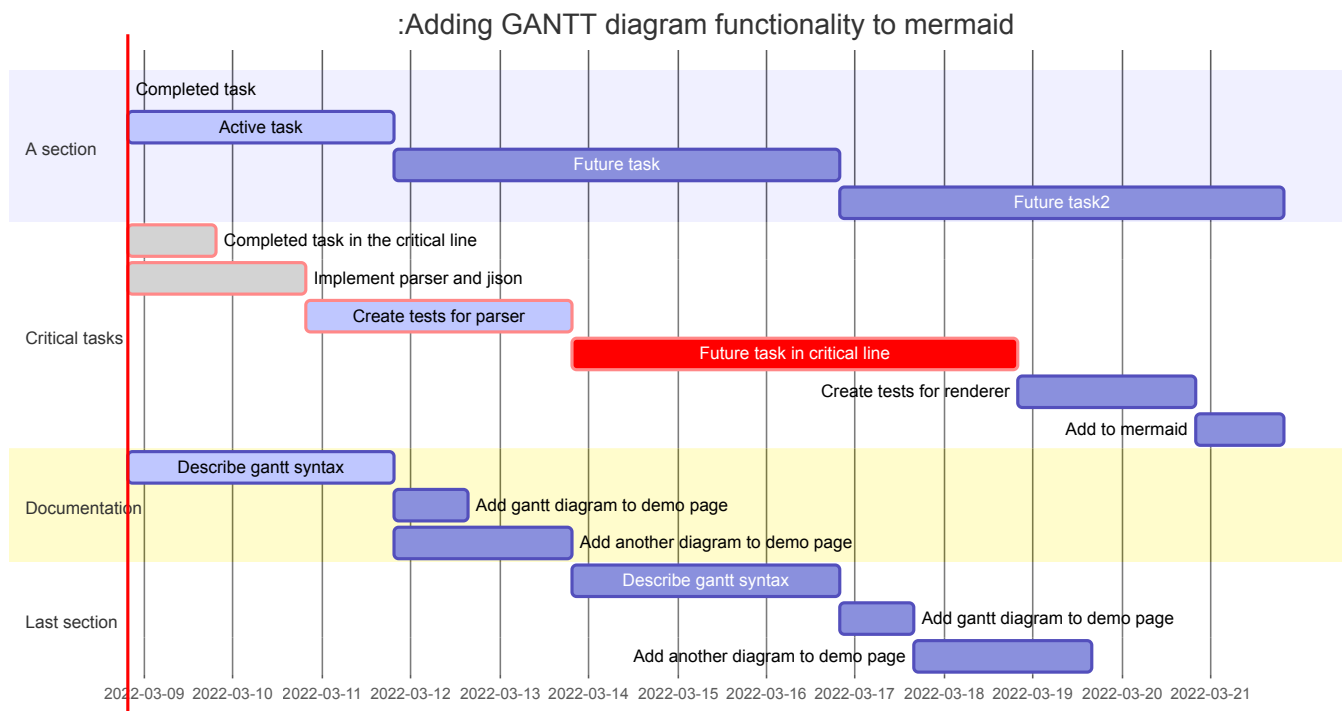```

```
    section Documentation
    Describe gantt syntax              :active, a1, after des1, 3d
    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
```


:Adding GANTT diagram functionality to mermaid

Class

```mermaid
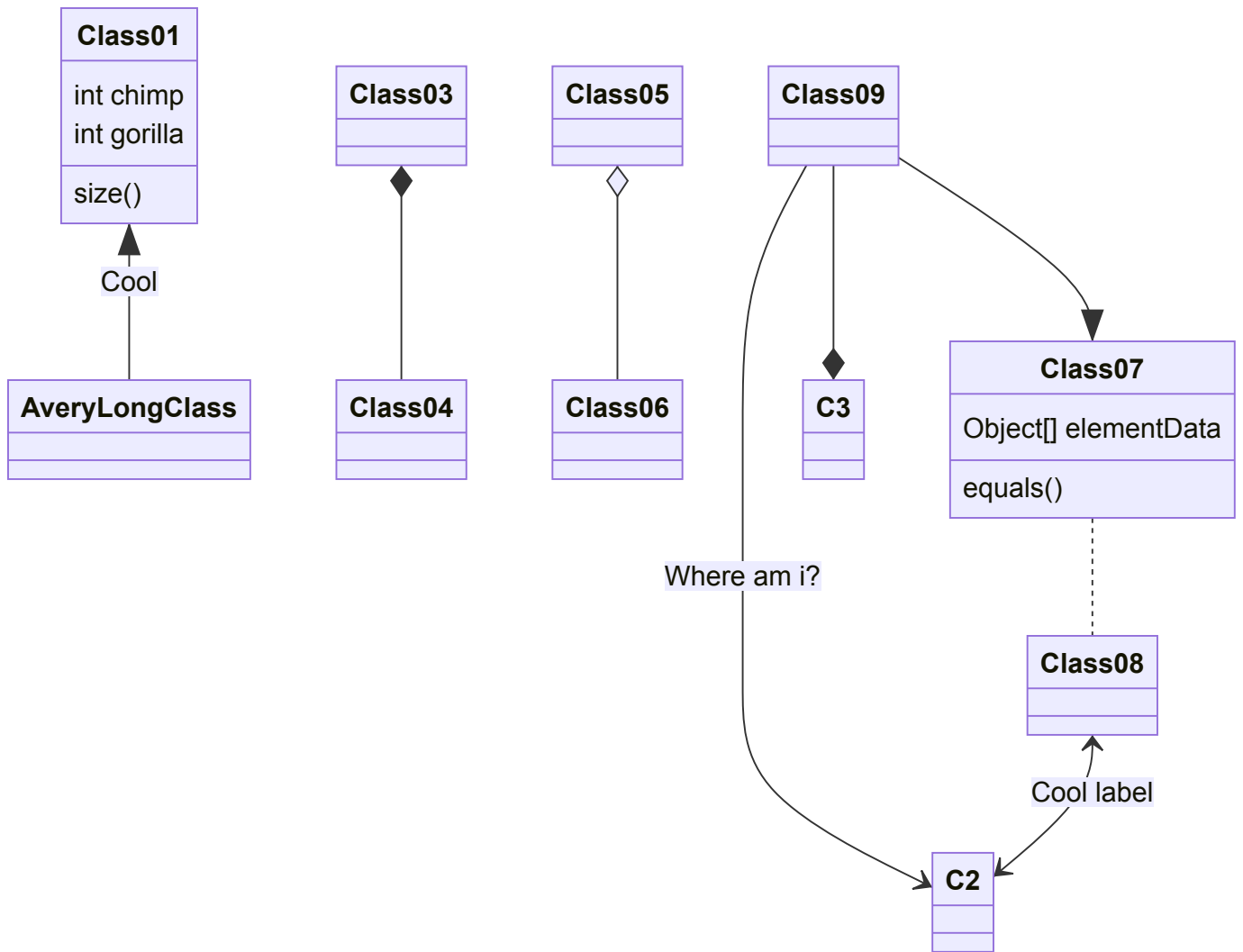classDiagram
    Class01 <|-- AveryLongClass : Cool
    Class03 *-- Class04
    Class05 o-- Class06
    Class07 .. Class08
    Class09 --> C2 : Where am i?
    Class09 --* C3
    Class09 --|> Class07
    Class07 : equals()
    Class07 : Object[] elementData
    Class01 : size()
    Class01 : int chimp
    Class01 : int gorilla
    Class08 <--> C2: Cool label
```

Git

```mermaid
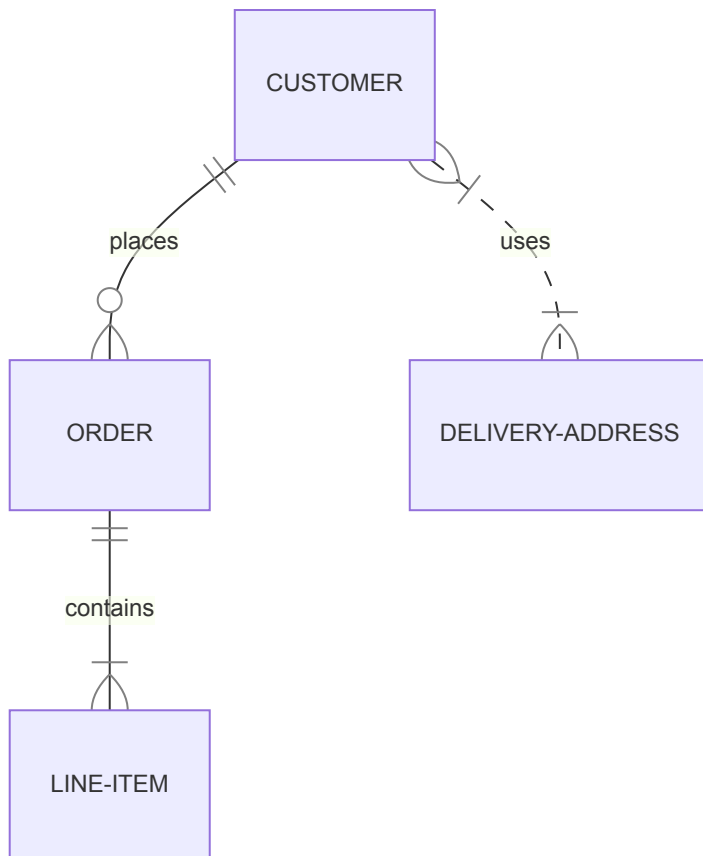gitGraph:
    options
    {
        "nodeSpacing": 150,
        "nodeRadius": 5
    }
    end
    commit
    branch newbranch
    checkout newbranch
    commit
    commit
    checkout master
    commit
    commit
    merge newbranch
```

ERDiagram

```mermaid
erDiagram
    CUSTOMER ||--o{ ORDER : places
    ORDER ||--|{ LINE-ITEM : contains
    CUSTOMER }|..|{ DELIVERY-ADDRESS : uses
```


This document is auto generated, if you find any mistake on it. Please contact us, thank.