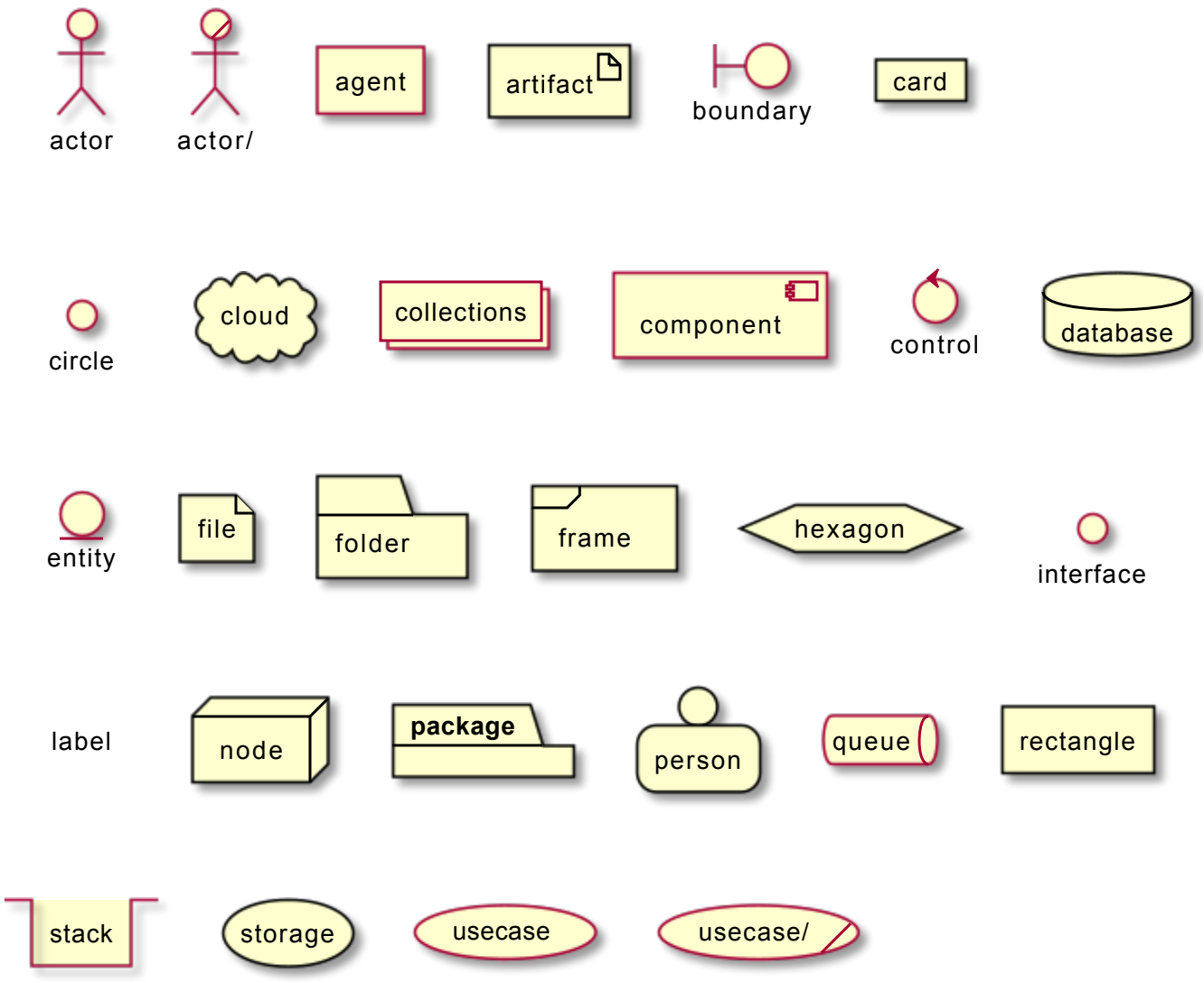
# Plant UML

PlantUML 은 다이어그램을 빠르게 작성하기 위한 오픈 소스 프로젝트입니다.

## Deployment 다이어그램

### Declaring element

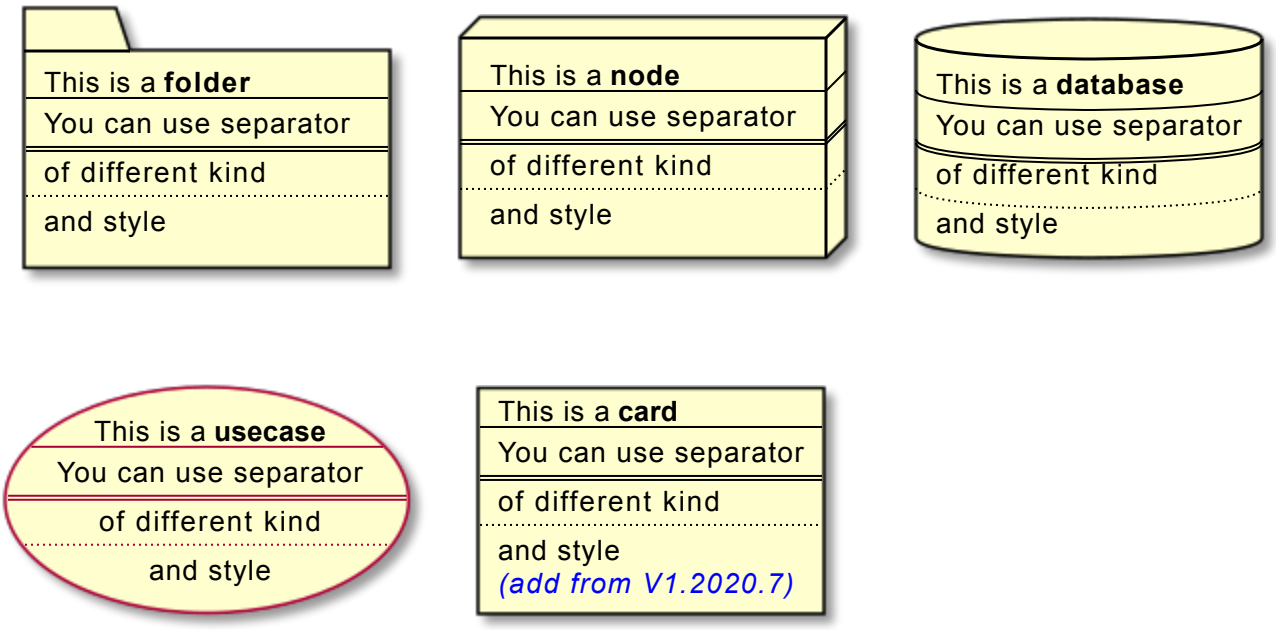
```
@startuml
actor actor
actor/ "actor/"
agent agent
artifact artifact
boundary boundary
card card
circle circle
cloud cloud
collections collections
component component
control control
database database
entity entity
file file
folder folder
frame frame
hexagon hexagon
interface interface
label label
node node
package package
person person
queue queue
rectangle rectangle
stack stack
storage storage
usecase usecase
usecase/ "usecase/"
@enduml
```




You can optionaly put text using bracket `[]` for a long description.

```
@startuml
folder folder [
This is a <b>folder
----
You can use separator
====
of different kind
....
and style
]

node node [
This is a <b>node
----
You can use separator
====
of different kind
....
and style
]

database database [
This is a <b>database
----
You can use separator
====
of different kind
....
and style
]

usecase usecase [
This is a <b>usecase
----
You can use separator
====
of different kind
....
and style
]

card card [
This is a <b>card
----
You can use separator
====
```

```
of different kind
....
and style
<i><color:blue>(add from V1.2020.7)</color></i>
]
@enduml
```

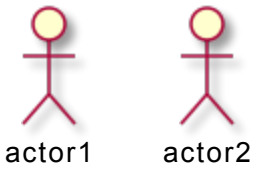



We can declare element using some short forms.

| Long form Keyword | Short form Keyword | Long form example | Short form example | Ref. |
|---|---|---|---|---|
| `actor` | `:a:` | `actor actor1` | `:actor2:` | Actors |
| `component` | `[c]` | `component component1` | `[component2]` | Components |
| `interface` | `()i` | `interface interface1` | `() "interface2"` | Interfaces |
| `usecase` | `(u)` | `usecase usecase1` | `(usecase2)` | Usecases |

## Actor

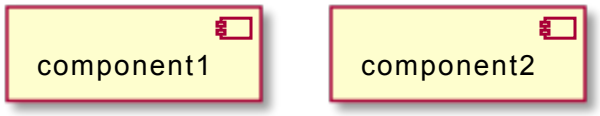
```
@startuml

actor actor1
:actor2:

@enduml
```




> NB: There is an old syntax for actor with guillemet which is now deprecated and will be removed some days. Please do not use in your diagram.

## Component

```
@startuml

component component1
[component2]

@enduml
```




## Interface

```
@startuml

interface interface1
() "interface2"

label "//interface example//"
@enduml
```


*interface example*

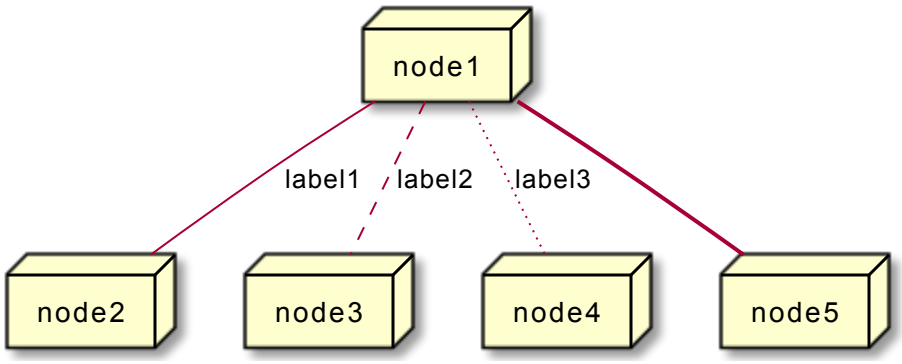
### Usecase

```
@startuml

usecase usecase1
(usecase2)

@enduml
```


## Linking or arrow

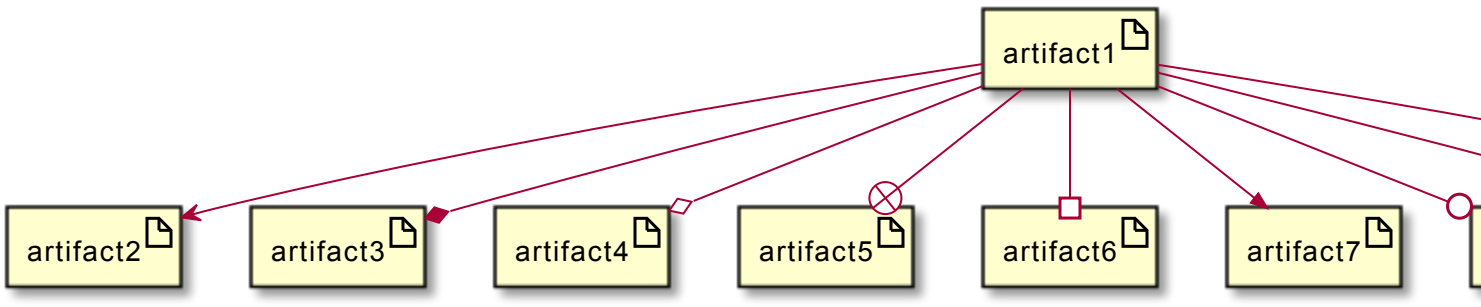
You can create simple links between elements with or without labels:

```
@startuml

node node1
node node2
node node3
node node4
node node5
node1 -- node2 : label1
node1 .. node3 : label2
node1 ~~ node4 : label3
node1 == node5

@enduml
```



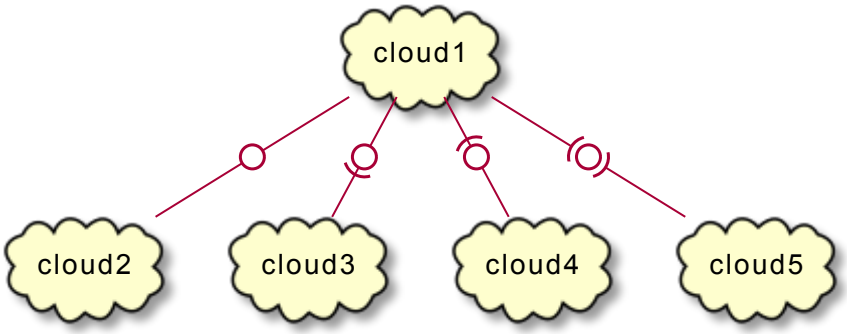

It is possible to use several types of links:

```
@startuml

artifact artifact1
artifact artifact2
artifact artifact3
artifact artifact4
artifact artifact5
artifact artifact6
artifact artifact7
artifact artifact8
artifact artifact9
artifact artifact10
artifact1 --> artifact2
artifact1 --* artifact3
artifact1 --o artifact4
artifact1 --+ artifact5
artifact1 --# artifact6
artifact1 -->> artifact7
artifact1 --0 artifact8
artifact1 --^ artifact9
artifact1 --(0 artifact10

@enduml
```



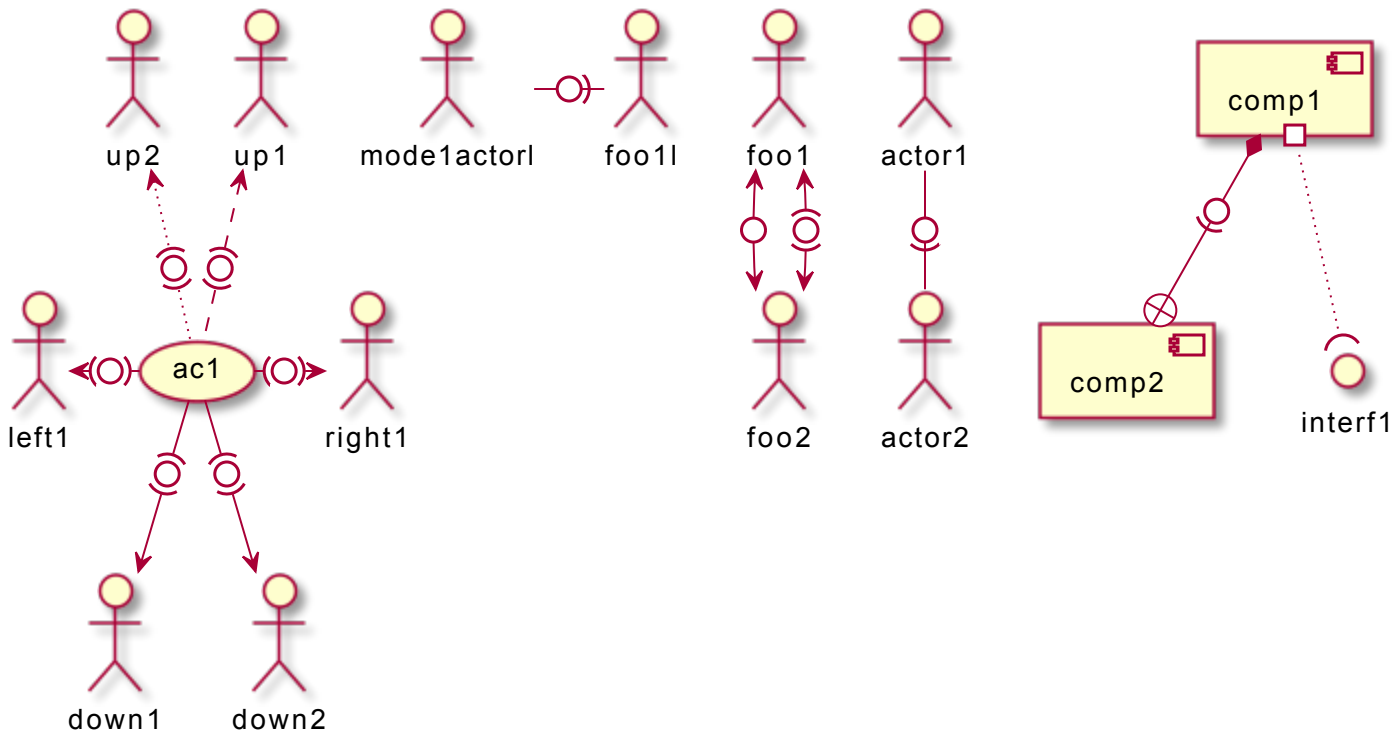
You can also have the following types:

```
@startuml

cloud cloud1
cloud cloud2
cloud cloud3
cloud cloud4
cloud cloud5
cloud1 -0- cloud2
cloud1 -0)- cloud3
cloud1 -(0- cloud4
cloud1 -(0)- cloud5

@enduml
```




or another example:

```
@startuml
actor foo1
actor foo2
foo1 <-0-> foo2
foo1 <-(0)-> foo2

(ac1) -le(0)-> left1
ac1 -ri(0)-> right1
ac1 .up(0).> up1
ac1 ~up(0)~> up2
ac1 -do(0)-> down1
ac1 -do(0)-> down2

actor1 -0)- actor2

component comp1
component comp2
comp1 *-0)-+ comp2
[comp3] <-->> [comp4]

boundary b1
control c1
b1 -(0)- c1

component comp1
interface interf1
comp1 #~~( interf1

:mode1actor: -0)- fooa1
:mode1actorl: -ri0)- foo1l

[component1] 0)-(0-(0 [componentC]
() component3 )-0-(0 "foo" [componentC]

[aze1] #-->> [aze2]
@enduml
```




# Bracketed arrow style

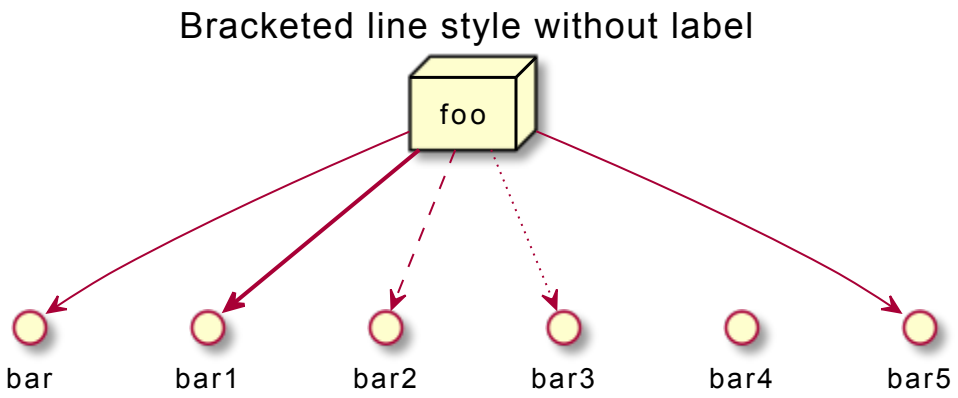
*Similar as Bracketed class relations (linking or arrow) style*

## Line style

It's also possible to have explicitly bold, dashed, dotted, hidden or plain arrows:

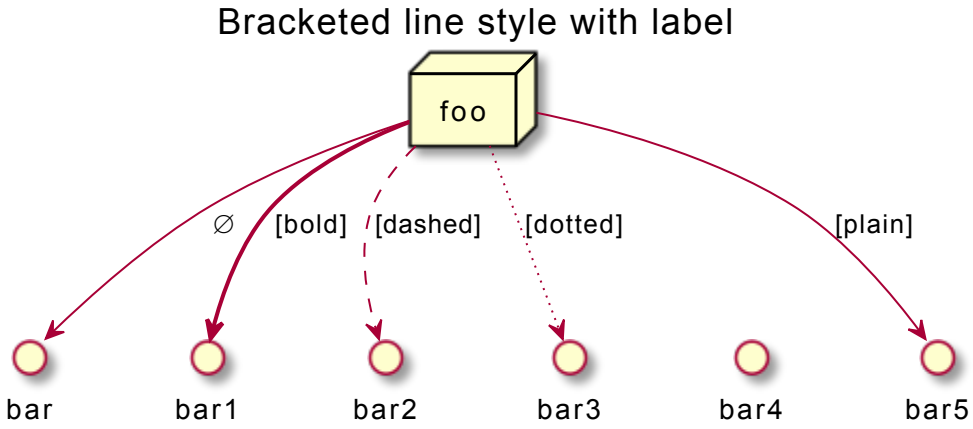
- without label

```
@startuml
node foo
title Bracketed line style without label
foo --> bar
foo -[bold]-> bar1
foo -[dashed]-> bar2
foo -[dotted]-> bar3
foo -[hidden]-> bar4
foo -[plain]-> bar5
@enduml
```



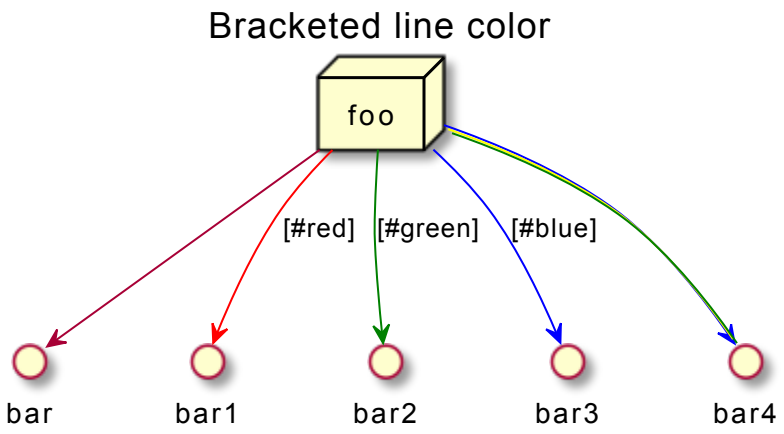

- with label

```
@startuml
title Bracketed line style with label
node foo
foo -->  bar           : ø
foo -[bold]-> bar1   : [bold]
foo -[dashed]-> bar2 : [dashed]
foo -[dotted]-> bar3 : [dotted]
foo -[hidden]-> bar4 : [hidden]
foo -[plain]-> bar5  : [plain]
@enduml
```



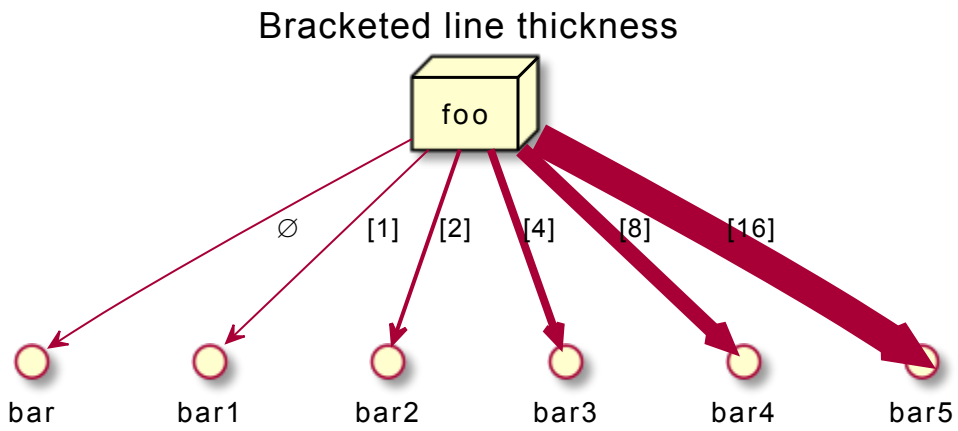
## Line color

```
@startuml
title Bracketed line color
node  foo
foo -->  bar
foo -[#red]-> bar1     : [#red]
foo -[#green]-> bar2   : [#green]
foo -[#blue]-> bar3    : [#blue]
foo -[#blue;#yellow;#green]-> bar4
@enduml
```



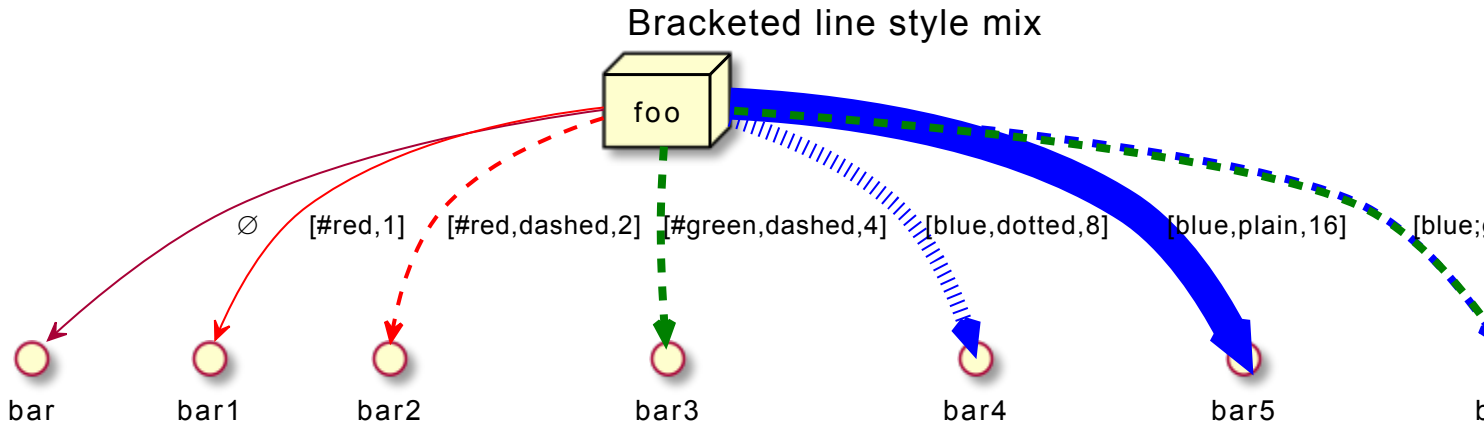

## Line thickness

```
@startuml
title Bracketed line thickness
node foo
foo -->  bar                  : ø
foo -[thickness=1]-> bar1   : [1]
foo -[thickness=2]-> bar2   : [2]
foo -[thickness=4]-> bar3   : [4]
foo -[thickness=8]-> bar4   : [8]
foo -[thickness=16]-> bar5  : [16]
@enduml
```




### Mix

```
@startuml
title Bracketed line style mix
node foo
foo --> bar                                 : ∅
foo -[#red,thickness=1]-> bar1              : [#red,1]
foo -[#red,dashed,thickness=2]-> bar2       : [#red,dashed,2]
foo -[#green,dashed,thickness=4]-> bar3     : [#green,dashed,4]
foo -[#blue,dotted,thickness=8]-> bar4      : [blue,dotted,8]
foo -[#blue,plain,thickness=16]-> bar5      : [blue,plain,16]
foo -[#blue;#green,dashed,thickness=4]-> bar6  : [blue;green,dashed,4]
@enduml
```

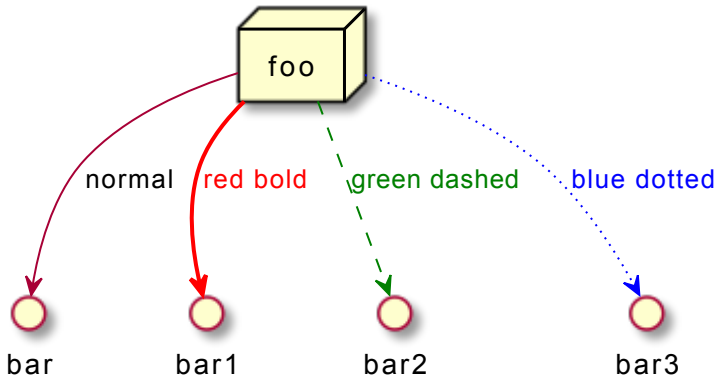



## Change arrow color and style (inline style)

You can change the color or style of individual arrows using the inline following notation:

- `#color;line.[bold|dashed|dotted];text:color`

```
@startuml
node foo
foo --> bar : normal
foo --> bar1 #line:red;line.bold;text:red  : red bold
foo --> bar2 #green;line.dashed;text:green : green dashed
foo --> bar3 #blue;line.dotted;text:blue   : blue dotted
@enduml
```

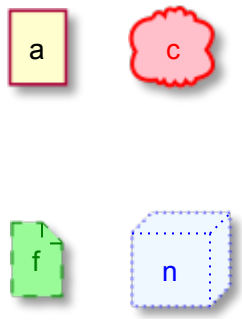



## Change element color and style (inline style)

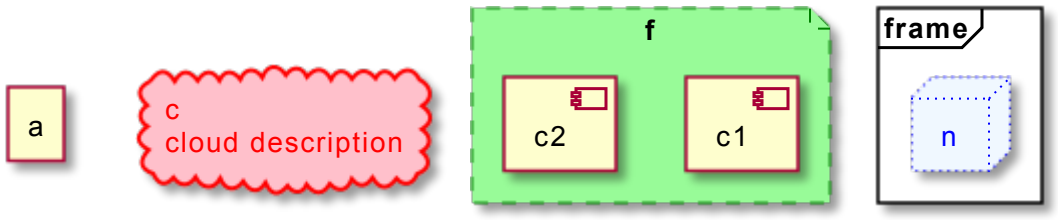
You can change the color or style of individual element using the following notation:

- `#[color|back:color];line:color;line.[bold|dashed|dotted];text:color`

```
@startuml
agent a
cloud c #pink;line:red;line.bold;text:red
file  f #palegreen;line:green;line.dashed;text:green
node  n #aliceblue;line:blue;line.dotted;text:blue
@enduml
```



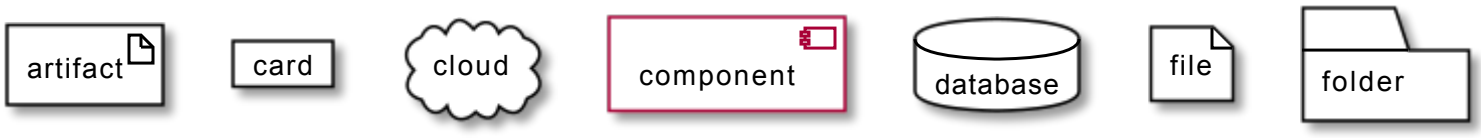
```
@startuml
agent a
cloud c #pink;line:red;line.bold;text:red [
c
cloud description
]
file  f #palegreen;line:green;line.dashed;text:green {
[c1]
[c2]
}
frame frame {
node  n #aliceblue;line:blue;line.dotted;text:blue
}
@enduml
```




## Nestable elements

Here are the nestable elements:

```
@startuml
artifact artifact {
}
card card {
}
cloud cloud {
}
component component {
}
database database {
}
file file {
}
folder folder {
}
frame frame {
}
hexagon hexagon {
}
node node {
}
package package {
}
queue queue {
}
rectangle rectangle {
}
stack stack {
}
storage storage {
}
@enduml
```

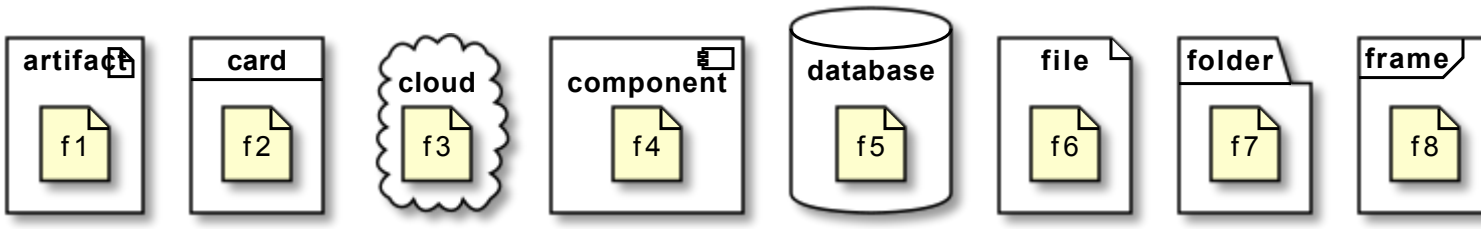


# Packages and nested elements

## Example with one level

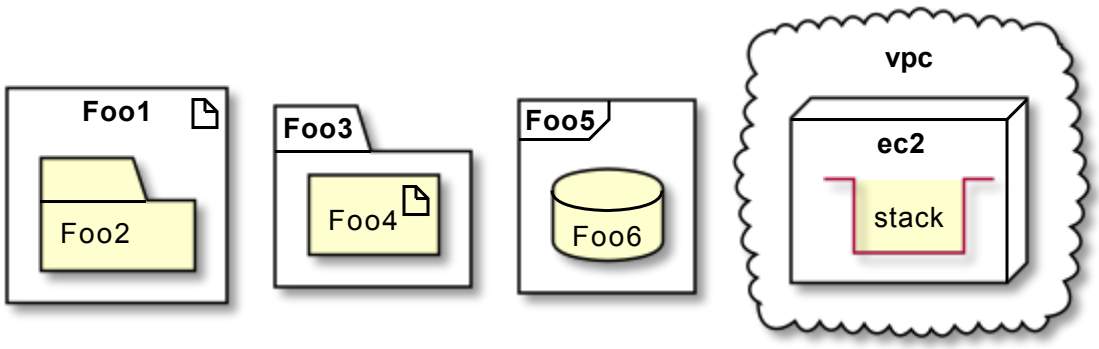
```
@startuml
artifact    artifactVeryLOOOOOOOOOOOOOOOOOOg    as "artifact" {
file f1
}
card        cardVeryLOOOOOOOOOOOOOOOOOOg        as "card" {
file f2
}
cloud       cloudVeryLOOOOOOOOOOOOOOOOOOg       as "cloud" {
file f3
}
component   componentVeryLOOOOOOOOOOOOOOOOOOg   as "component" {
file f4
}
database    databaseVeryLOOOOOOOOOOOOOOOOOOg    as "database" {
file f5
}
file        fileVeryLOOOOOOOOOOOOOOOOOOg        as "file" {
file f6
}
folder      folderVeryLOOOOOOOOOOOOOOOOOOg      as "folder" {
file f7
}
frame       frameVeryLOOOOOOOOOOOOOOOOOOg       as "frame" {
file f8
}
hexagon     hexagonVeryLOOOOOOOOOOOOOOOOOOg     as "hexagon" {
file f9
}
node        nodeVeryLOOOOOOOOOOOOOOOOOOg        as "node" {
file f10
}
package     packageVeryLOOOOOOOOOOOOOOOOOOg     as "package" {
file f11
}
queue       queueVeryLOOOOOOOOOOOOOOOOOOg       as "queue" {
file f12
}
rectangle   rectangleVeryLOOOOOOOOOOOOOOOOOOg   as "rectangle" {
file f13
}
stack       stackVeryLOOOOOOOOOOOOOOOOOOg       as "stack" {
file f14
}
storage     storageVeryLOOOOOOOOOOOOOOOOOOg     as "storage" {
file f15
}
```

```
@enduml
```

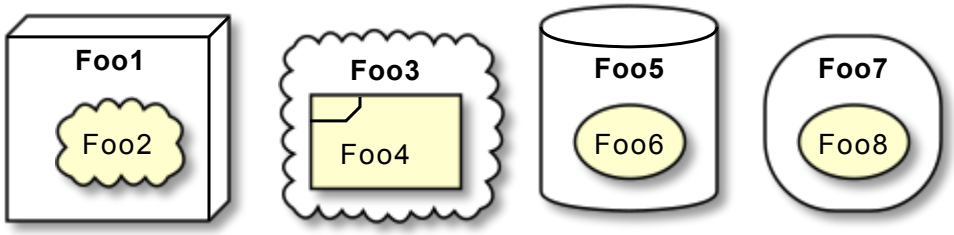



## Other example

```
@startuml
artifact Foo1 {
  folder Foo2
}

folder Foo3 {
  artifact Foo4
}

frame Foo5 {
  database Foo6
}

cloud vpc {
  node ec2 {
    stack stack
  }
}

@enduml
```



```
@startuml
node Foo1 {
 cloud Foo2
}

cloud Foo3 {
  frame Foo4
}

database Foo5  {
  storage Foo6
}

storage Foo7 {
  storage Foo8
}
@enduml
```

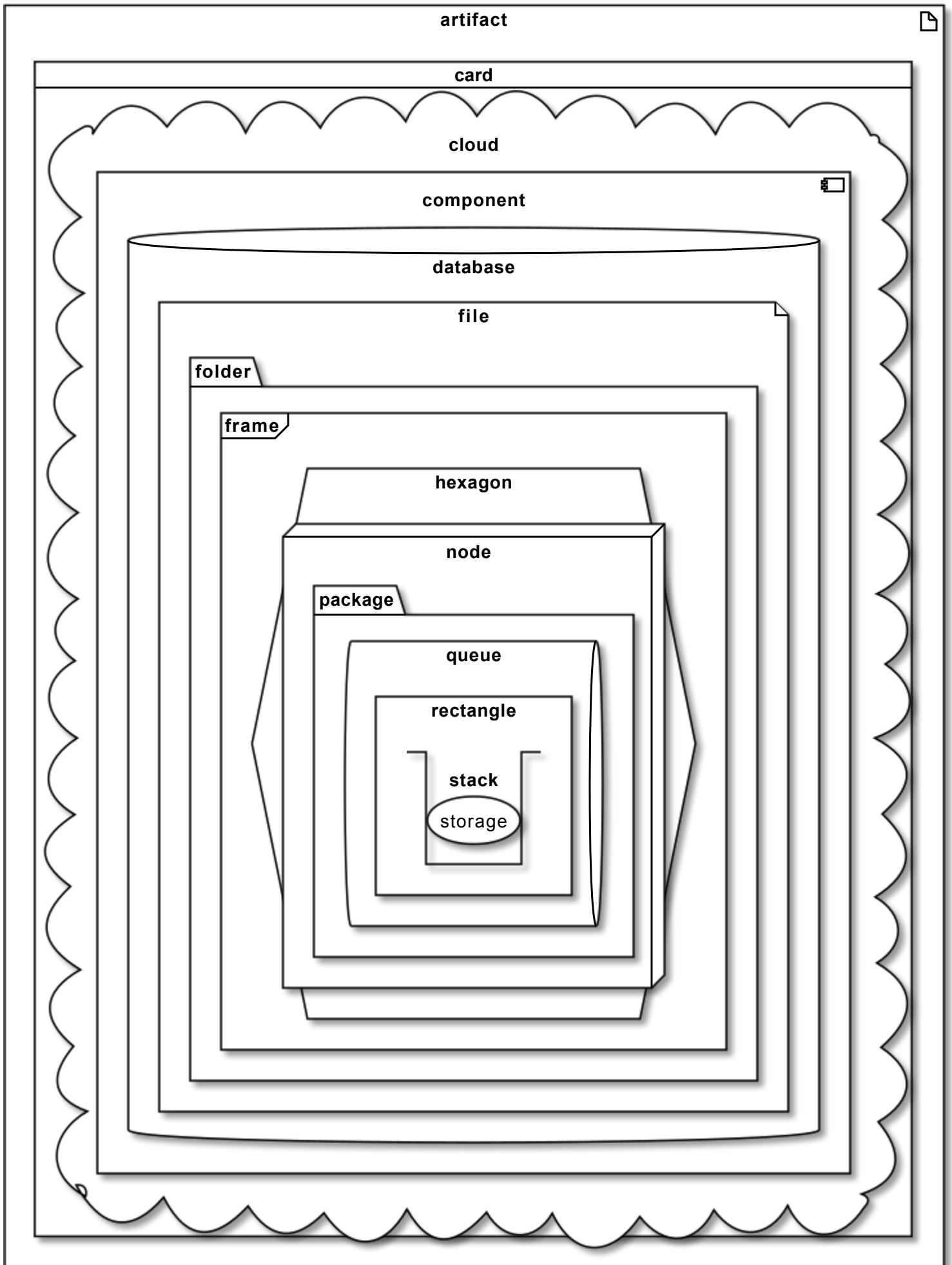



## Full nesting

Here is all the nested elements:

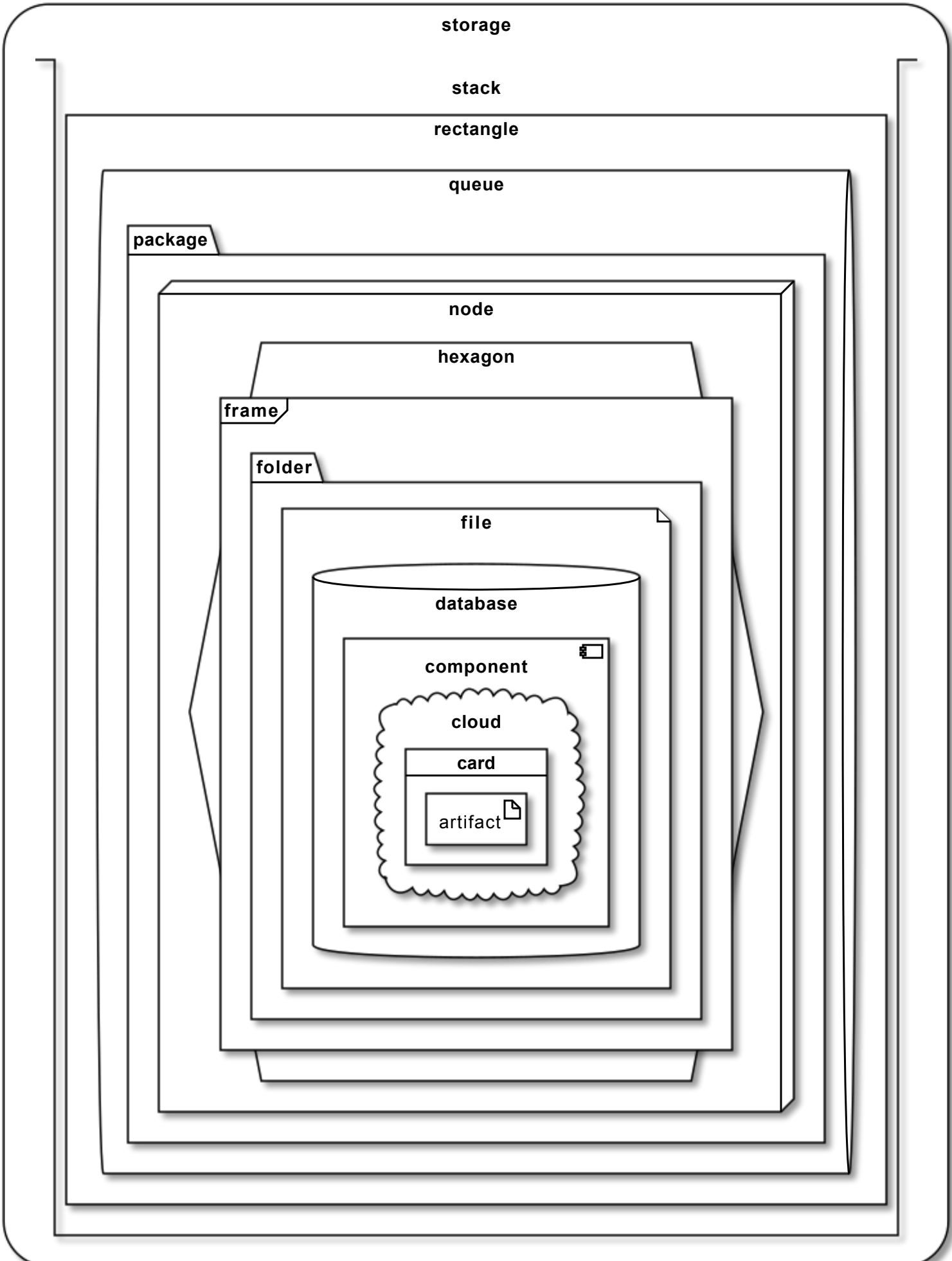
- by alphabetical order:

```
@startuml
artifact artifact {
card card {
cloud cloud {
component component {
database database {
file file {
folder folder {
frame frame {
hexagon hexagon {
node node {
package package {
queue queue {
rectangle rectangle {
stack stack {
storage storage {
}
}
}
}
}
}
}
}
}
}
}
}
}
}
}
@enduml
```


artifact
card
cloud
component
database
file
folder
frame
hexagon
node
package
queue
rectangle
stack
storage

- or reverse alphabetical order

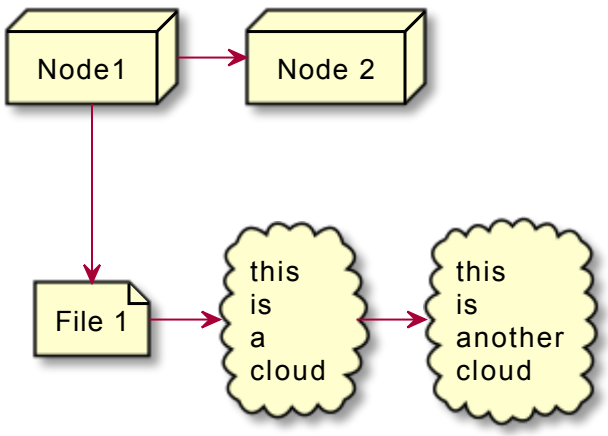
```
@startuml
storage storage {
stack stack {
rectangle rectangle {
queue queue {
package package {
node node {
hexagon hexagon {
frame frame {
folder folder {
file file {
database database {
component component {
cloud cloud {
card card {
artifact artifact {
}
}
}
}
}
}
}
}
}
}
}
}
}
}
}
@enduml
```


storage
stack
rectangle
queue
package
node
hexagon
frame
folder
file
database
component
cloud
card
artifact

# Alias

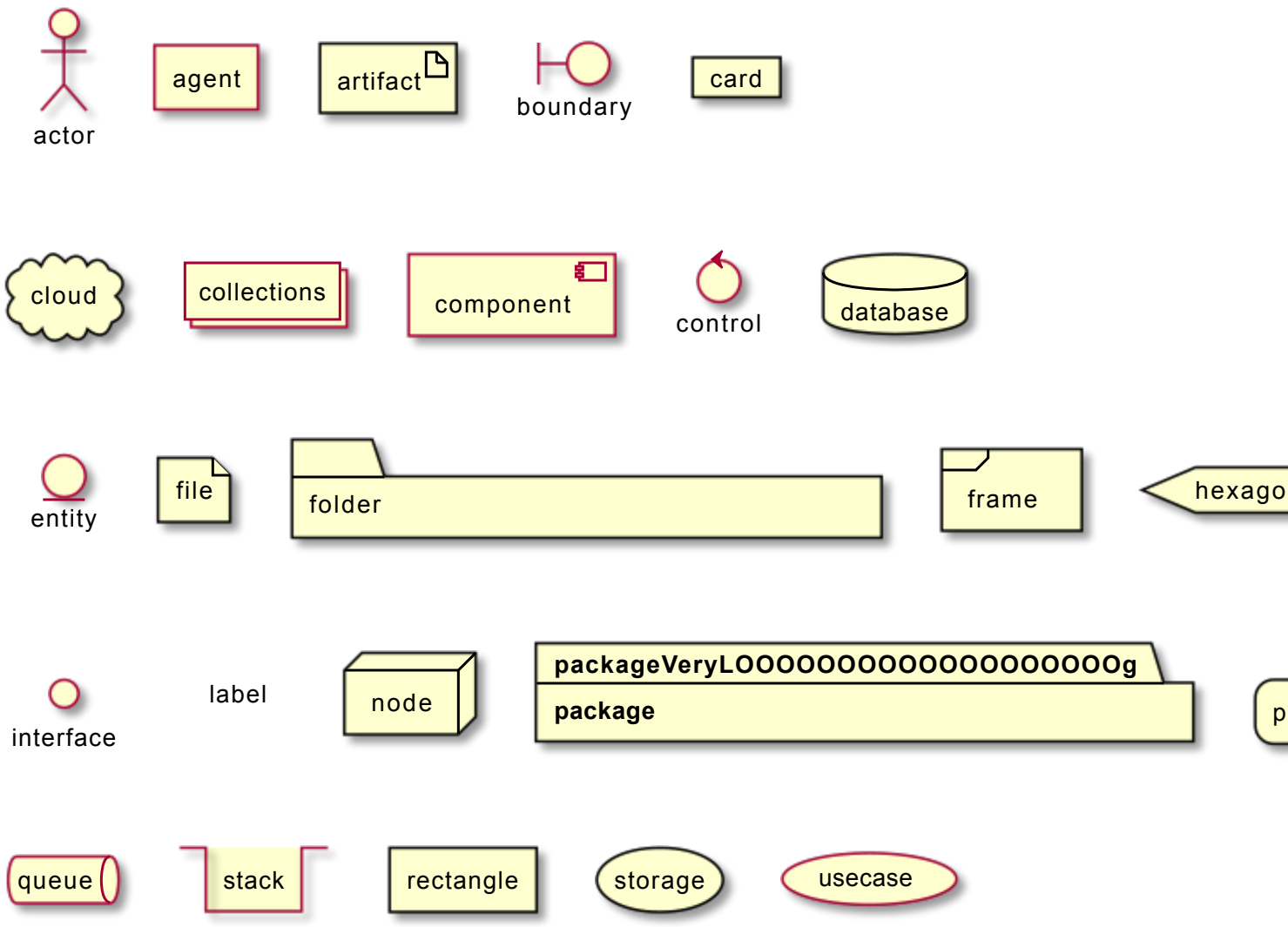
## Simple alias with `as`

```
@startuml
node Node1 as n1
node "Node 2" as n2
file f1 as "File 1"
cloud c1 as "this
is
a
cloud"
cloud c2 [this
is
another
cloud]

n1 -> n2
n1 --> f1
f1 -> c1
c1 -> c2
@enduml
```

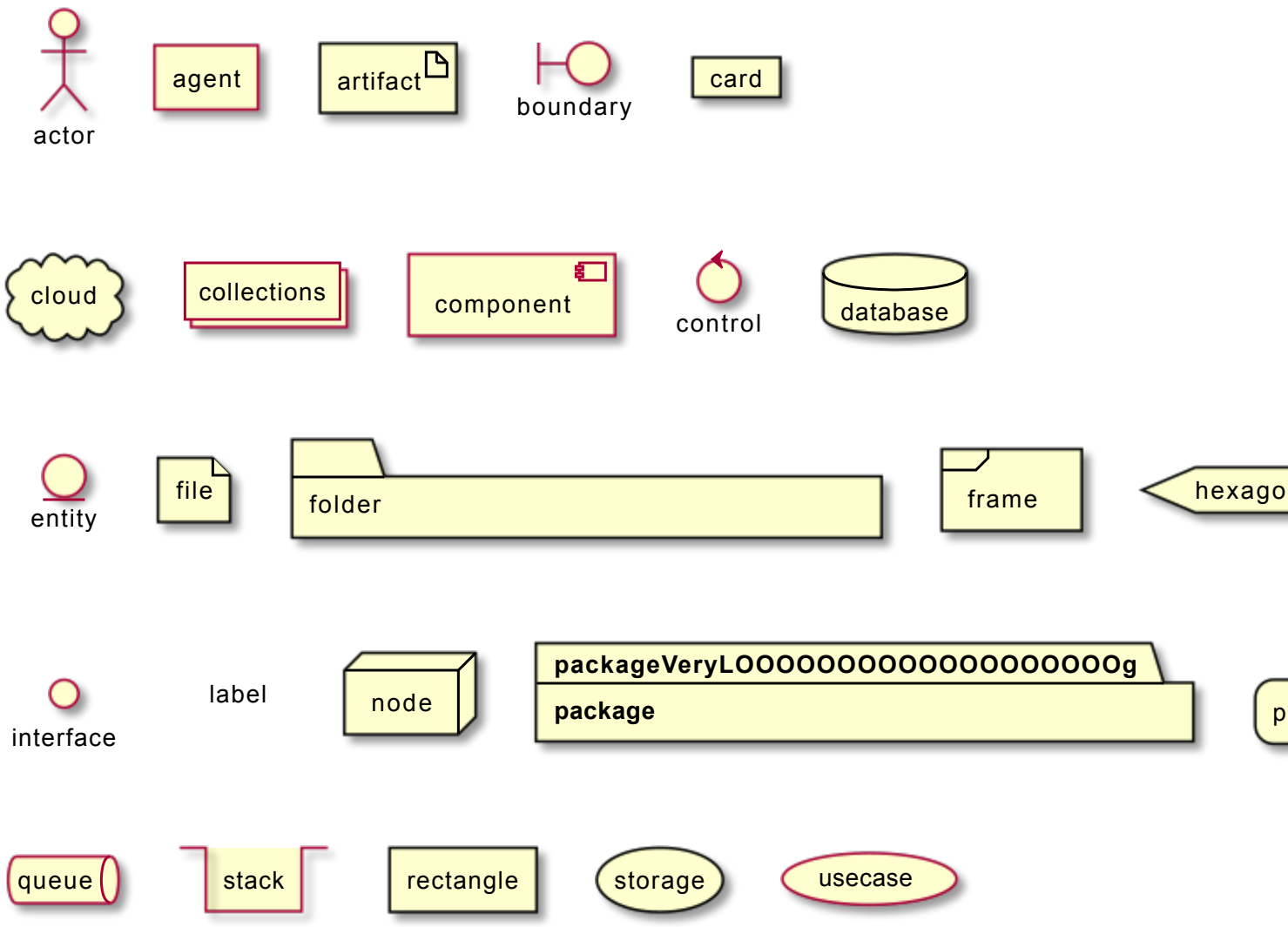


## Examples of long alias

```
@startuml
actor        "actor"       as actorVeryLOOOOOOOOOOOOOOOOOOg
agent        "agent"       as agentVeryLOOOOOOOOOOOOOOOOOOg
artifact     "artifact"    as artifactVeryLOOOOOOOOOOOOOOOOOOg
boundary     "boundary"    as boundaryVeryLOOOOOOOOOOOOOOOOOOg
card         "card"        as cardVeryLOOOOOOOOOOOOOOOOOOg
cloud        "cloud"       as cloudVeryLOOOOOOOOOOOOOOOOOOg
collections  "collections" as collectionsVeryLOOOOOOOOOOOOOOOOOOg
component    "component"   as componentVeryLOOOOOOOOOOOOOOOOOOg
control      "control"     as controlVeryLOOOOOOOOOOOOOOOOOOg
database     "database"    as databaseVeryLOOOOOOOOOOOOOOOOOOg
entity       "entity"      as entityVeryLOOOOOOOOOOOOOOOOOOg
file         "file"        as fileVeryLOOOOOOOOOOOOOOOOOOg
folder       "folder"      as folderVeryLOOOOOOOOOOOOOOOOOOg
frame        "frame"       as frameVeryLOOOOOOOOOOOOOOOOOOg
hexagon      "hexagon"     as hexagonVeryLOOOOOOOOOOOOOOOOOOg
interface    "interface"   as interfaceVeryLOOOOOOOOOOOOOOOOOOg
label        "label"       as labelVeryLOOOOOOOOOOOOOOOOOOg
node         "node"        as nodeVeryLOOOOOOOOOOOOOOOOOOg
package      "package"     as packageVeryLOOOOOOOOOOOOOOOOOOg
person       "person"      as personVeryLOOOOOOOOOOOOOOOOOOg
queue        "queue"       as queueVeryLOOOOOOOOOOOOOOOOOOg
stack        "stack"       as stackVeryLOOOOOOOOOOOOOOOOOOg
rectangle    "rectangle"   as rectangleVeryLOOOOOOOOOOOOOOOOOOg
storage      "storage"     as storageVeryLOOOOOOOOOOOOOOOOOOg
usecase      "usecase"     as usecaseVeryLOOOOOOOOOOOOOOOOOOg
@enduml
```

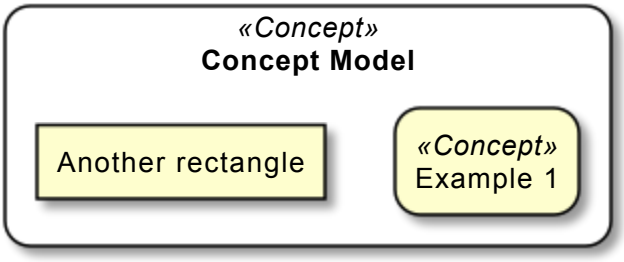

actor
agent
artifact
boundary
card
cloud
collections
component
control
database
entity
file
folder
frame
hexago
interface
label
node
packageVeryLOOOOOOOOOOOOOOOOOg
package
p
queue
stack
rectangle
storage
usecase

```
@startuml
actor       actorVeryLOOOOOOOOOOOOOOOOOOg       as "actor"
agent       agentVeryLOOOOOOOOOOOOOOOOOOg       as "agent"
artifact    artifactVeryLOOOOOOOOOOOOOOOOOOg    as "artifact"
boundary    boundaryVeryLOOOOOOOOOOOOOOOOOOg    as "boundary"
card        cardVeryLOOOOOOOOOOOOOOOOOOg        as "card"
cloud       cloudVeryLOOOOOOOOOOOOOOOOOOg       as "cloud"
collections collectionsVeryLOOOOOOOOOOOOOOOOOOg as "collections"
component   componentVeryLOOOOOOOOOOOOOOOOOOg   as "component"
control     controlVeryLOOOOOOOOOOOOOOOOOOg     as "control"
database    databaseVeryLOOOOOOOOOOOOOOOOOOg    as "database"
entity      entityVeryLOOOOOOOOOOOOOOOOOOg      as "entity"
file        fileVeryLOOOOOOOOOOOOOOOOOOg        as "file"
folder      folderVeryLOOOOOOOOOOOOOOOOOOg      as "folder"
frame       frameVeryLOOOOOOOOOOOOOOOOOOg       as "frame"
hexagon     hexagonVeryLOOOOOOOOOOOOOOOOOOg     as "hexagon"
interface   interfaceVeryLOOOOOOOOOOOOOOOOOOg   as "interface"
label       labelVeryLOOOOOOOOOOOOOOOOOOg       as "label"
node        nodeVeryLOOOOOOOOOOOOOOOOOOg        as "node"
package     packageVeryLOOOOOOOOOOOOOOOOOOg     as "package"
person      personVeryLOOOOOOOOOOOOOOOOOOg      as "person"
queue       queueVeryLOOOOOOOOOOOOOOOOOOg       as "queue"
stack       stackVeryLOOOOOOOOOOOOOOOOOOg       as "stack"
rectangle   rectangleVeryLOOOOOOOOOOOOOOOOOOg   as "rectangle"
storage     storageVeryLOOOOOOOOOOOOOOOOOOg     as "storage"
usecase     usecaseVeryLOOOOOOOOOOOOOOOOOOg     as "usecase"
@enduml
```




## Round corner

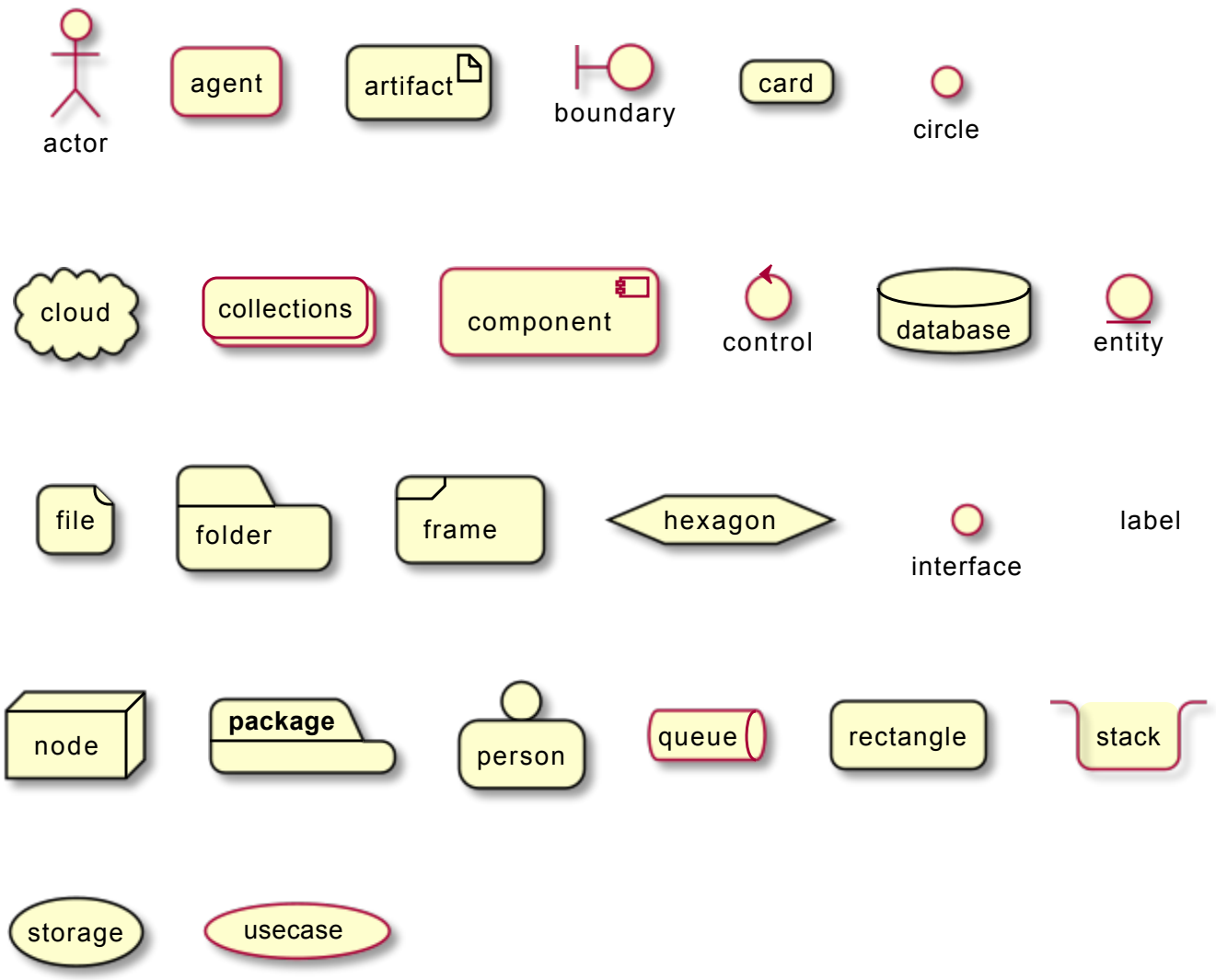
```
@startuml
skinparam rectangle {
    roundCorner<<Concept>> 25
}

rectangle "Concept Model" <<Concept>> {
rectangle "Example 1" <<Concept>> as ex1
rectangle "Another rectangle"
}
@enduml
```




# Specific SkinParameter

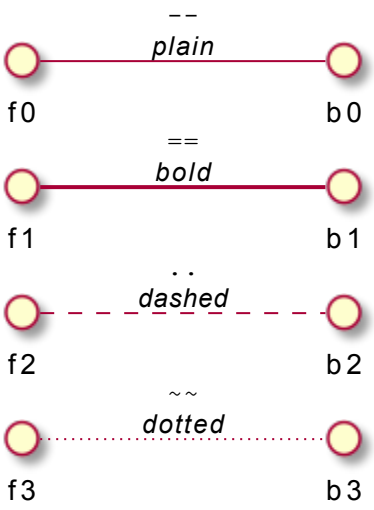
## roundCorner

```
@startuml
skinparam roundCorner 15
actor actor
agent agent
artifact artifact
boundary boundary
card card
circle circle
cloud cloud
collections collections
component component
control control
database database
entity entity
file file
folder folder
frame frame
hexagon hexagon
interface interface
label label
node node
package package
person person
queue queue
rectangle rectangle
stack stack
storage storage
usecase usecase
@enduml
```




## Appendix: All type of arrow line

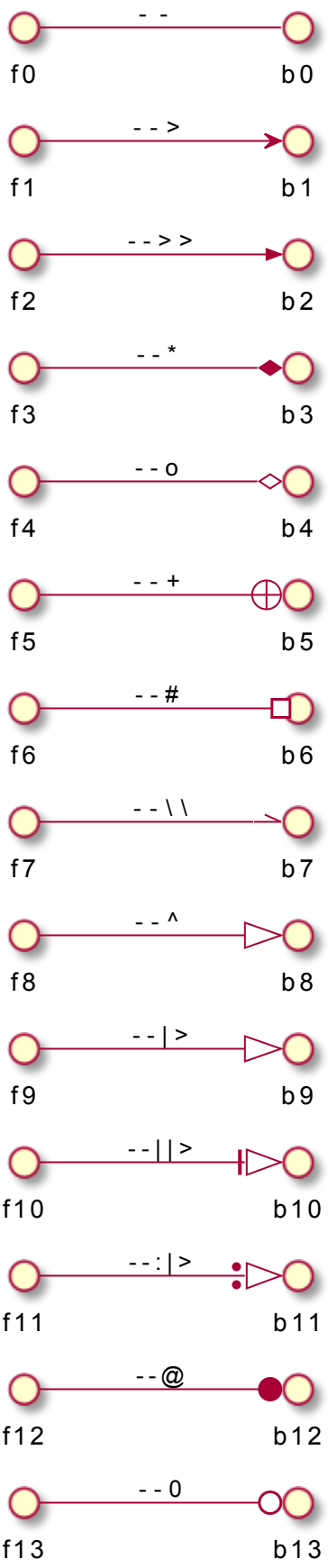
```
@startuml
left to right direction
skinparam nodesep 5

f3  ~~  b3  : ""~~""\n//dotted//
f2  ..  b2  : ""..""\n//dashed//
f1  ==  b1  : ""==""\n//bold//
f0  --  b0  : ""--""\n//plain//
@enduml
```




# Appendix: All type of arrow head or '0' arrow

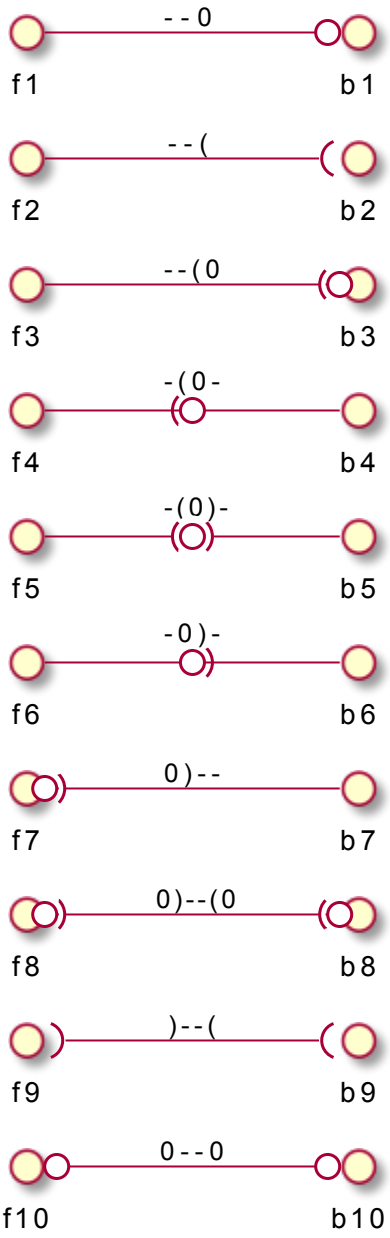
## Type of arrow head

```
@startuml
left to right direction
skinparam nodesep 5

f13 --0   b13 : ""--0""
f12 --@   b12 : ""--@""
f11 --:|> b11 : ""--:|>""
f10 --||> b10 : ""--||>""
f9  --|>  b9  : ""--|>""
f8  --^   b8  : ""--^ ""
f7  --\\  b7  : ""--\\\\""
f6  --#   b6  : ""--# ""
f5  --+   b5  : ""--+ ""
f4  --o   b4  : ""--o ""
f3  --*   b3  : ""--* ""
f2  -->>  b2  : ""-->>""
f1  -->   b1  : ""--> ""
f0  --    b0  : ""--  ""
@enduml
```


- -
f0
b0
- - >
f1
b1
- - > >
f2
b2
- - *
f3
b3
- - o
f4
b4
- - +
f5
b5
- - #
f6
b6
- - \ \
f7
b7
- - ^
f8
b8
- - | >
f9
b9
- - | | >
f10
b10
- - : | >
f11
b11
- - @
f12
b12
- - 0
f13
b13

## Type of '0' arrow or circle arrow

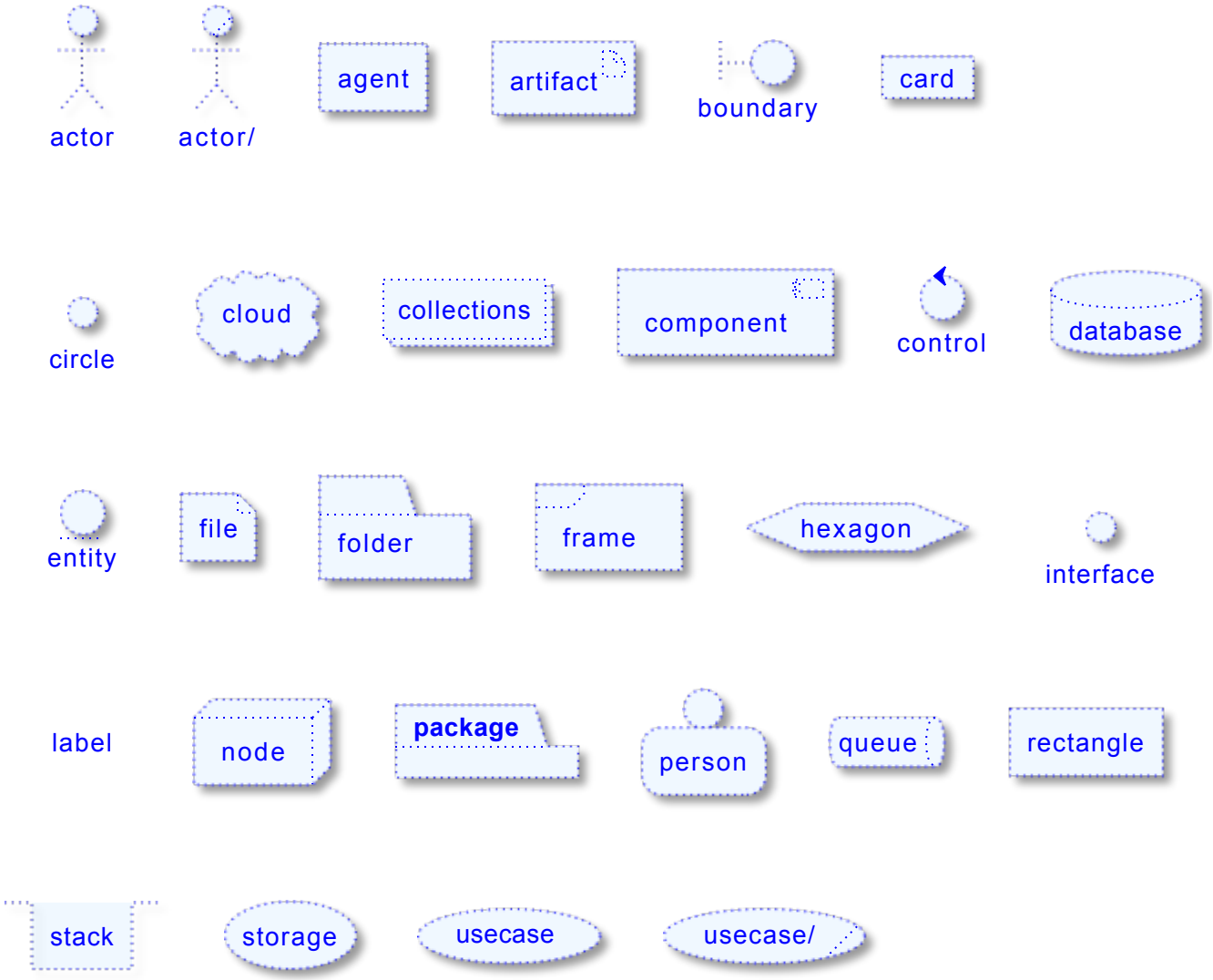
```
@startuml
left to right direction
skinparam nodesep 5

f10 0--0 b10 : "" 0--0 ""
f9 )--(  b9  : "" )--( ""
f8 0)--(0 b8 : "" 0)--(0""
f7 0)--  b7  : "" 0)-- ""
f6 -0)-  b6  : "" -0)- ""
f5 -(0)- b5  : "" -(0)-""
f4 -(0-  b4  : "" -(0- ""
f3 --(0  b3  : "" --(0 ""
f2 --(   b2  : "" --(  ""
f1 --0   b1  : "" --0  ""
@enduml
```


--0
f1
b1
--(
f2
b2
--(0
f3
b3
-(0-
f4
b4
-(0)-
f5
b5
-0)-
f6
b6
0)--
f7
b7
0)--(0
f8
b8
)--(
f9
b9
0--0
f10
b10

# Appendix: Test of inline style on all element

## Simple element

```
@startuml
actor actor             #aliceblue;line:blue;line.dotted;text:blue
actor/ "actor/"         #aliceblue;line:blue;line.dotted;text:blue
agent agent             #aliceblue;line:blue;line.dotted;text:blue
artifact artifact       #aliceblue;line:blue;line.dotted;text:blue
boundary boundary       #aliceblue;line:blue;line.dotted;text:blue
card card               #aliceblue;line:blue;line.dotted;text:blue
circle circle           #aliceblue;line:blue;line.dotted;text:blue
cloud cloud             #aliceblue;line:blue;line.dotted;text:blue
collections collections #aliceblue;line:blue;line.dotted;text:blue
component component     #aliceblue;line:blue;line.dotted;text:blue
control control         #aliceblue;line:blue;line.dotted;text:blue
database database       #aliceblue;line:blue;line.dotted;text:blue
entity entity           #aliceblue;line:blue;line.dotted;text:blue
file file               #aliceblue;line:blue;line.dotted;text:blue
folder folder           #aliceblue;line:blue;line.dotted;text:blue
frame frame             #aliceblue;line:blue;line.dotted;text:blue
hexagon hexagon         #aliceblue;line:blue;line.dotted;text:blue
interface interface     #aliceblue;line:blue;line.dotted;text:blue
label label             #aliceblue;line:blue;line.dotted;text:blue
node node               #aliceblue;line:blue;line.dotted;text:blue
package package         #aliceblue;line:blue;line.dotted;text:blue
person person           #aliceblue;line:blue;line.dotted;text:blue
queue queue             #aliceblue;line:blue;line.dotted;text:blue
rectangle rectangle     #aliceblue;line:blue;line.dotted;text:blue
stack stack             #aliceblue;line:blue;line.dotted;text:blue
storage storage         #aliceblue;line:blue;line.dotted;text:blue
usecase usecase         #aliceblue;line:blue;line.dotted;text:blue
usecase/ "usecase/"     #aliceblue;line:blue;line.dotted;text:blue
@enduml
```


actor
actor/
agent
artifact
boundary
card
circle
cloud
collections
component
control
database
entity
file
folder
frame
hexagon
interface
label
node
package
person
queue
rectangle
stack
storage
usecase
usecase/

## Nested element

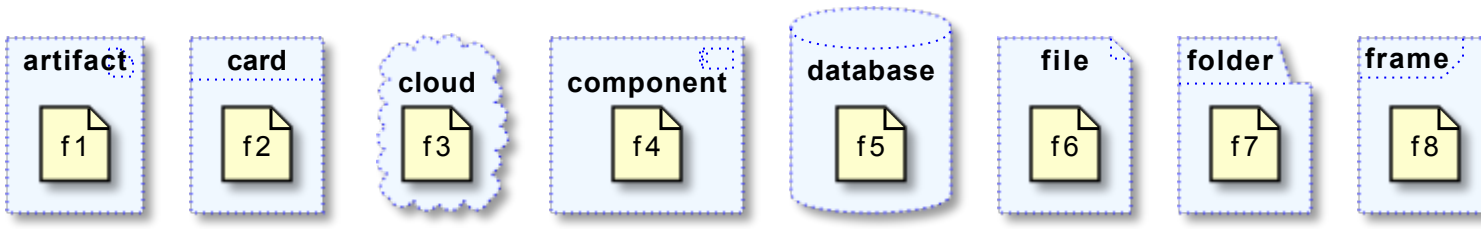
### Without sub-element

```
@startuml
artifact artifact #aliceblue;line:blue;line.dotted;text:blue {
}
card card #aliceblue;line:blue;line.dotted;text:blue {
}
cloud cloud #aliceblue;line:blue;line.dotted;text:blue {
}
component component #aliceblue;line:blue;line.dotted;text:blue {
}
database database #aliceblue;line:blue;line.dotted;text:blue {
}
file file #aliceblue;line:blue;line.dotted;text:blue {
}
folder folder #aliceblue;line:blue;line.dotted;text:blue {
}
frame frame #aliceblue;line:blue;line.dotted;text:blue {
}
hexagon hexagon #aliceblue;line:blue;line.dotted;text:blue {
}
node node #aliceblue;line:blue;line.dotted;text:blue {
}
package package #aliceblue;line:blue;line.dotted;text:blue {
}
queue queue #aliceblue;line:blue;line.dotted;text:blue {
}
rectangle rectangle #aliceblue;line:blue;line.dotted;text:blue {
}
stack stack #aliceblue;line:blue;line.dotted;text:blue {
}
storage storage #aliceblue;line:blue;line.dotted;text:blue {
}
@enduml
```

## With sub-element

```
@startuml
artifact    artifactVeryLOOOOOOOOOOOOOOOOOOg    as "artifact" #aliceblue;line:blue;line.d
file f1
}
card        cardVeryLOOOOOOOOOOOOOOOOOOg        as "card" #aliceblue;line:blue;line.dotte
file f2
}
cloud       cloudVeryLOOOOOOOOOOOOOOOOOOg       as "cloud" #aliceblue;line:blue;line.dott
file f3
}
component   componentVeryLOOOOOOOOOOOOOOOOOOg   as "component" #aliceblue;line:blue;line.
file f4
}
database    databaseVeryLOOOOOOOOOOOOOOOOOOg    as "database" #aliceblue;line:blue;line.d
file f5
}
file        fileVeryLOOOOOOOOOOOOOOOOOOg        as "file" #aliceblue;line:blue;line.dotte
file f6
}
folder      folderVeryLOOOOOOOOOOOOOOOOOOg      as "folder" #aliceblue;line:blue;line.dot
file f7
}
frame       frameVeryLOOOOOOOOOOOOOOOOOOg       as "frame" #aliceblue;line:blue;line.dott
file f8
}
hexagon     hexagonVeryLOOOOOOOOOOOOOOOOOOg     as "hexagon" #aliceblue;line:blue;line.do
file f9
}
node        nodeVeryLOOOOOOOOOOOOOOOOOOg        as "node" #aliceblue;line:blue;line.dotte
file f10
}
package     packageVeryLOOOOOOOOOOOOOOOOOOg     as "package" #aliceblue;line:blue;line.do
file f11
}
queue       queueVeryLOOOOOOOOOOOOOOOOOOg       as "queue" #aliceblue;line:blue;line.dott
file f12
}
rectangle   rectangleVeryLOOOOOOOOOOOOOOOOOOg   as "rectangle" #aliceblue;line:blue;line.
file f13
}
stack       stackVeryLOOOOOOOOOOOOOOOOOOg       as "stack" #aliceblue;line:blue;line.dott
file f14
}
storage     storageVeryLOOOOOOOOOOOOOOOOOOg     as "storage" #aliceblue;line:blue;line.do
file f15
}
```

```
@enduml
```

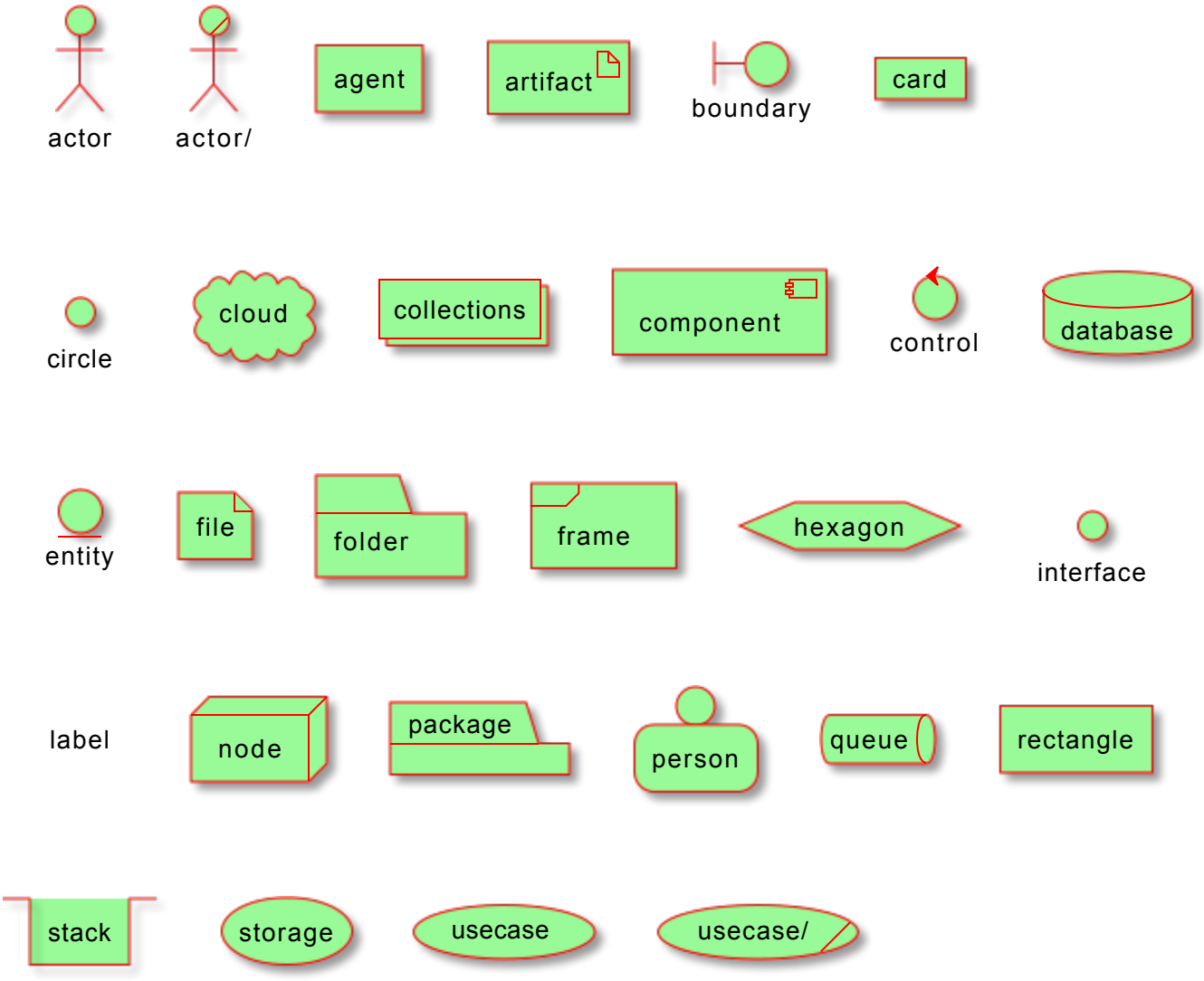

artifact
f1
card
f2
cloud
f3
component
f4
database
f5
file
f6
folder
f7
frame
f8

# Appendix: Test of style on all element

## Simple element

### Global style (on componentDiagram)

```
@startuml
<style>
componentDiagram {
  BackGroundColor palegreen
  LineThickness 1
  LineColor red
}
document {
  BackGroundColor white
}
</style>
actor actor
actor/ "actor/"
agent agent
artifact artifact
boundary boundary
card card
circle circle
cloud cloud
collections collections
component component
control control
database database
entity entity
file file
folder folder
frame frame
hexagon hexagon
interface interface
label label
node node
package package
person person
queue queue
rectangle rectangle
stack stack
storage storage
usecase usecase
usecase/ "usecase/"
@enduml
```


actor
actor/
agent
artifact
boundary
card
circle
cloud
collections
component
control
database
entity
file
folder
frame
hexagon
interface
label
node
package
person
queue
rectangle
stack
storage
usecase
usecase/

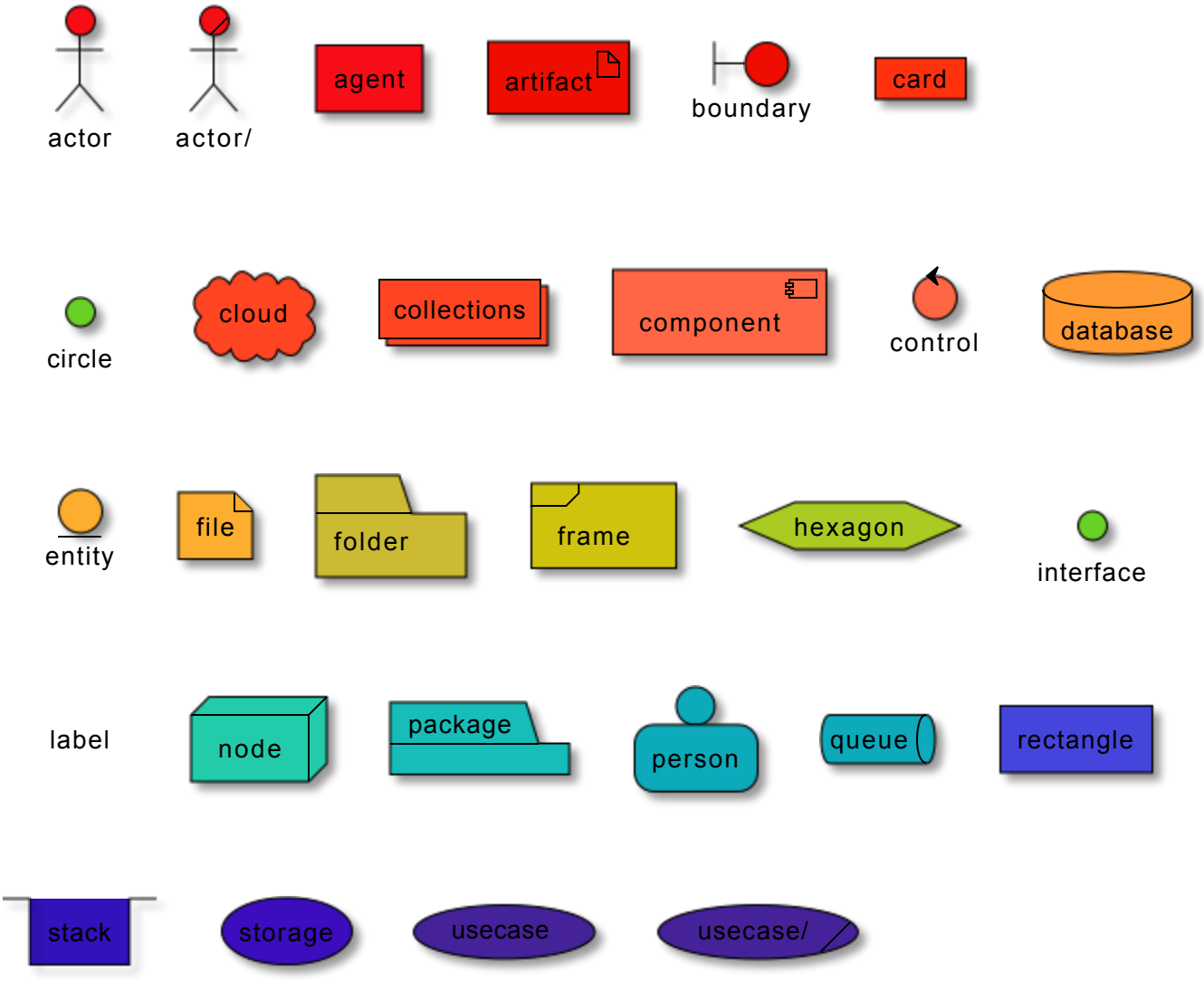
## Style for each element

```
@startuml
<style>
actor {
  BackGroundColor #f80c12
  LineThickness 1
  LineColor black
}
agent {
  BackGroundColor #f80c12
  LineThickness 1
  LineColor black
}
artifact {
  BackGroundColor #ee1100
  LineThickness 1
  LineColor black
}
boundary {
  BackGroundColor #ee1100
  LineThickness 1
  LineColor black
}
card {
  BackGroundColor #ff3311
  LineThickness 1
  LineColor black
}
circle {
  BackGroundColor #ff3311
  LineThickness 1
  LineColor black
}
cloud {
  BackGroundColor #ff4422
  LineThickness 1
  LineColor black
}
collections {
  BackGroundColor #ff4422
  LineThickness 1
  LineColor black
}
component {
  BackGroundColor #ff6644
  LineThickness 1
  LineColor black
```

```
}
control {
  BackGroundColor #ff6644
  LineThickness 1
  LineColor black
}
database {
  BackGroundColor #ff9933
  LineThickness 1
  LineColor black
}
entity {
  BackGroundColor #feae2d
  LineThickness 1
  LineColor black
}
file {
  BackGroundColor #feae2d
  LineThickness 1
  LineColor black
}
folder {
  BackGroundColor #ccbb33
  LineThickness 1
  LineColor black
}
frame {
  BackGroundColor #d0c310
  LineThickness 1
  LineColor black
}
hexagon {
  BackGroundColor #aacc22
  LineThickness 1
  LineColor black
}
interface {
  BackGroundColor #69d025
  LineThickness 1
  LineColor black
}
label {
  BackGroundColor black
  LineThickness 1
  LineColor black
}
```

```
node {
  BackGroundColor #22ccaa
  LineThickness 1
  LineColor black
}
package {
  BackGroundColor #12bdb9
  LineThickness 1
  LineColor black
}
person {
  BackGroundColor #11aabb
  LineThickness 1
  LineColor black
}
queue {
  BackGroundColor #11aabb
  LineThickness 1
  LineColor black
}
rectangle {
  BackGroundColor #4444dd
  LineThickness 1
  LineColor black
}
stack {
  BackGroundColor #3311bb
  LineThickness 1
  LineColor black
}
storage {
  BackGroundColor #3b0cbd
  LineThickness 1
  LineColor black
}
usecase {
  BackGroundColor #442299
  LineThickness 1
  LineColor black
}
</style>
actor actor
actor/ "actor/"
agent agent
artifact artifact
boundary boundary
```

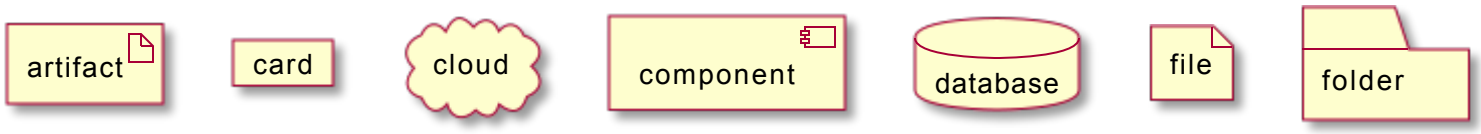
```
card card
circle circle
cloud cloud
collections collections
component component
control control
database database
entity entity
file file
folder folder
frame frame
hexagon hexagon
interface interface
label label
node node
package package
person person
queue queue
rectangle rectangle
stack stack
storage storage
usecase usecase
usecase/ "usecase/"
@enduml
```


actor
actor/
agent
artifact
boundary
card
circle
cloud
collections
component
control
database
entity
file
folder
frame
hexagon
interface
label
node
package
person
queue
rectangle
stack
storage
usecase
usecase/

# Nested element (without level)

## Global style (on componentDiagram)

```
<style>
componentDiagram {
  BackGroundColor palegreen
  LineThickness 2
  LineColor red
}
</style>
artifact artifact {
}
card card {
}
cloud cloud {
}
component component {
}
database database {
}
file file {
}
folder folder {
}
frame frame {
}
hexagon hexagon {
}
node node {
}
package package {
}
queue queue {
}
rectangle rectangle {
}
stack stack {
}
storage storage {
}
@enduml
```

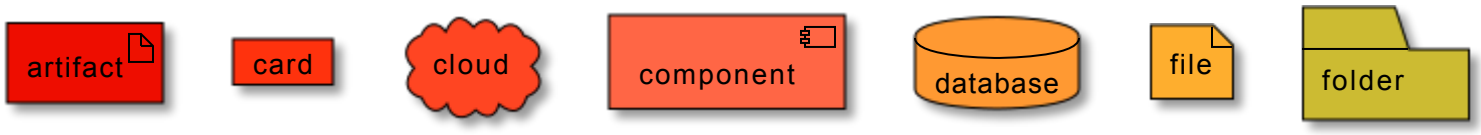

artifact
card
cloud
component
database
file
folder

## Style for each nested element

```
@startuml
<style>
artifact {
  BackGroundColor #ee1100
  LineThickness 1
  LineColor black
}
card {
  BackGroundColor #ff3311
  LineThickness 1
  LineColor black
}
cloud {
  BackGroundColor #ff4422
  LineThickness 1
  LineColor black
}
component {
  BackGroundColor #ff6644
  LineThickness 1
  LineColor black
}
database {
  BackGroundColor #ff9933
  LineThickness 1
  LineColor black
}
file {
  BackGroundColor #feae2d
  LineThickness 1
  LineColor black
}
folder {
  BackGroundColor #ccbb33
  LineThickness 1
  LineColor black
}
frame {
  BackGroundColor #d0c310
  LineThickness 1
  LineColor black
}
hexagon {
  BackGroundColor #aacc22
  LineThickness 1
  LineColor black
```

```
}
node {
  BackGroundColor #22ccaa
  LineThickness 1
  LineColor black
}
package {
  BackGroundColor #12bdb9
  LineThickness 1
  LineColor black
}
queue {
  BackGroundColor #11aabb
  LineThickness 1
  LineColor black
}
rectangle {
  BackGroundColor #4444dd
  LineThickness 1
  LineColor black
}
stack {
  BackGroundColor #3311bb
  LineThickness 1
  LineColor black
}
storage {
  BackGroundColor #3b0cbd
  LineThickness 1
  LineColor black
}

</style>
artifact artifact {
}
card card {
}
cloud cloud {
}
component component {
}
database database {
}
file file {
}
folder folder {
```

```
}
frame frame {
}
hexagon hexagon {
}
node node {
}
package package {
}
queue queue {
}
rectangle rectangle {
}
stack stack {
}
storage storage {
}
@enduml
```

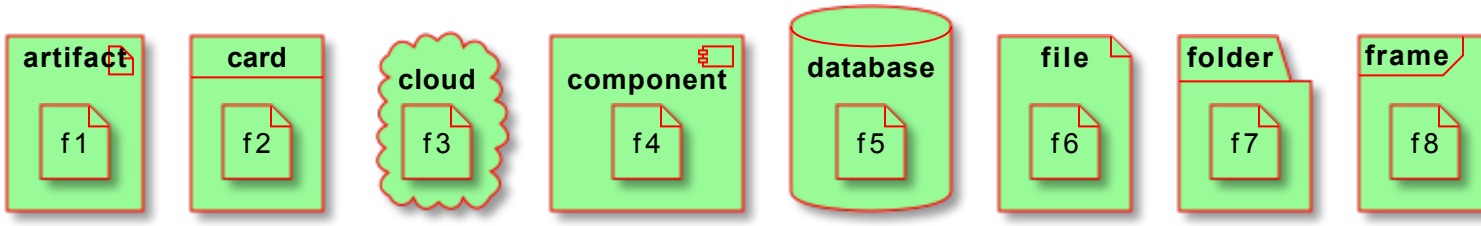


## Nested element (with one level)

### Global style (on componentDiagram)

```
@startuml
<style>
componentDiagram {
  BackGroundColor palegreen
  LineThickness 1
  LineColor red
}
document {
  BackGroundColor white
}
</style>
artifact e1 as "artifact" {
file f1
}
card e2 as "card" {
file f2
}
cloud e3 as "cloud" {
file f3
}
component e4 as "component" {
file f4
}
database e5 as "database" {
file f5
}
file e6 as "file" {
file f6
}
folder e7 as "folder" {
file f7
}
frame e8 as "frame" {
file f8
}
hexagon e9 as "hexagon" {
file f9
}
node e10 as "node" {
file f10
}
package e11 as "package" {
file f11
}
queue e12 as "queue" {
file f12
```

```
}
rectangle e13 as "rectangle" {
file f13
}
stack e14 as "stack" {
file f14
}
storage e15 as "storage" {
file f15
}
@enduml
```

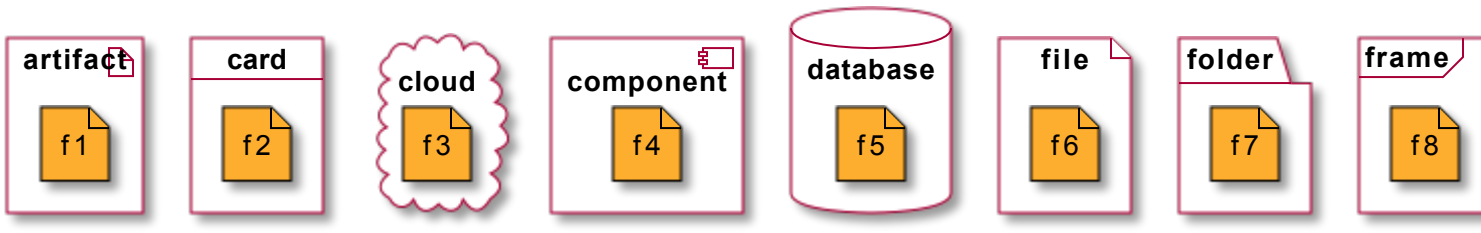


## Style for each nested element

```
@startuml
<style>
artifact {
  BackGroundColor #ee1100
  LineThickness 1
  LineColor black
}
card {
  BackGroundColor #ff3311
  LineThickness 1
  LineColor black
}
cloud {
  BackGroundColor #ff4422
  LineThickness 1
  LineColor black
}
component {
  BackGroundColor #ff6644
  LineThickness 1
  LineColor black
}
database {
  BackGroundColor #ff9933
  LineThickness 1
  LineColor black
}
file {
  BackGroundColor #feae2d
  LineThickness 1
  LineColor black
}
folder {
  BackGroundColor #ccbb33
  LineThickness 1
  LineColor black
}
frame {
  BackGroundColor #d0c310
  LineThickness 1
  LineColor black
}
hexagon {
  BackGroundColor #aacc22
  LineThickness 1
  LineColor black
```

```
}
node {
  BackGroundColor #22ccaa
  LineThickness 1
  LineColor black
}
package {
  BackGroundColor #12bdb9
  LineThickness 1
  LineColor black
}
queue {
  BackGroundColor #11aabb
  LineThickness 1
  LineColor black
}
rectangle {
  BackGroundColor #4444dd
  LineThickness 1
  LineColor black
}
stack {
  BackGroundColor #3311bb
  LineThickness 1
  LineColor black
}
storage {
  BackGroundColor #3b0cbd
  LineThickness 1
  LineColor black
}
</style>
artifact e1 as "artifact" {
file f1
}
card e2 as "card" {
file f2
}
cloud e3 as "cloud" {
file f3
}
component e4 as "component" {
file f4
}
database e5 as "database" {
file f5
```

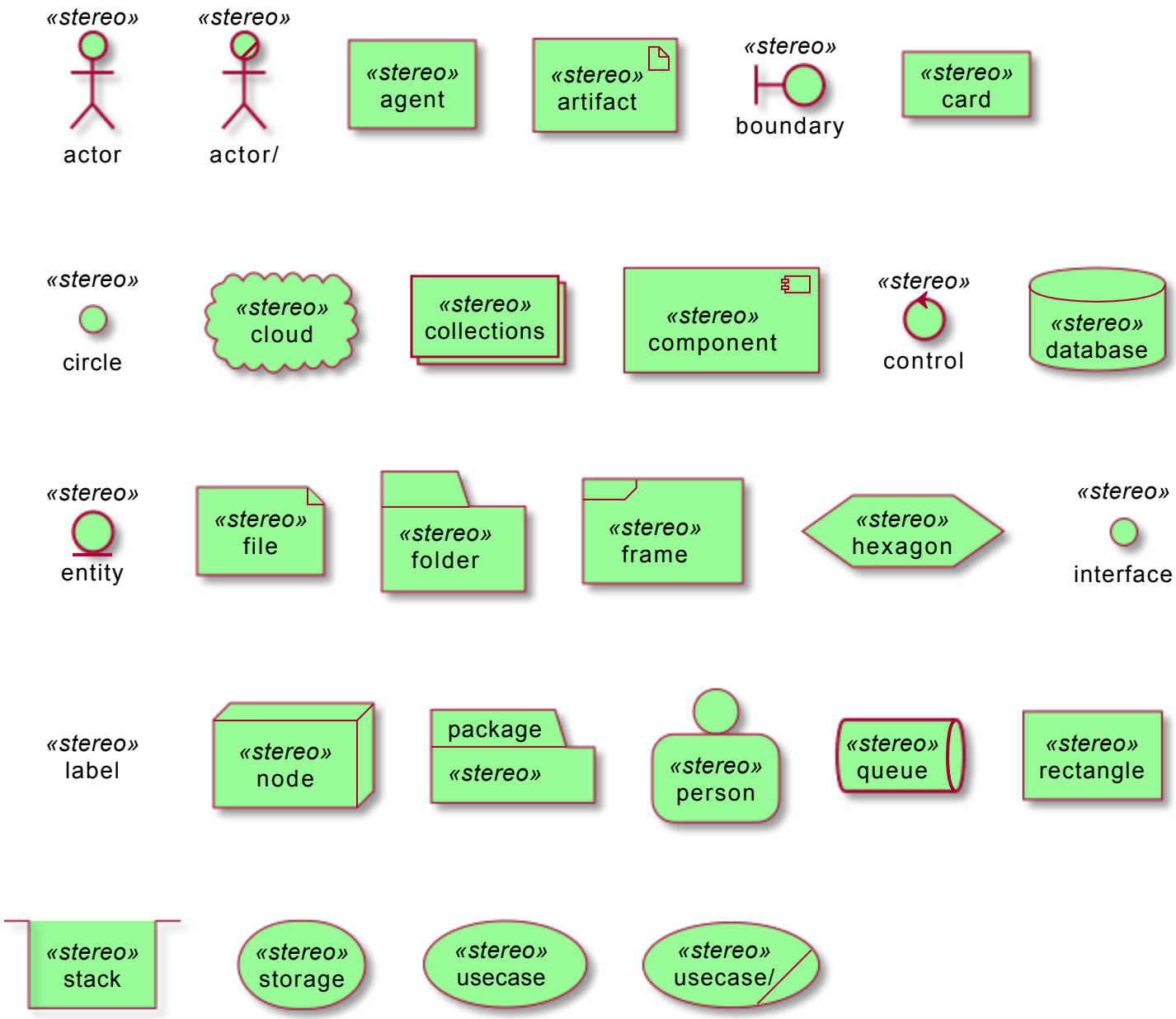
```
}
file e6 as "file" {
file f6
}
folder e7 as "folder" {
file f7
}
frame e8 as "frame" {
file f8
}
hexagon e9 as "hexagon" {
file f9
}
node e10 as "node" {
file f10
}
package e11 as "package" {
file f11
}
queue e12 as "queue" {
file f12
}
rectangle e13 as "rectangle" {
file f13
}
stack e14 as "stack" {
file f14
}
storage e15 as "storage" {
file f15
}
@enduml
```



# Appendix: Test of stereotype with style on all element

## Simple element

```
@startuml
<style>
.stereo {
  BackgroundColor palegreen
}
</style>
actor actor << stereo >>
actor/ "actor/" << stereo >>
agent agent << stereo >>
artifact artifact << stereo >>
boundary boundary << stereo >>
card card << stereo >>
circle circle << stereo >>
cloud cloud << stereo >>
collections collections << stereo >>
component component << stereo >>
control control << stereo >>
database database << stereo >>
entity entity << stereo >>
file file << stereo >>
folder folder << stereo >>
frame frame << stereo >>
hexagon hexagon << stereo >>
interface interface << stereo >>
label label << stereo >>
node node << stereo >>
package package << stereo >>
person person << stereo >>
queue queue << stereo >>
rectangle rectangle << stereo >>
stack stack << stereo >>
storage storage << stereo >>
usecase usecase << stereo >>
usecase/ "usecase/" << stereo >>
@enduml
```


«stereo»
actor
«stereo»
actor/
«stereo»
agent
«stereo»
artifact
«stereo»
boundary
«stereo»
card
«stereo»
circle
«stereo»
cloud
«stereo»
collections
«stereo»
component
«stereo»
control
«stereo»
database
«stereo»
entity
«stereo»
file
«stereo»
folder
«stereo»
frame
«stereo»
hexagon
«stereo»
interface
«stereo»
label
«stereo»
node
package
«stereo»
«stereo»
person
«stereo»
queue
«stereo»
rectangle
«stereo»
stack
«stereo»
storage
«stereo»
usecase
«stereo»
usecase/