

# 

## 

### 

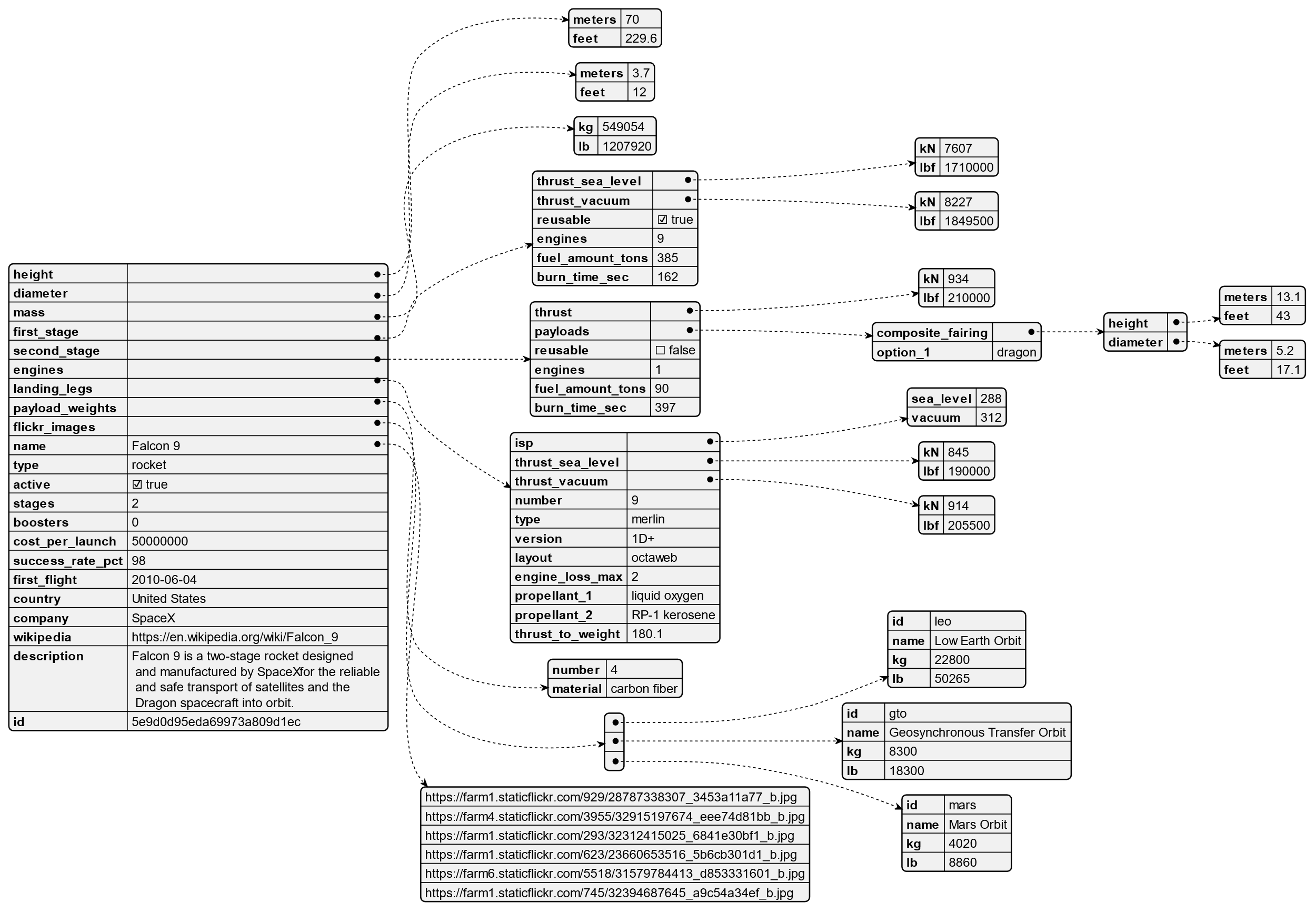
{"height":{"meters":70,"feet":229.6},"diameter":{"meters":3.7,"feet":12},"mass":{"kg":549054,"lb":1207920},"first\_stage":{"thrust\_sea\_level":{"kN":7607,"lbf":1710000},"thrust\_vacuum":{"kN":8227,"lbf":1849500},"reusable":true,"engines":9,"fuel\_amount\_tons":385,"burn\_time\_sec":162},"second\_stage":{"thrust":{"kN":934,"lbf":210000},"payloads":{"composite\_fairing":{"height":{"meters":13.1,"feet":43},"diameter":{"meters":5.2,"feet":17.1}},"option\_1":"dragon"},"reusable":false,"engines":1,"fuel\_amount\_tons":90,"burn\_time\_sec":397},"engines":{"isp":{"sea\_level":288,"vacuum":312},"thrust\_sea\_level":{"kN":845,"lbf":190000},"thrust\_vacuum":{"kN":914,"lbf":205500},"number":9,"type":"merlin","version":"1D+","layout":"octaweb","engine\_loss\_max":2,"propellant\_1":"liquid oxygen","propellant\_2":"RP-1 kerosene","thrust\_to\_weight":180.1},"landing\_legs":{"number":4,"material":"carbon fiber"},"payload\_weights":[{"id":"leo","name":"Low Earth Orbit","kg":22800,"lb":50265},{"id":"gto","name":"Geosynchronous Transfer Orbit","kg":8300,"lb":18300},{"id":"mars","name":"Mars Orbit","kg":4020,"lb":8860}],"flickr\_images":["https:\/\/farm1.staticflickr.com\/929\/28787338307\_3453a11a77\_b.jpg","https:\/\/farm4.staticflickr.com\/3955\/32915197674\_eee74d81bb\_b.jpg","https:\/\/farm1.staticflickr.com\/293\/32312415025\_6841e30bf1\_b.jpg","https:\/\/farm1.staticflickr.com\/623\/23660653516\_5b6cb301d1\_b.jpg","https:\/\/farm6.staticflickr.com\/5518\/31579784413\_d853331601\_b.jpg","https:\/\/farm1.staticflickr.com\/745\/32394687645\_a9c54a34ef\_b.jpg"],"name":"Falcon 9","type":"rocket","active":true,"stages":2,"boosters":0,"cost\_per\_launch":50000000,"success\_rate\_pct":98,"first\_flight":"2010-06-04","country":"United States","company":"SpaceX","wikipedia":"https:\/\/en.wikipedia.org\/wiki\/Falcon\_9","description":"Falcon 9 is a two-stage rocket designed and manufactured by SpaceX for the reliable and safe transport of satellites and the Dragon spacecraft into orbit.","id":"5e9d0d95eda69973a809d1ec"}

### 



☺

### 



## 

## 

SpaceX REST API

**Open-Source REST API for launch, rocket, core, capsule, starlink, launchpad, and landing pad data.**

[https://github.com/r-spacex/SpaceX-API](https://swapi.dev/)

What is this?

It’s an unofficial public API to receive various information about all Space X rocket launches.

### 

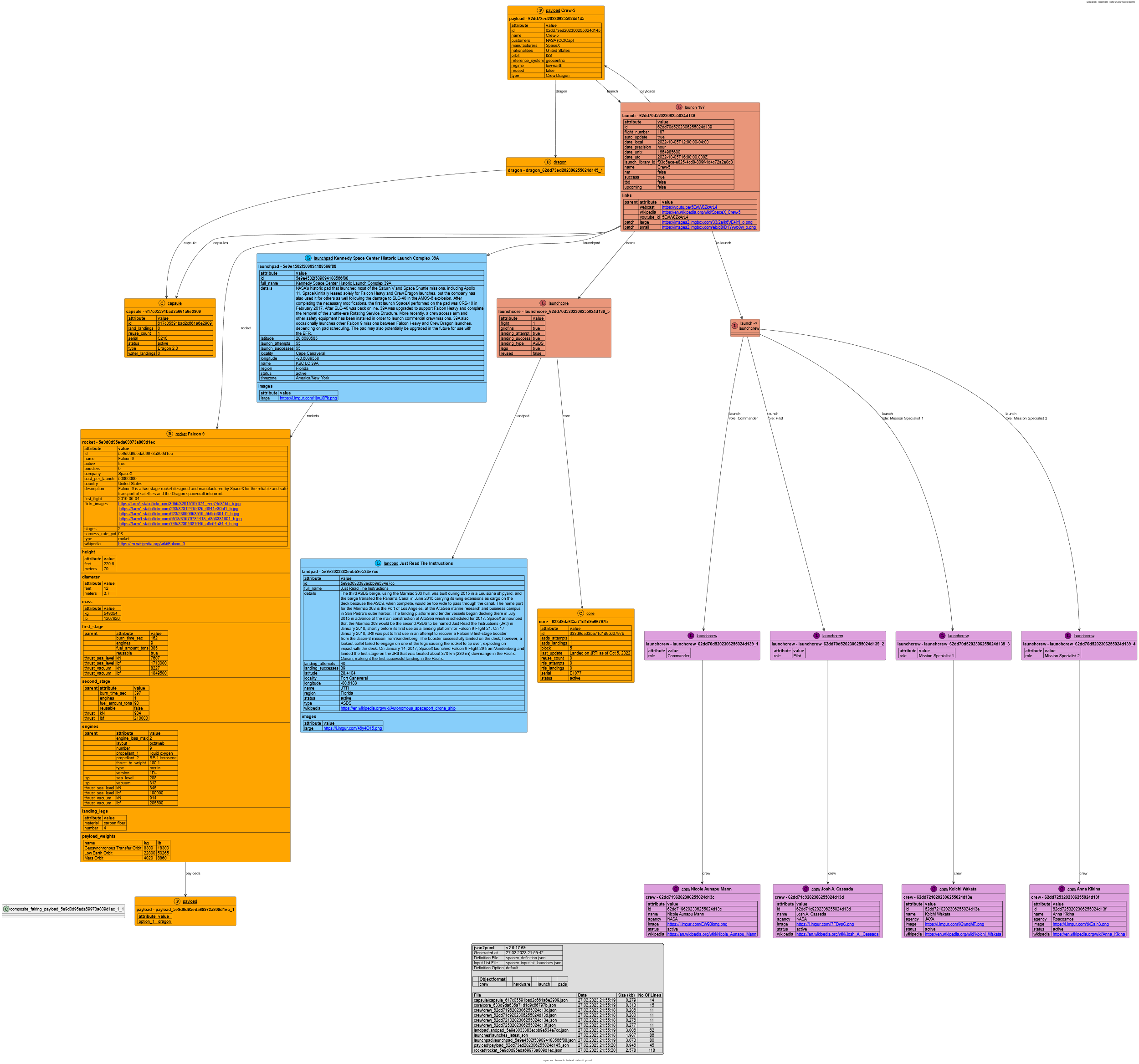


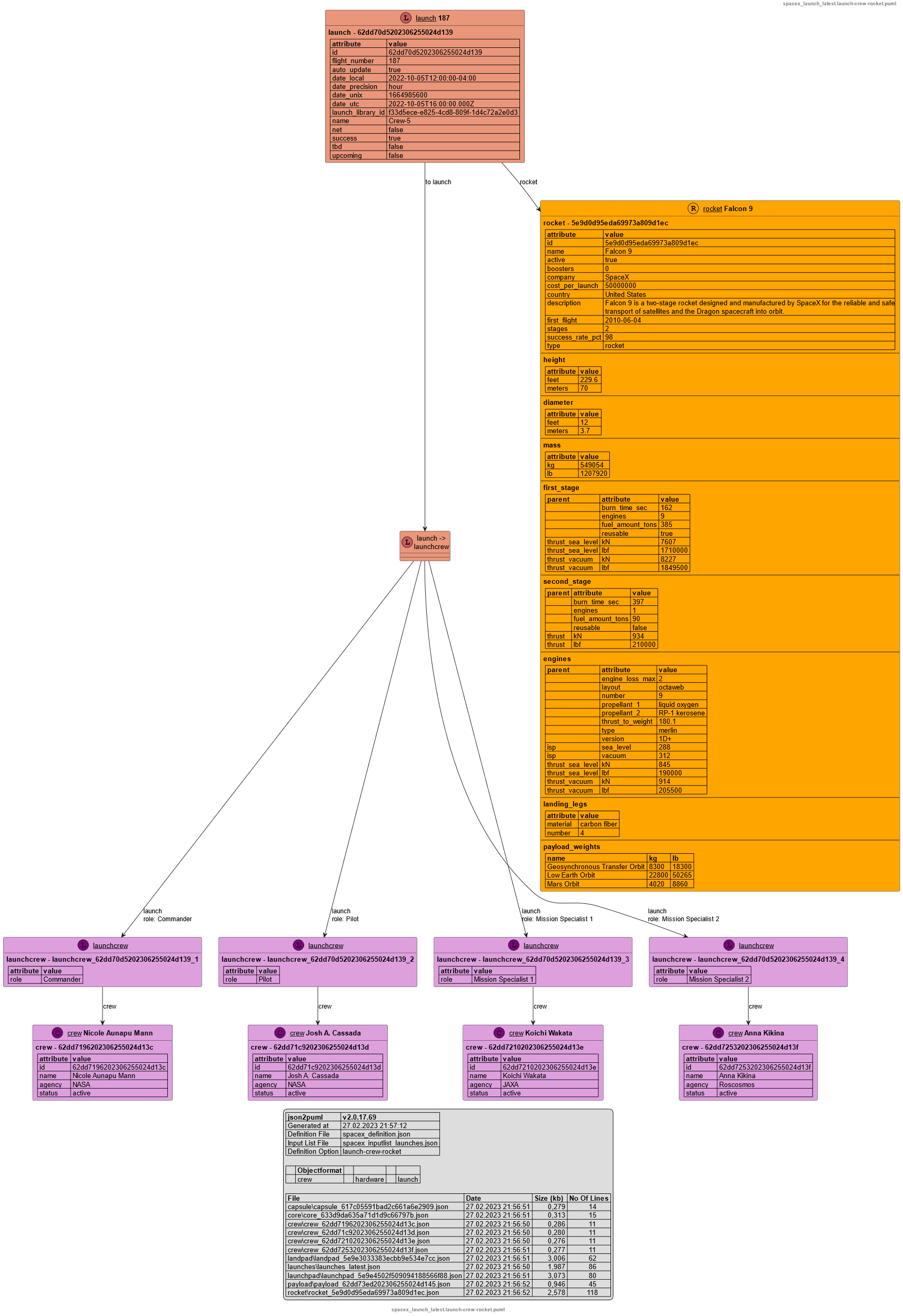




### 







## 

[SWAPI - The Star Wars API](https://swapi.dev/)

<https://swapi.dev/>

What is this?

The Star Wars API, or "swapi" (Swah-pee) is the world's first quantified and programmatically-accessible data source for all the data from the Star Wars canon universe!

We've taken all the rich contextual stuff from the universe and formatted into something easier to consume with software. Then we went and stuck an API on the front so you can access it all!

### 



### 



### 



# 

## 

### 



### 



### 



### 



### 



### 



### 



## 

## 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## 

### 

### 

### 



## 

|  | |  |  |
| --- | --- | --- | --- |
|  |  | |  |
|  |  | |  |
|  |  | |  |
|  |  | |  |

## 

### 

### 

### 



# 

## 

### 

### 

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

### 

## 

### 

### 

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |



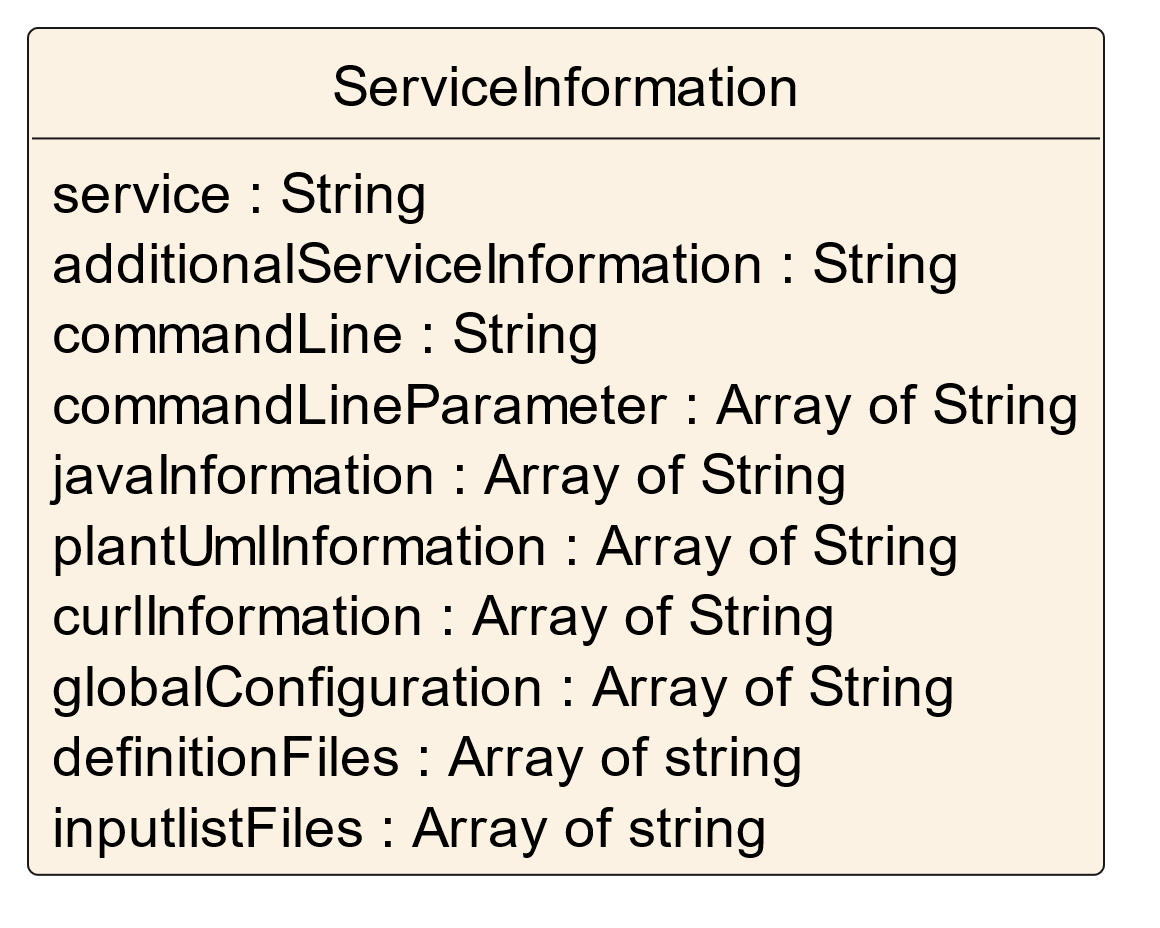


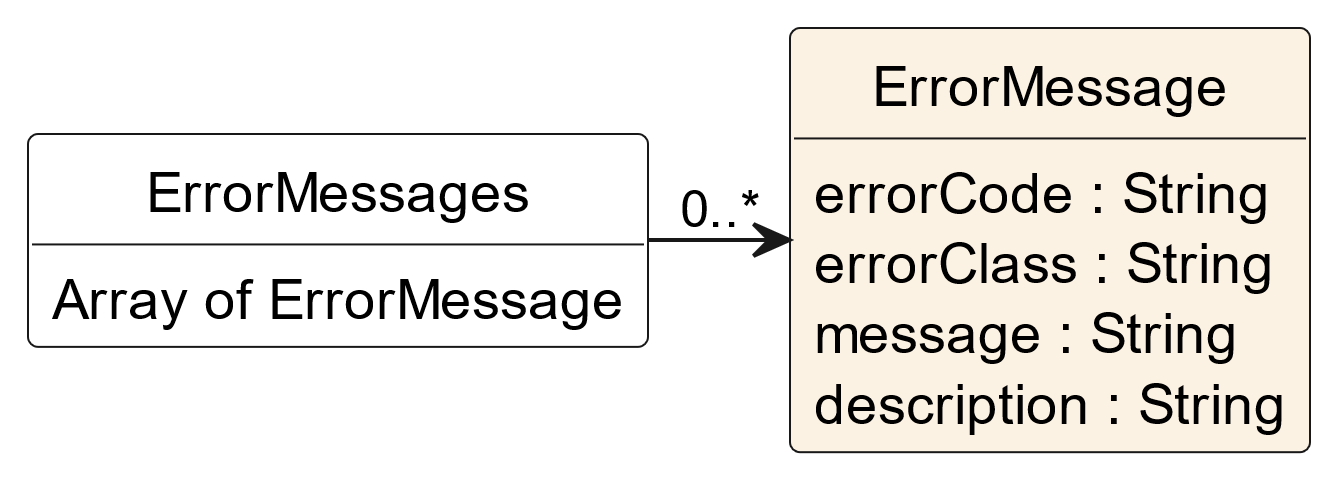
### 

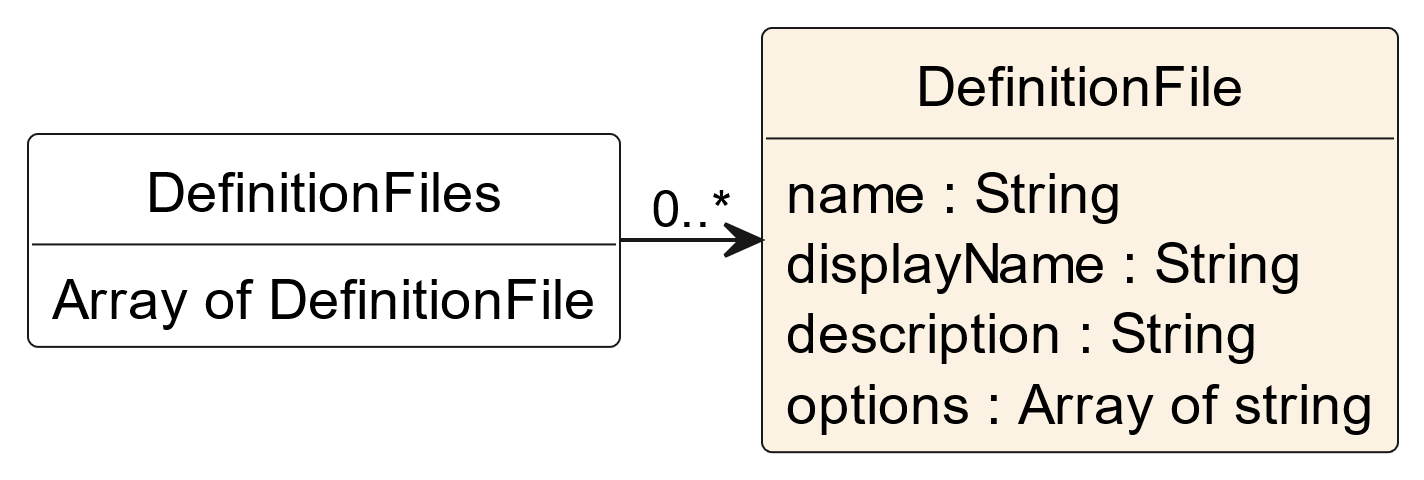
### 

#### 

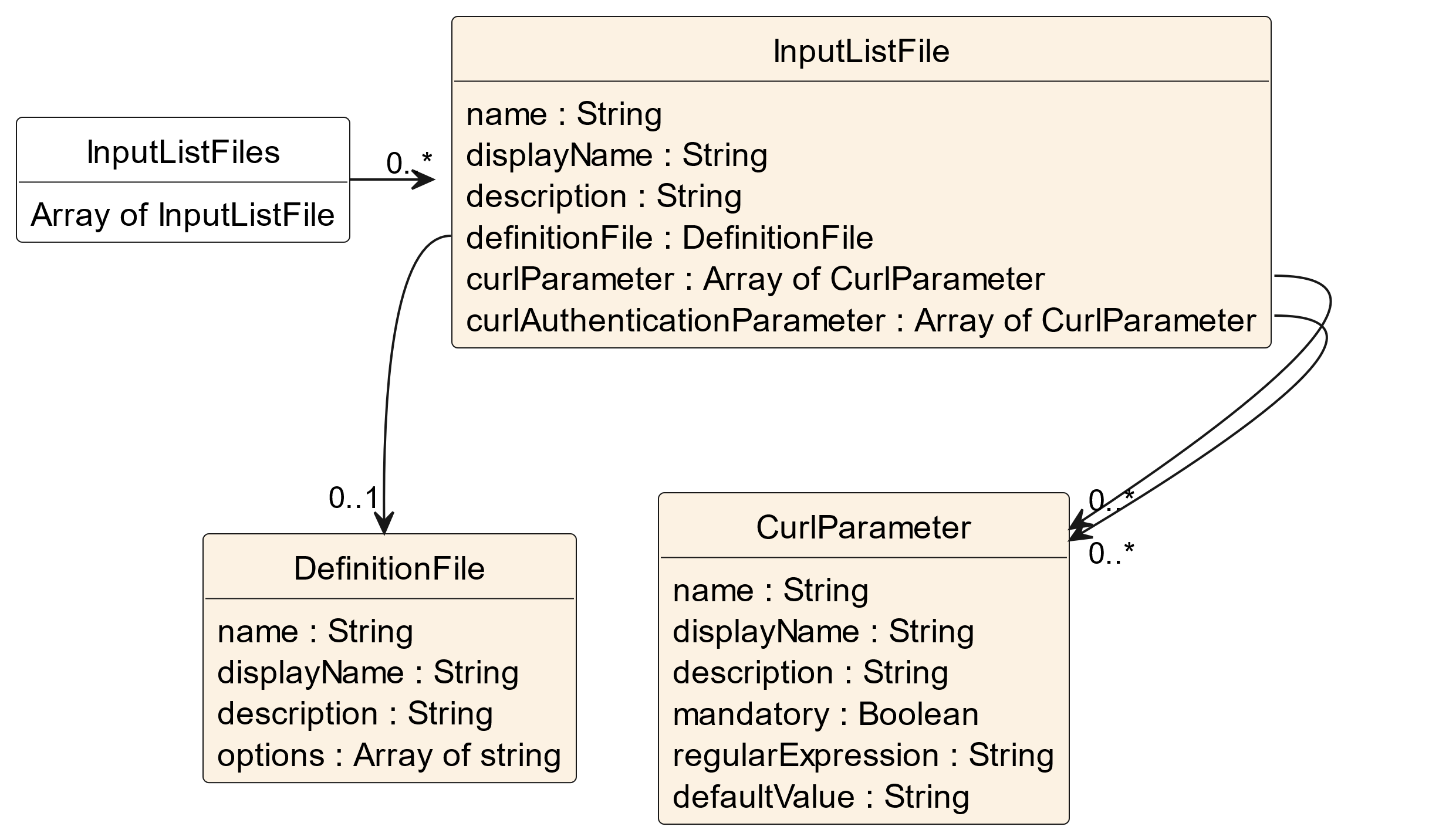
#### 

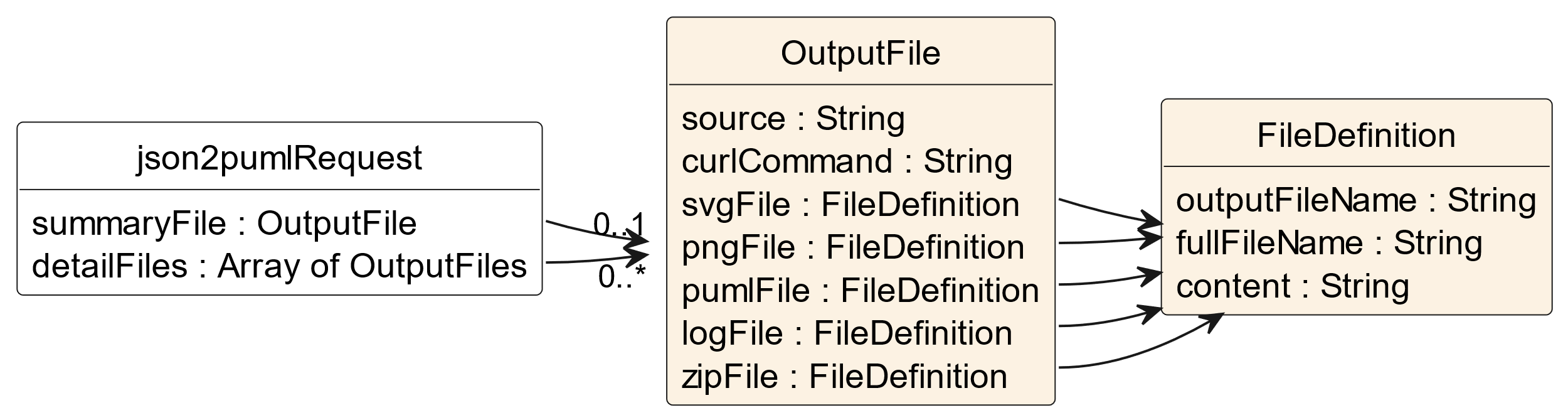






#### 





|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

###### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

###### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

##### 

## 

### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

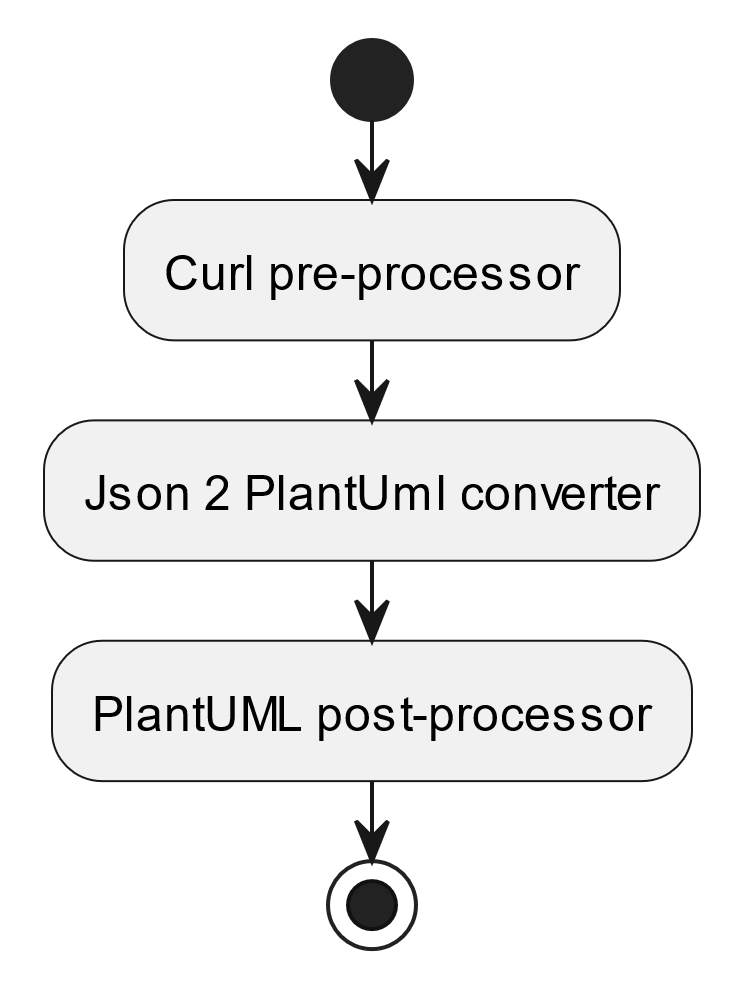
### 



### 

# 

## 



### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

### 

### 

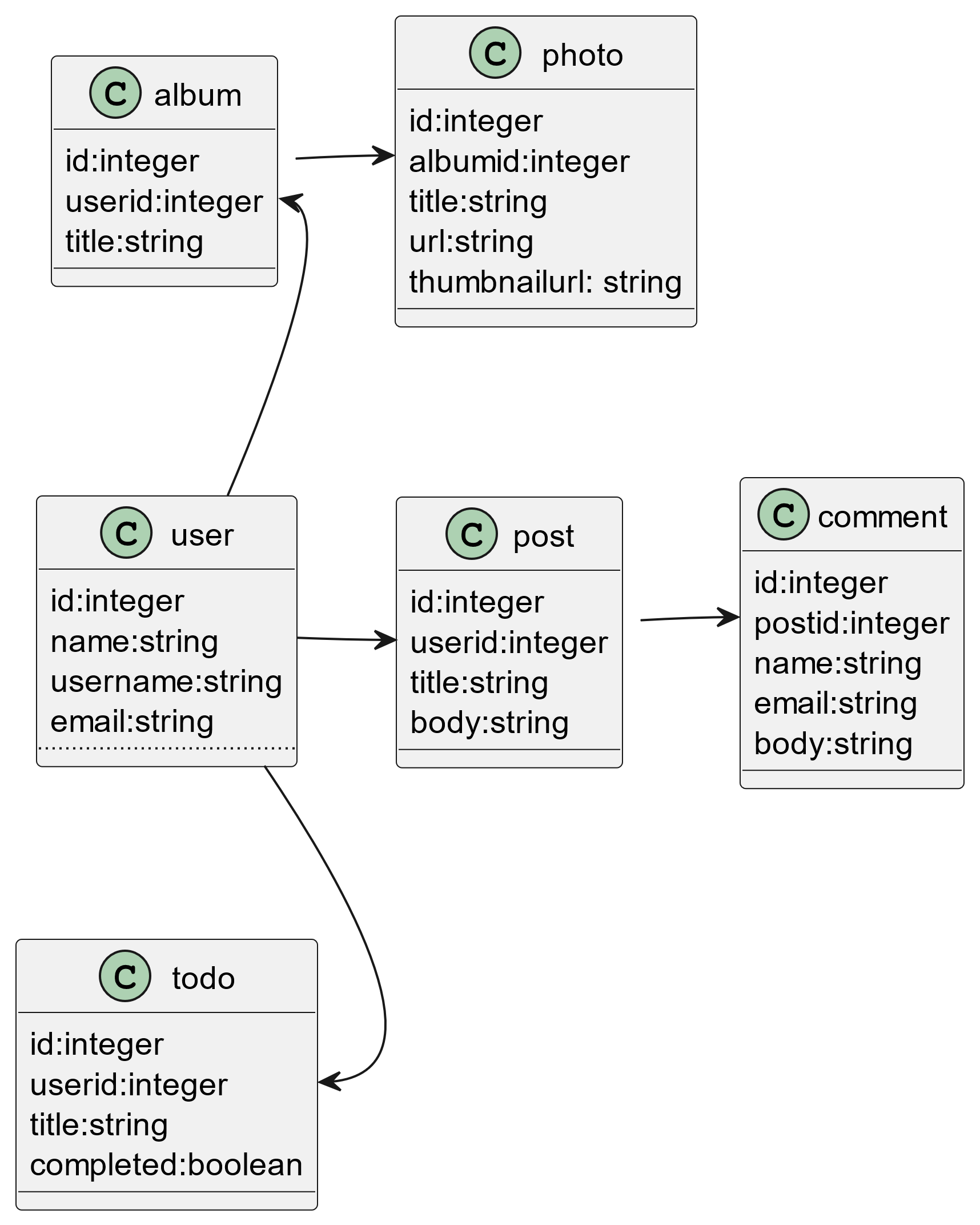
## 

### 

### 



### 





|  |  |
| --- | --- |
|  |  |
|  |  |

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |

### 



### 

### 

#### 

## 

### 



### 



### 



### 



#### 





### 

### 

### 





### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## 

### 

### 

### 

## 

### 



|  |  |
| --- | --- |
|  |  |
|  | |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |
|  | |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |  |  | |
|  |  |

### 

### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

### 

### 

### 

### 

### 

# 

## 

### 

### 

### 

### 

### 

### 

### 

## 

### 

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

### 

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

#### 

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

### 

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

### 

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

### 

#### 

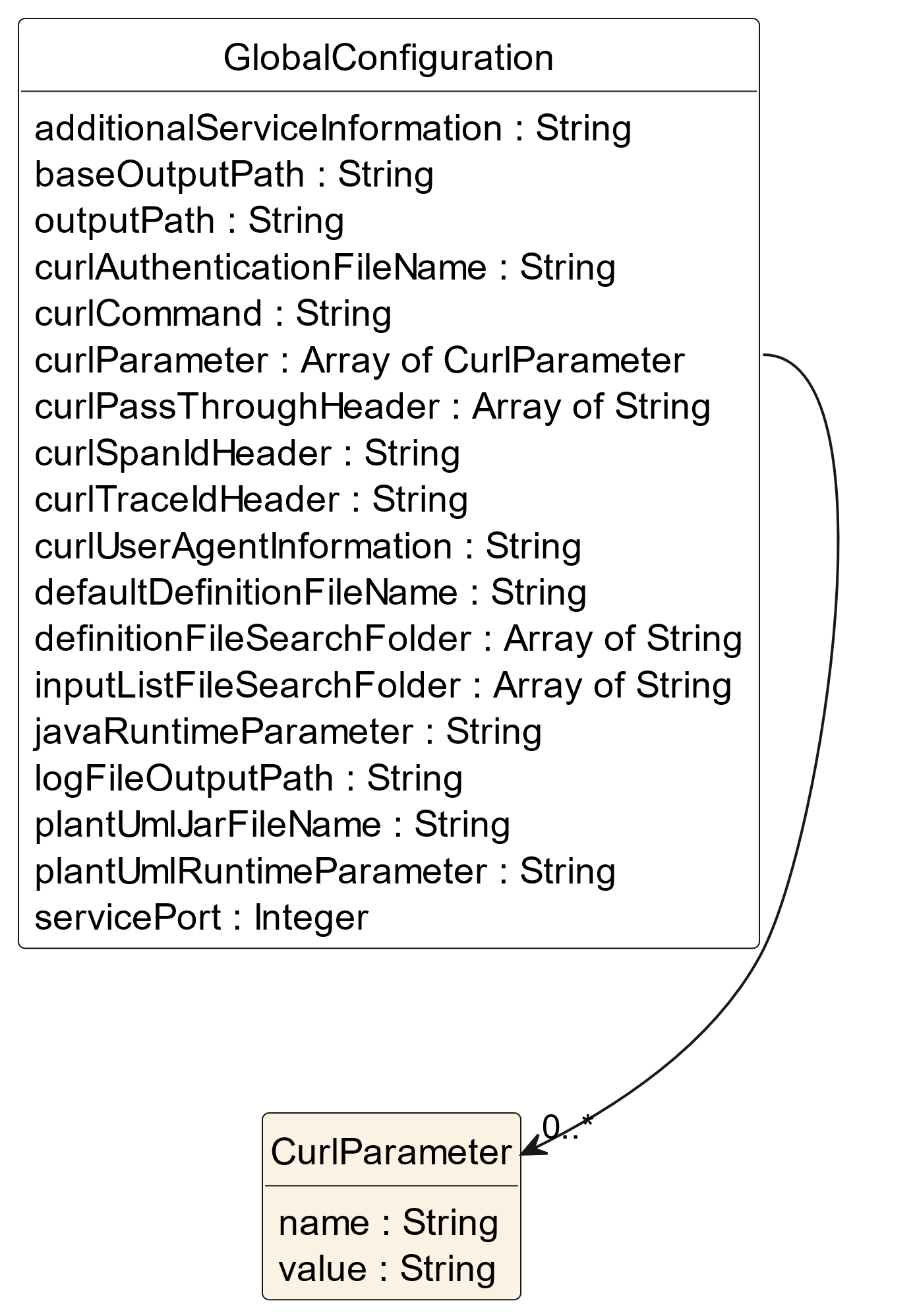
|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

#### 

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |

## 

### 



### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

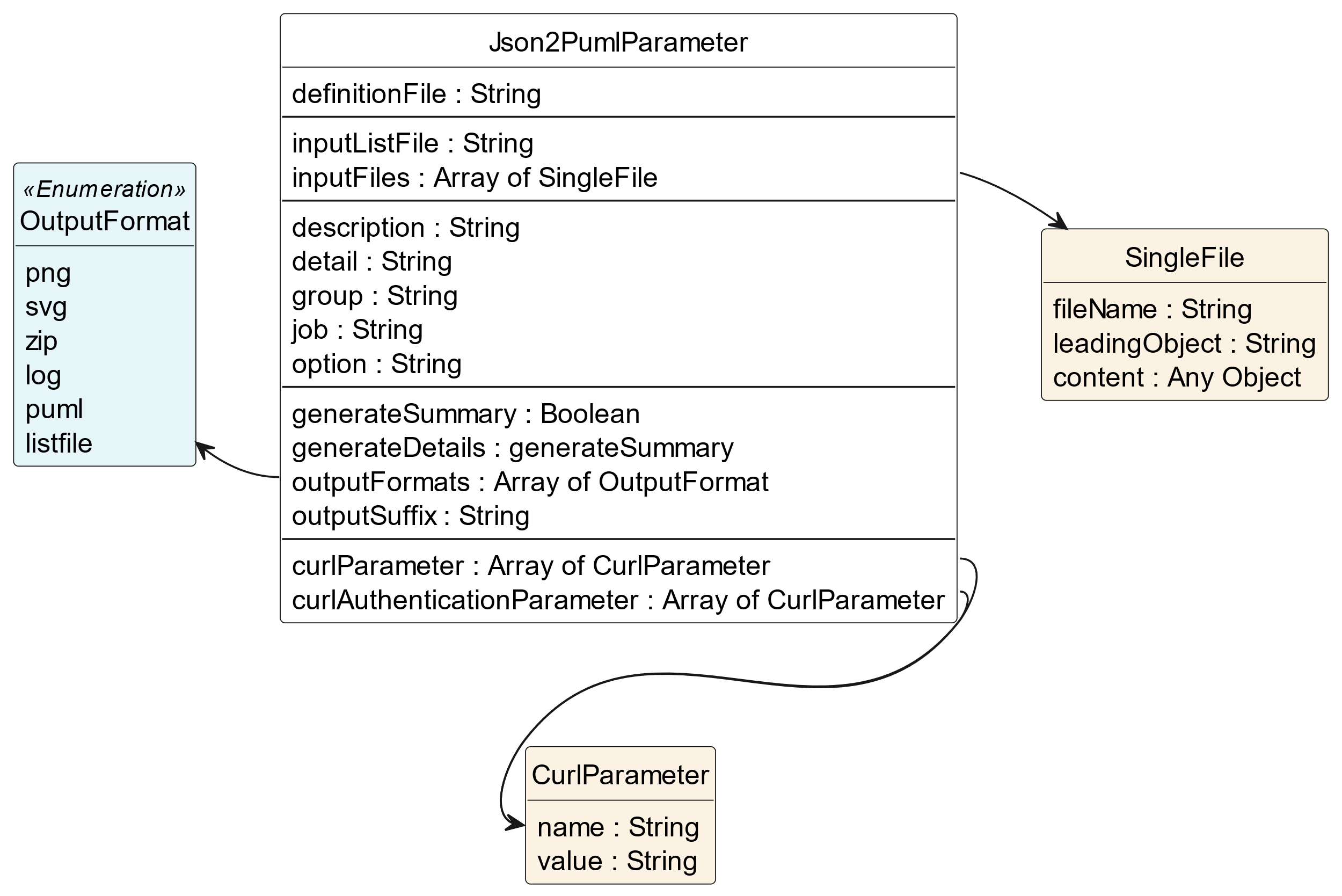
|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

## 

### 



### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 

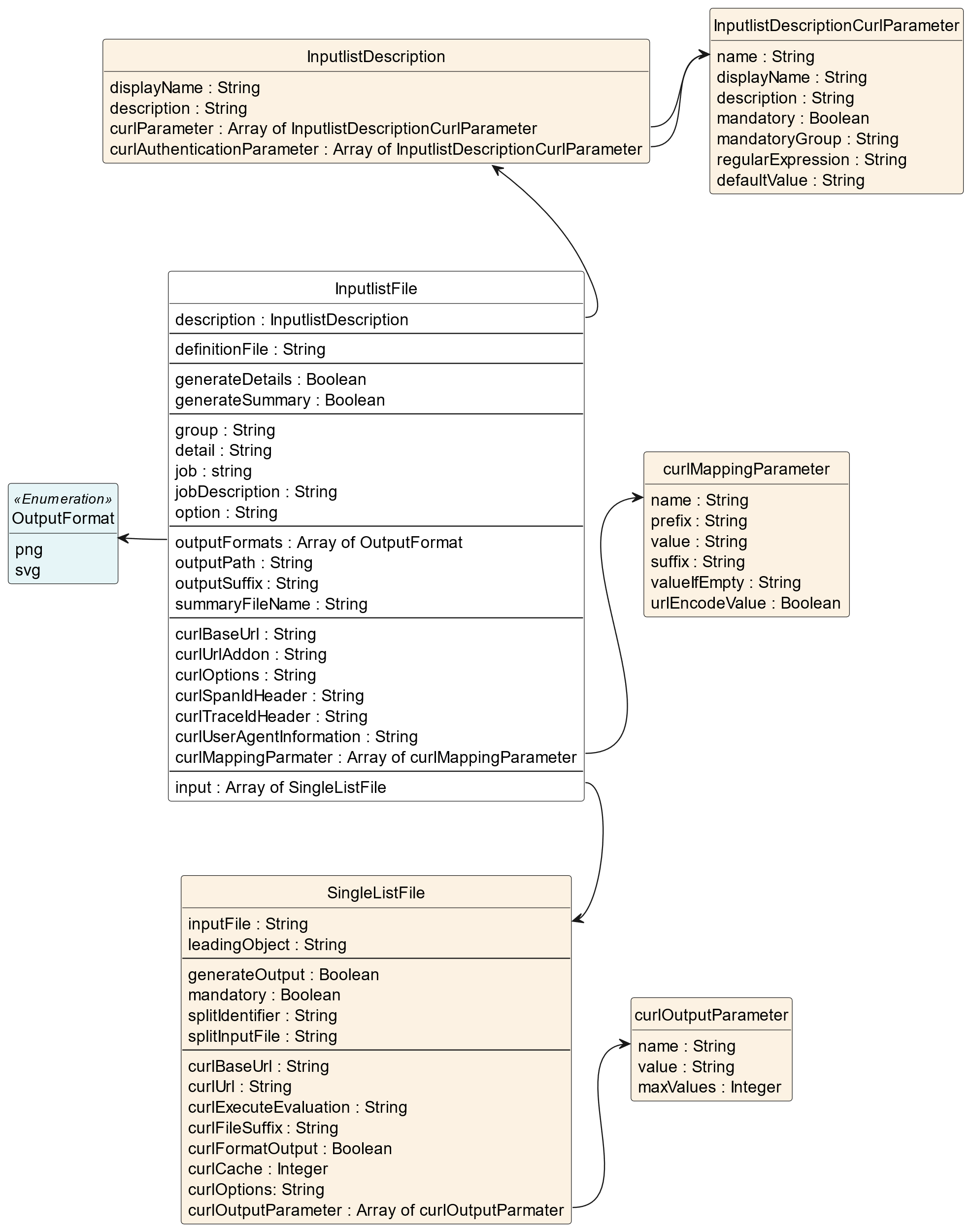


|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

## 

### 



### 

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
| |  |  |  | | --- | --- | --- | |  |  |  | |  |  |  | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
| |  |  |  | | --- | --- | --- | |  |  |  | |  |  |  |  |  |  |  | | --- | --- | --- | |  |  |  | |  |  |  | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
| |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  |  |  |  | | --- | --- | |  |  | |  |  | |  |  | |  |  | |  |  | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 



|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |

### 

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
| |  |  | | --- | --- | |  |  | |  |  | |  |  | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | |  | | | | |  | | | |  |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | |  | | | | |  | | | |  |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | |  | | | | |  | | | |  |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | |  | | | | |  | | | |  |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | |  | | | | |  | | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |
|  | | | |
|  | | | |

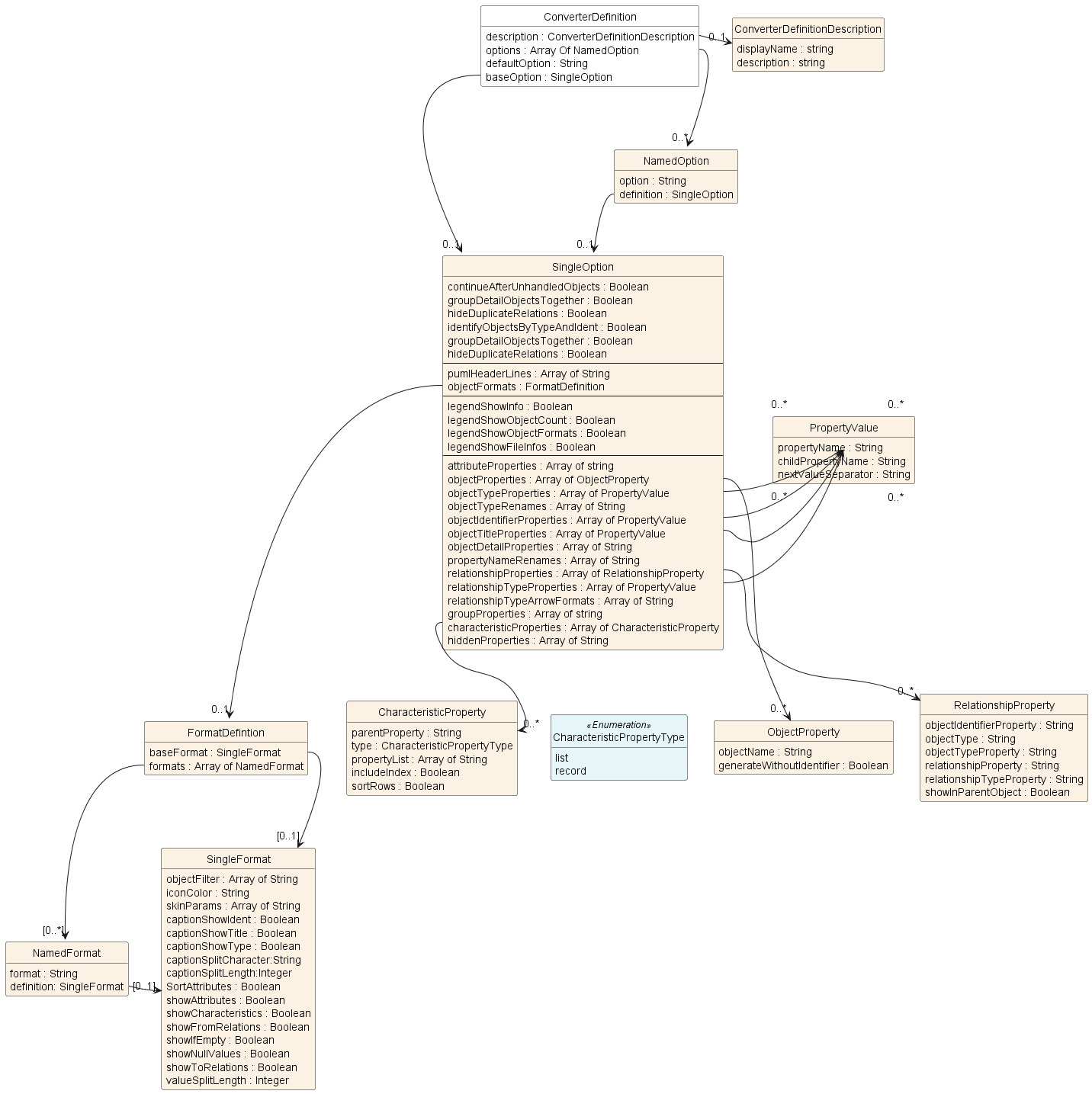
### 

## 

### 

### 

### 



### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 



|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
| |  |  |  | | --- | --- | --- | |  |  |  | |  |  |  | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
| |  | | --- | |  | |  | |  | |  | | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

#### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

## 

### 



### 



|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

## 

### 



### 

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

### 



|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | | | |
|  | | | |

# 

## 