

TypeScript: Implementing interface in the constructor possible?

I have the following interface:

4 **interface** **SMJSPacket** {
 header: {
 tag: string;
 method: string;
 type: string;
 };
 response?: {
 status: string;
 content: string;
 };
 event?: {
 key?: string;
 action?: string;
 };
 request?: {
 run?: string;
 };
}

And then I want to implement it as a class and the properties being set in the constructor:

```
class Request implements SMJSPacket {  
  constructor(data: any, method: string) {  
    this.header = {  
      type: 'request',  
      method: method || 'calld',  
      tag: Request.getTag()  
    }  
    this.request = data;  
  }  
  static getTag(): string {  
    return '_' + goog.now() + '_' + utils.getRandomBetween(1, 1000);  
  }  
}
```

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same thing in Closure tools also works perfectly. The idea is that I want to implement the interface as a class so I can have utility methods in the prototype but still be able to easily convert to JSON string.

Any ideas?

Thanks

typescript

asked Oct 8 '12 at 11:02



Peter StJ

737 3 9 20

1 Answer



7



The language service will statically analyse your declaration of your interface, and because you've expressed that it requires that your header member, that should form part of the class declaration:

```
class Request implements SMJSPacket {
  header: { tag: string; method: string; type: string; };

  constructor(data: any, method: string) {
    this.header = {
      type: "request",
      method: (method || "call"),
      tag: Request.getTag()
    };
  }

  static getTag(): string {
    return "tag stuff";
  }
}
```

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```
    type: "request",
    method: (method || "call"),
    tag: Request.getTag()
  };
}
Request.getTag = function getTag() {
  return "tag stuff";
}
return Request;
})();
```

edited Jul 28 '15 at 8:57

answered Oct 8 '12 at 12:48

[Matthew Abbott](#)

52.5k 9 94 120

so what's the use of implements Interface? – [TSR](#) Mar 12 at 23:25

@TSR: An interface is a contract that the class derived from the interface has to fulfill. The interface says: you class need method X and property Y to implement me, the compiler will fail if it doesn't. e.g.: Interface Vehicle, Classes Car and Bike. Both have at least to implement a method "drive" and a property "tires". Matthew Abbott: Aren't members in typescript the entirety of class components (properties, methods, constructor)? IMO "header property" would be the correct term. Also: One "that" to much, isn't it? Just saw the date of the answer. I'm a gravedigger by heart. – [user3469861](#) Jun 27 at 21:49

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