

# Create strongly typed array of arrays in TypeScript



In a language like C# I can declare a list of lists like:

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```
List<List<int>> list_of_lists;
```



Is there a similar way to declare a strongly typed array of arrays in TypeScript? I tried the following approaches but neither compiles.



1

```
var list_of_lists:int[][];  
var list_of_lists:Array<int[]>;
```

[typescript](#)[edited Apr 20 '14 at 2:16](#)[asked Apr 18 '14 at 20:07](#)[silentorb](#)

947 1 10 19

1 Please don't use the term [typed arrays](#) for this... – [Bergi](#) Apr 18 '14 at 20:32

In TypeScript "typed array" means what it means in most every other programming language except JavaScript, but since they are closely tied together I'll clarify it with "strongly". – [silentorb](#) Apr 20 '14 at 2:25

Thanks, I appreciate the term "strongly typed" :-)) – [Bergi](#) Apr 20 '14 at 14:31

## 2 Answers



`int` is not a type in TypeScript. You probably want to use `number` :

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My code actually doesn't use arrays of numbers, I'd just inserted int as an example. I just realized after posting this question that the vague compiler errors were actually complaining about some other aspect of my declaration and my array of array declarations were working, and was about to delete this post but you already commented so I'll mark it as answered. – [silentorb](#) Apr 18 '14 at 20:16

3 @silentorb No worries; your question might help people in the future who are looking for how to declare arrays of arrays in TypeScript. – [Peter Olson](#) Apr 18 '14 at 20:18 ✎

@PeterOlson it did help me – [Ian J Miller](#) Feb 23 '17 at 16:29

it's not strongly typed though – [zhekaus](#) Nov 8 '17 at 15:20

You do it exactly like in Java/C#, e.g. (in a class):

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```
class SomeClass {  
    public someVariable: Array<Array<AnyTypeYouWant>>;  
}
```

Or as a standalone variable:

```
var someOtherVariable: Array<Array<AnyTypeYouWant>>;
```

answered Mar 21 '16 at 8:30



[Damian Wojakowski](#)  
431 5 3

I actually used the any type in Angular, Array<Array<any>> – [Stephen Himes](#) May 31 '18 at 11:55 ✎

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