



ESRI DEVELOPER SUMMIT 2023

TypeScript



TypeScript

TypeScript with Experience Builder

- Built-in
- Open the “client/” folder!

Types by Inference

```
let helloWorld = "Hello World";  
// ^ = let helloWorld: string
```

Defining Types

```
const user = {  
  name: "Hayes",  
  id: 0,  
};
```

```
interface User {  
  name: string;  
  id: number;  
}
```

```
const user: User = {  
  name: "Hayes",  
  id: 0,  
};
```

Demo

TypeScript in VS Code

```
const layer = new MapLayer({
  view: new MapView({
    // ...
  })
});
```

```
const view = new
MapView({
  map: new
  Map({
    // ...
  })
});
```



```
let view = new ScrollView({
  content: "view",
  width: 100,
  height: 100,
  style: {
    backgroundColor: "red"
  }
});
```

[@ {

</STYLE>

Combining Types

Unions and Generics

```
const layerView = new LayerView({
  content: "layerView",
  width: 100,
  height: 100,
  style: {
    backgroundColor: "red"
  }
});
```

Unions

```
type MyBool = true | false;
```

```
type WindowStates = "open" | "closed" | "minimized";
```

```
type LockStates = "locked" | "unlocked";
```

```
type OddNumbersUnderTen = 1 | 3 | 5 | 7 | 9;
```

```
function getLength(obj: string | string[]) {  
    return obj.length;  
}
```


Generics

```
type StringArray = Array<string>;  
type NumberArray = Array<number>;  
type ObjectWithNameArray = Array<{ name: string }>;
```

Activity

10 Minutes

- Work with types in your development environment.
- Work with types in <https://www.typescriptlang.org/play>



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