

Notes - 12/5

Wednesday, December 5, 2012 12:49 PM

[In 41/1753 at 1:00 today.]

Agenda:

- Generics update
 - Maybe nothing new for today?
- Compile-on-save and compilation configuration
 - Notes here: [Compile-on-save and compiler settings configuration](#) ([Web view](#))
- Enums
 - Previous viewpoint:
 - Enums should become a compile-time only thing
 - Philosophy on our compilation pipeline
 - Our compiler really does .ts -> .js
 - Then other steps (separate tools) do:
 - Concatenation
 - Minification
 - ▣ • Optimization (inlining, and dead code elimination)
 - Dependency analysis
 - R.js
 - Etc.
 - There are some other pre-process pieces
 - Current thinking:
 - Enums are manifest
 - We want reverse mapping
 - Some issues with numbers, but okay to be somewhat unpredictable here

Classes:

Foo: number = 3; (this is good)

Interfaces:

Foo: string;

Enums

Foo = 3,

Object

Foo: 3,

```
enum Color { "red", "blue" }
enum Day { Monday: 0, Tuesday: 1, "Wed nes day": 3}
```

```
enum Day { Monday: 0, Tuesday: 1, "Wed nes day": 3}
```

```
var Day = {
  "Monday": 0, 0: "Monday",
  "Tuesday": 1, 1: "Tuesday"
}
```

```
var Day = {
  Monday: 0,
  Tuesday: 1
  0: "Monday",
  1: "Tuesday"
}
```

```
/* WE DO THIS */
```

```
enum Day { Monday: 0, Tuesday: 1, "Wed nes day": Day.Monday | Day.Tuesday,
}
// LHSes can be anything that is a valid Object Literal LHS *except* a number
```

```
-->
```

```
var Day;
(function(Day) {
  Day[Day.Monday = 0] = "Monday";
  Day[Day.Tuesday = 1] = "Tuesday";
  Day[Day["Wed nes day"] = Day.Monday | Day.Tuesday] = "Wed nes day";
})(Day = {});
```

```
// No string enums
// Workitem: design overloading on constants
```

Typing:

- Enums are branded subtypes of number

```
/* END WE DO THIS */
```

```

var Day = (function() {
  var Day = {};
  Day[Day.Monday = 0] = "Monday";
  Day[Day.Tuesday = 1] = "Tuesday";
  Day[Day["Wed nes day"] = Day.Monday | Day.Tuesday] = "Wed nes day";
  return Day;
})();

/* WE DO THIS */

enum Day { Monday: 0, Tuesday: 1, "Wed nes day": Day.Monday | Day.Tuesday, }
// LHSes can be anything that is a valid Object Literal LHS *except* a number

-->

```

```

var Day;
(function(Day) {
  Day[Day.Monday = 0] = "Monday";
  Day[Day.Tuesday = 1] = "Tuesday";
  Day[Day["Wed nes day"] = Day.Monday | Day.Tuesday] = "Wed nes day";
})(Day = {});

// No string enums
// Workitem: design overloading on constants

Typing:
  ◦ Enums are branded subtypes of number

/* END WE DO THIS */

```

```

var Day;
(function(_) {
  _[_.Monday = 0] = "Monday";
  _[_.Tuesday = 1] = "Tuesday";
  _[_.["Wed nes day"] = Day.Monday | Day.Tuesday] = "Wed nes day";
})(Day = {});

```

```

var Day = (function() {
  var Day = {}
  Day[Day["Monday"] = 0] = "Monday";
  Day[Day["Tuesday"] = 1] = "Tuesday";
})();

```

```

enum Day { Monday = 0, Tuesday = 1}

```

```

var c: Color = "red"
var d: Day = Day.Monday;

```

```

document.createElement("div")

```

```

interface GetOptions {
  method: "GET",
  //...
}
interface PutOptions {
  method: "PUT",

```

```
//...  
}  
$.ajax(options: GetOptions)  
$.ajax(options: PutOptions)  
$.ajax({method: "GET", ...})  
  
addEventListener('click', function(mev) {  
})  
// routing - /foo/:user
```

- Update on Fundules, clodules
- Design backlog
 - “self type” in classes (see [forum thread](#) @_Oct 8 at 3:22 PM)
 - Bringing back explicit “this” parameter type
 - ... for arguments
 - String interpolation
 - Overloading on constants
 - Rubber stamp enum update
 - Type-only mixins
 - Decorations
 - Static initialization (#74)
 - Thinking on how to approach async via generators (#38)
 - SkyDrive feedback – implications for future thinking?
- Others?
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