

## Notes - 5/2: SENT

Monday, May 16, 2011 3:03 PM

### Type Inference

#### Statics

- Module with same name

#### Construction sequence:

- Establish fields
- Base call
- construction

#### Anders' issues:

- Class/method
- Dotting into typed (dynamicall)
- This.x and lifting

```
class Foo(x,y) {
  function F() {
    this.x
    this.y
  }
}
```

#### Single underscore.

- Is and as, possible T(x)
- Top level scope?
- Uninitialized variables/inference/defaults

Proposal: Could it be inferred from all assignments?

#### Should

- O[x] with typed objects
- Operator to conv to any
- Number vs. int
  - Int is gone
- What is the type of null?
- 
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#### Anders' thoughts:

- Qualitatively, what are we going to provide by having types?
  - Documentation
  - Intellisense
  - Static verification? (much less)
- Example:
  - Var a : Point[] = ...;
  - Var l : any = a;
  - Var c : Customer[] = (Customer[]) o;
- Looks like JavaScript:
  - Vars and functions going down the page
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#### Runtime report:

- No global invariant anymore
- Static layout is done

- Look at the constructor pattern
- Run the constructor – look at member list at end of constructor
  - If it's stable enough, we'll put the members at the beginning of the header
  - And insert hoisted
- Type profile, re-jit
- switches

Path to CTP:

- MIX 2012
  - CTP
    - 1. Compiler written in Strada
    - 2. Browser hosted mini IDE
    - 3. Visual Studio experience (debugging, intellisense)
      - Templates
      - Win8
  - Documentation
    - 101 Strada examples
  - Marketing
- End of August 2011
  - Internal drop
  - Finished design
- Dedesd
  -

**From:** Luke Hoban

**Sent:** Monday, May 02, 2011 9:54 AM

**To:** Strada Design Team

**Subject:** Strada Design Meeting Agenda - 5/2

Welcome back after two weeks off from Strada design meetings!

During those two weeks, Steve has made some great progress on the implementation of the new Strada design. Here's some agenda items:

- Demo of Steve's Strada implementation
- Collect any implementation-blocking design questions
- Path to CTP (discuss what goalposts we want to structure our design meetings around)
- Re-collect technical design issue backlog after updated design (old list below is likely out of date):
  - Array types
  - Function types
  - Optional parameters
  - Varargs
  - Typeswitch
  - Typing of ES5 builtins (Strada core library)

Luke