

Notes - 2/25

Saturday, March 12, 2011 5:43 PM

IMPORTANT

Internal vs. public:

- Most methods only callable from strongly typed code
- Performance concern about checks at boundaries
 - We'd like to do these checks
 - Reduce chance of having to back off
 - But, perf issue is that we disadvantage chrome if all public methods act this way
 - Want to encourage folks to create as big a typed world as possible
 - Perhaps generate both
 - From JavaScript, is it okay to pass:
 - '3' for a string parameter
 - ** If you declare something as int, anyone would be surprised to have "Anders" be legal.
 - Okay if passing a string is slow but passing an int is fast
 - Agreeing that there should be internal/public distinction
 - Publicly visible (mangled) but with no guards
 - When you declare something as "int"
 - Consistent behavior, even in error cases
 - Not sure that adding a whole new dimension in the source language is required to
 - "private" may be too strong, perhaps the one non-public option.
 - Private would go before internal in C#
 - Default is module-internal
 - Three is bad
- Non-primitives
- Why classes?
 - We really do think classes are valuable
 - Scenario: Mixins
 - Class:
 - Mixins: m1,m2,m3
 - Foo f =
 - Might be good to have a
 - No virtual/override
- Overloads
 - Can declare multiple, but only implement one
 - Interfaces can contain overloads
 - Scenarios we have to support are interop ones
 - People play lots of tricks that are hard to codify in the type system
- Separate compilation
 - This is a goal – need to make sure PBCtor supports it
 - Re-generate canonical Strada from metadata
 - Locals are also strongly typed (PBCast?)
 - Import as Strada
- Modules
 - Wouldn't mind if Strada needed a module boundary
- Typed object literals
 - Are public fields in the property bag? Trust but verified?
 - IPoint { int x: 10, int y : 10 }
 - Classes get created through constructors
 - Interfaces can be created by typed object literals
- Generics:
 - It is clear that the pain is not worth it

```
Class Point(int x, int y)
{
    public int getX() = x;
    public int getY() = y;
}
```

From: Luke Hoban

Sent: Friday, February 25, 2011 9:49 AM

To: Strada Design Team

Subject: Strada Design Meeting Agenda - 2/25

We've gone through the pressing issues needed to prep for the (now-postponed) TCN talk. We can open up to new topics that folks would like to discuss next. I have a few candidates:

- Feedback from ChrisAn on:
 - Choice of embracing classes instead of just something more akin to typed object literals
 - Desire to be able to compile using Strada using a library that is the generated output of Strada
- Design issues:
 - Typed Object literals
 - Typing of the JS libraries
 - Function types
 - Varargs
 - The global scope
- Other topics?

Luke