

DSL

Domain Specific Language







```
<person>  
  <name>Peylow</name>  
  <age>35</age>  
</person>
```

NSXMLParser

```
@interface PEWPerson  
@property(copy) NSString *name;  
@property(assign) NSInteger age;  
@end
```




```
<person>  
  <name>Peylow</name>  
  <age>35</age>  
</person>
```

if **person** then return a **PEWPerson** instance

```
person >> @root : PEWPerson
```

```
@interface PEWPerson  
@property(copy) NSString *name;  
@property(assign) NSInteger age;  
@end
```



```
<person>  
  <name>Peylow</name>  
  <age>35</age>  
</person>
```

if **name** then assign to **name** property

```
name >> name
```

```
@interface PEWPerson  
@property(copy) NSString *name;  
@property(assign) NSInteger age;  
@end
```




```
<person>  
  <name>Peylow</name>  
  <age>35</age>  
</person>
```

if **age** then type cast and assign to **age** property

```
age >> age : NSNumber
```

```
@interface PEWPerson  
@property(copy) NSString *name;  
@property(assign) NSInteger age;  
@end
```

```
<person>
  <name>Peylow</name>
  <age>35</age>
</person>
```

```
people = [CWXMLTranslator translateContentsOfURL:url
                        withTranslationNamed:@"PEWPerson"
                        delegate:nil
                        error:NULL];
```

```
@interface PEWPerson
@property(copy) NSString *name;
@property(assign) NSInteger age;
@end
```



```
<person>
  <name>Peylow</name>
  <age>35</age>
</person>
```

```
person >> @root : PEWPerson {
  name >> name;
  age >> age : NSNumber;
}
```

```
@interface PEWPerson
@property(copy) NSString *name;
@property(assign) NSInteger age;
@end
```

BNF

Backus-Naur Form

translation ::= source ">>" target { ":" transform }

source ::= XML-SYMBOL

target ::= "@root" | keypath

keypath ::= OBJC-SYMBOL

transform ::= class { "{" translation* "}" }

class ::= OBJC-SYMBOL

Backus-Naur Form



Recursive Descent Parser

translation ::= source ">>" target { ":" transform }

source ::= XML-SYMBOL

target ::= "@root" | keypath

keypath ::= OBJC-SYMBOL

transform ::= class { "{" translation* "}" }

class ::= OBJC-SYMBOL

```
translation ::= source ">>" target { ":" transform }  
source      ::= XML-SYMBOL
```

```
- (id)parseTranslation {  
    [self takeXMLSymbol];  
    [self takeString:@">>"];  
    [self parseTarget];  
    if ([self tryString:@":"]) {  
        [self parseTransform];  
    }  
}
```



```
target      ::= "@root" | keypath
keypath     ::= OBJC-SYMBOL
```

```
- (void)parseTarget {
    if ([self tryString:@"@root"]) {
        [self addRootMarker];
    } else {
        [self takeKeyPathSymbol];
    }
}
```

```
transform ::= class { "{" translation* "}" }  
class      ::= OBJC-SYMBOL
```

```
- (void)parseTransform {  
    [self takeClassSymbol];  
    if ([self tryString:@"{"]) {  
        while (![self tryString:@"}"]) {  
            [self parseTranslation];  
        }  
    }  
}
```


NSScanner

An unsung hero of Foundation

- + [NSScanner scannerWithString:]
- [NSScanner scanString:intoString:]
- [NSScanner scanCharactersFromSet:intoString:]
- [NSScanner scanInteger:]
- [NSScanner scanDouble:]
- ...

Denna

<https://github.com/PeyloW/CWFoundation>

```
[main]  
debug = 0N
```

```
[menu]  
color = green  
show-help = NO
```



```
ini-file    ::= groups*  
group       ::= groupname setting*  
groupname   ::= "[" SYMBOL "]" "\n"  
setting     ::= SYMBOL "=" TEXT  "\n"
```