



Problems
- Rerouting
- No clear path
- No clear direction

Solution
- Use Dec Language



Type-Safe
Web **with** 

Andrey Breslav

from
JetBRAINS



Type-Safe
Web with 

Andrew Breslav
for
BRAINS

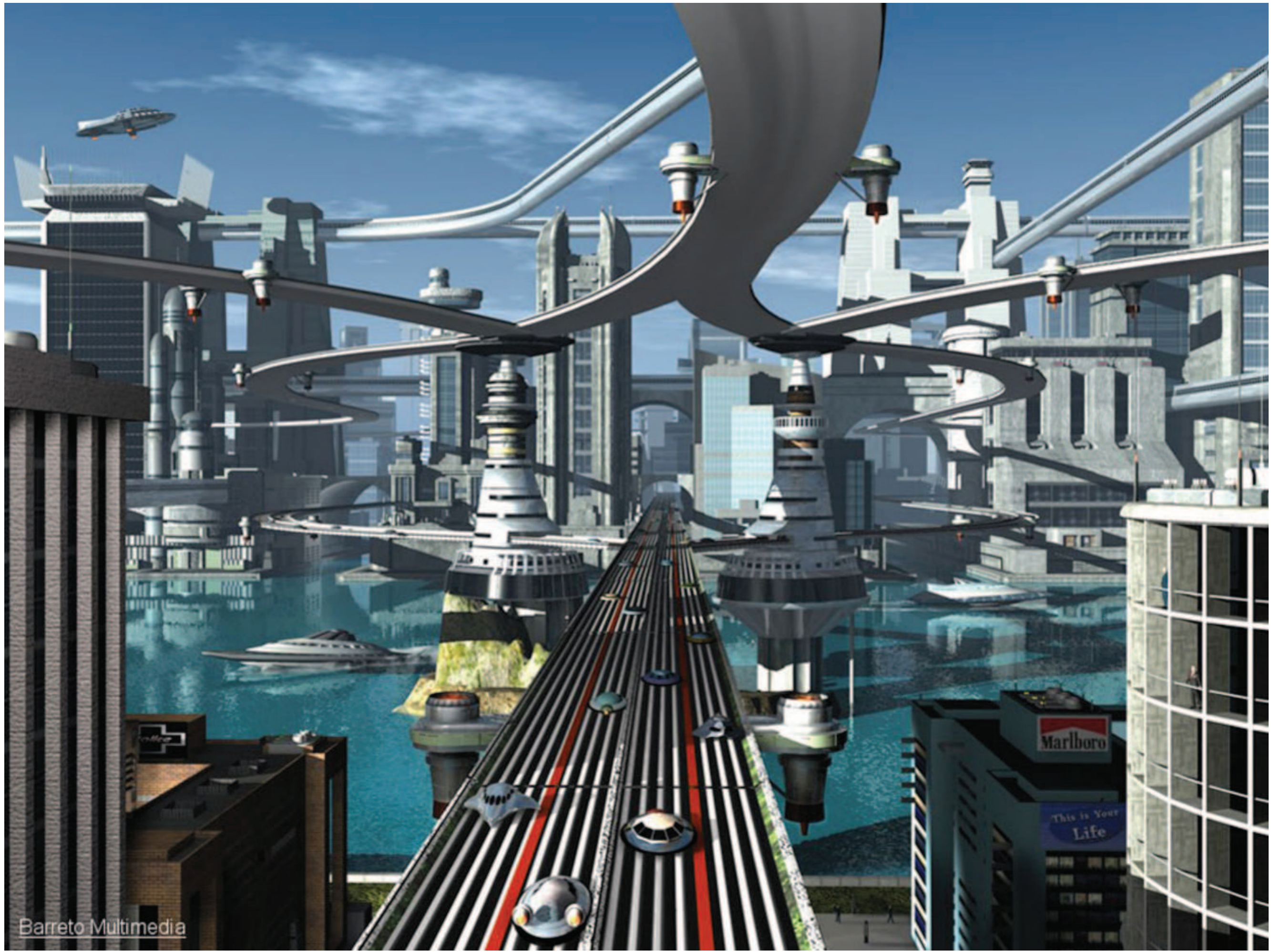




22 07 2012











PROBLEMS

JSP? >

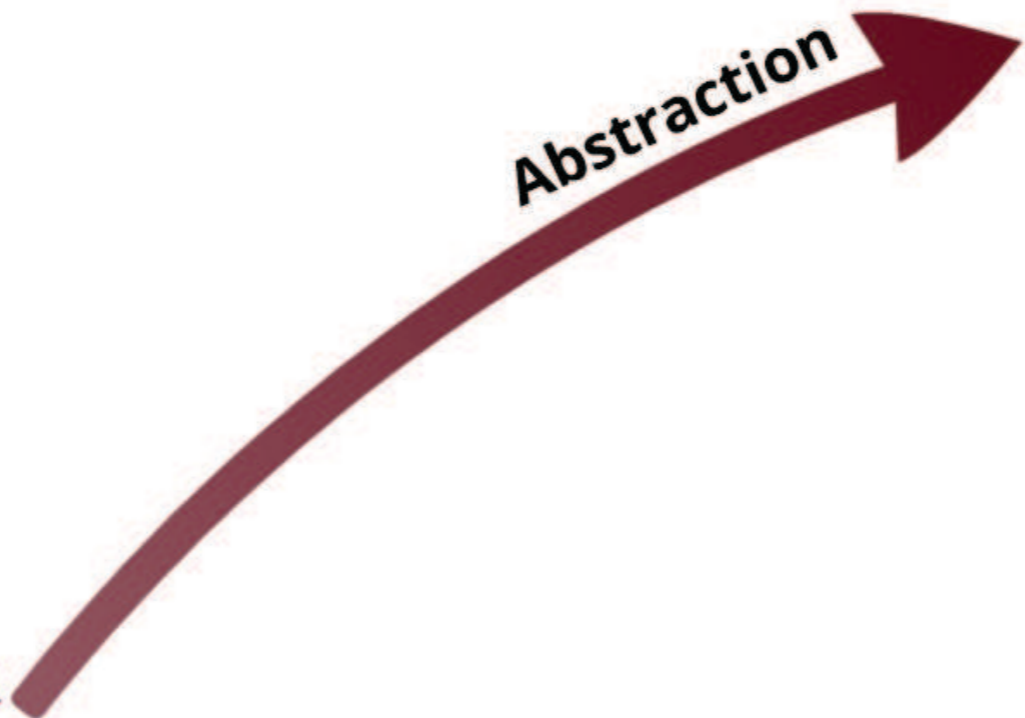




HTML/CSS

Copy & Paste

CTRL+V



Abstraction



Abstract & Reuse

Programming Language

Copy

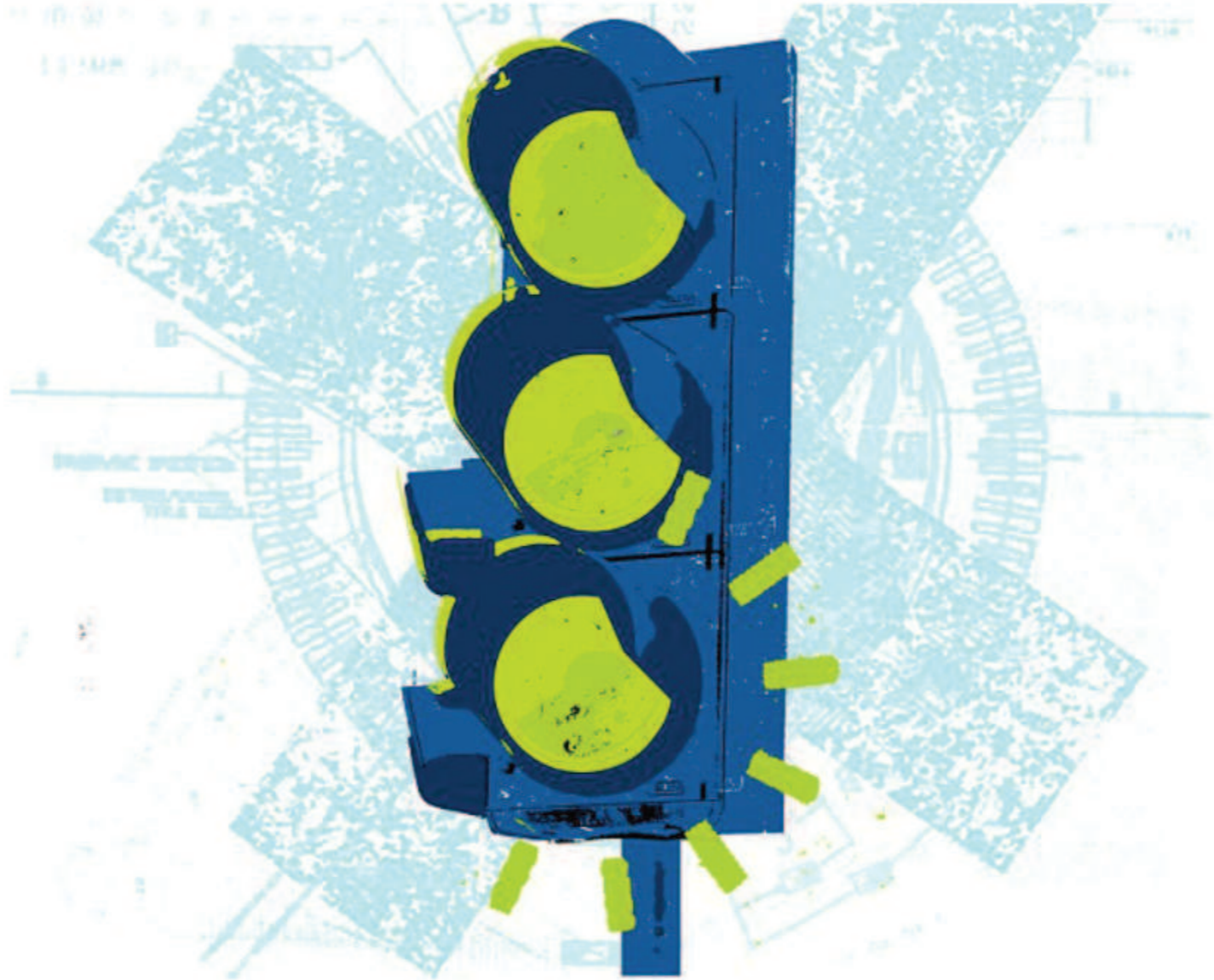
&

Paste

PROBBLLEM 2



I DON'T ALWAYS CHECK MY CODE



BUT WHEN I DO, I DO IT MANUALLY



ПРОБЛЕМЫ

Problems

- **5 languages**
- **No abstraction/reuse**
- **No static checks**

Solution

Use One Language



**ROAD
WORK
AHEAD**

```
<table>
  <tr>
    <td>Link</td>
  </tr>
  <tr>
    <td>
      <a href="list?dir=foo">...</a>
    </td>
  </tr>
</table>
```

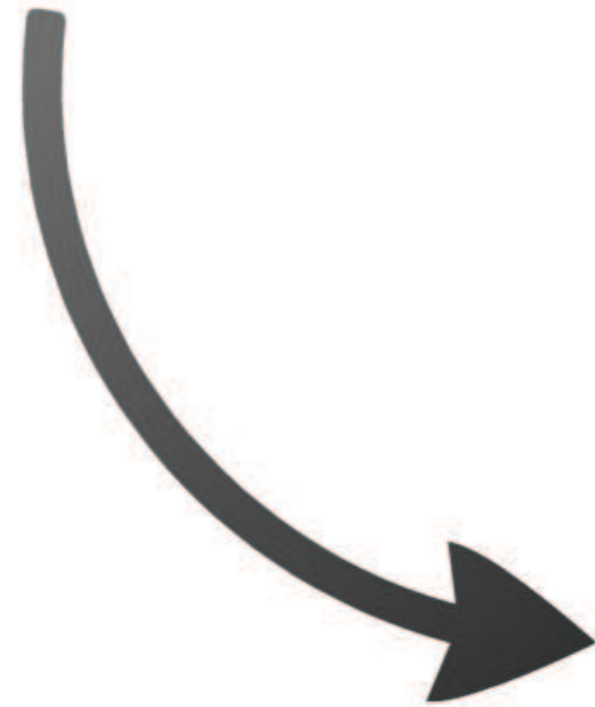
CSS in Kotlin



```
table {
  tr {
    td { +"Link" }
  }
  tr {
    td {
      a(href = Home.FileList("foo")) { ... }
    }
  }
}
```


CSS in Kotlin

```
td.permitted {  
    width: 25px;  
    textAlign: center;  
}
```



```
td(permited) {  
    width = 25.px  
    textAlign = center  
}
```

Files (a Kara Application) x

localhost:3000/list?dir=/Developer&showHidden=true

Files (a Kara Appplication)

Directory /Developer

Name	Size
..	<parent>
Applications	r w x
Documentation	r w x
Examples	r w x
Extras	r w x
Headers	r w x
Library	r w x
Makefiles	r w x
Platforms	r w x
SDKs	r w x
Tools	r w x
usr	r w x
.DS_Store	r w x
About Xcode.pdf	r w x

http://.../list?dir=myDir





FileList("myDir")

...

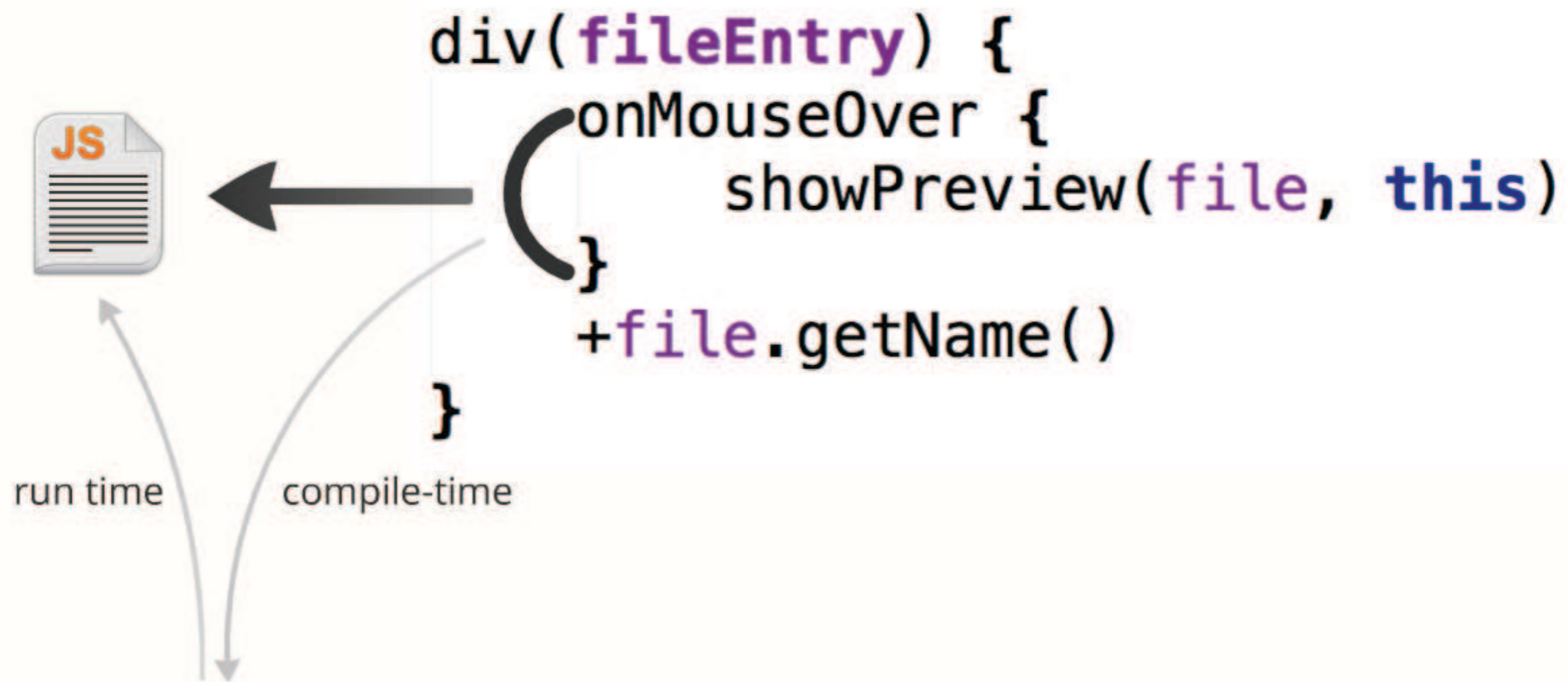
a(href = FileList("myDir/child"))

Demo!

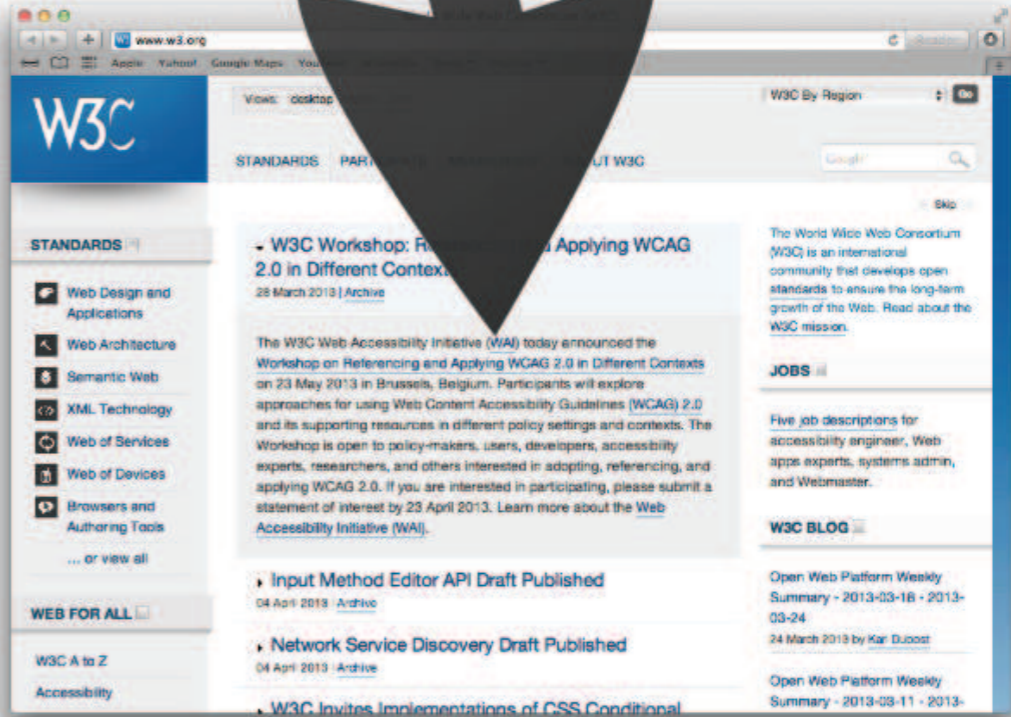


A green rectangular sign with rounded corners and a white border of reflective dots. The word "Dreams" is written in a large, white, sans-serif font across the center. The sign is supported by two wooden posts. The background is a bright blue sky with scattered white clouds.

Dreams



```
FUNCTION_LITERAL_EXPRESSION  
FUNCTION_LITERAL  
BLOCK  
CALL_EXPRESSION  
REFERENCE_EXPRESSION  
  PsiElement(IDENTIFIER)('showPreview')  
VALUE_ARGUMENT_LIST  
VALUE_ARGUMENT  
  REFERENCE_EXPRESSION  
    PsiElement(IDENTIFIER)('file')  
VALUE_ARGUMENT  
  THIS_EXPRESSION  
  REFERENCE_EXPRESSION  
    PsiElement(this)('this')
```





<?JSP?>

Type-Safe
Web **with** 



kotlin.jetbrains.org

karaframework.com

andrey.breslav@BRAINS.com