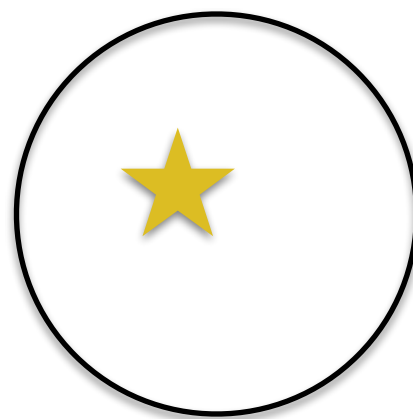


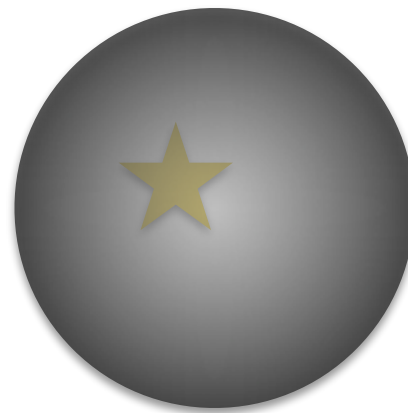


Current Mission:
to **remove code**
duplication.

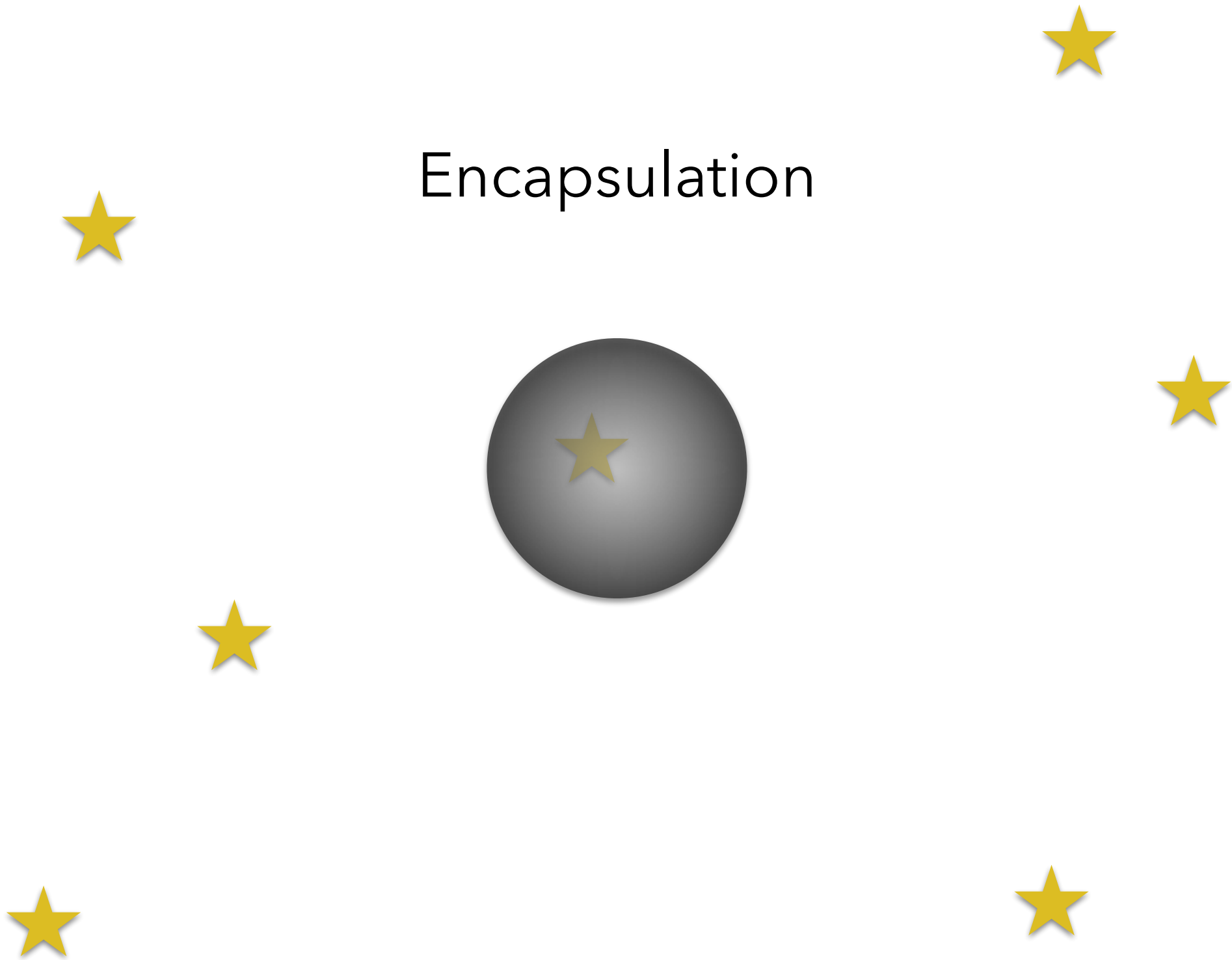
The Background:
timing sections of code.



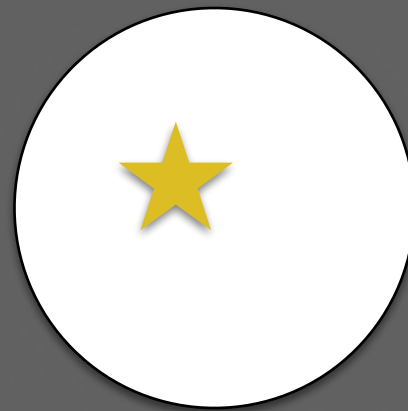
Encapsulation



Encapsulation



Isolation

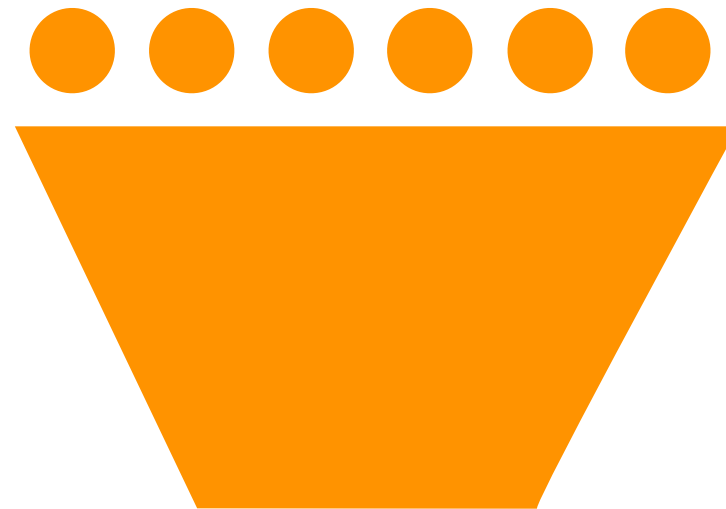


✓ Specific Types

✓ Data In, Data Out

✓ Tested

filter



transform



filter

transform



“little trees of broccoli”





✓ Java 8

✓ Java 6



Next Mission:
separation of concerns.

Java 8

Java 6



Next Mission:
separation of concerns.

External Iteration

Internal Iteration

FluentIterable

filter

transform

Joiner

Internal Iteration

FluentIterable

filter

transform

Joiner

Stream

filter

map

reduce



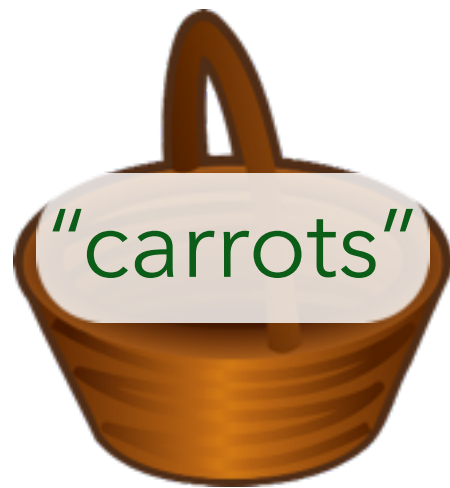
"carrots"

"bananas"

"pumpkins"

"broccoli"

"meat"



"bananas"

"pumpkins"

"broccoli"

"meat"

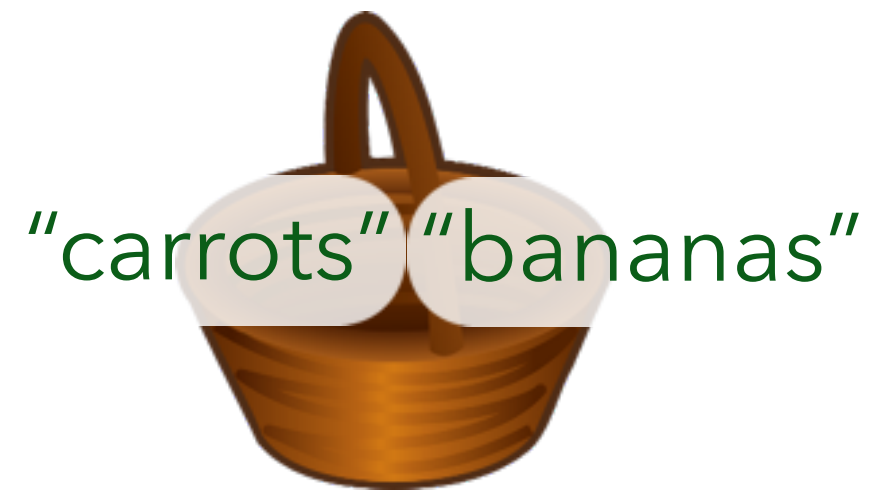


"bananas"

"pumpkins"

"broccoli"

"meat"



"pumpkins"

"broccoli"

"meat"



"pumpkins"

"broccoli"

"meat"



"pumpkins"

"broccoli"

"meat"

"carrots & bananas" "pumpkins"



"broccoli"

"meat"

"carrots & bananas & pumpkins"



"broccoli"

"meat"

"carrots & bananas & pumpkins"



"broccoli"

"meat"

"carrots & bananas & pumpkins" "broccoli"



"meat"

"carrots & bananas & pumpkins & broccoli"



"meat"

"carrots & bananas & pumpkins & broccoli" "meat"



"carrots & bananas & pumpkins & broccoli" "meat"



"carrots & bananas & pumpkins & broccoli & meat"



"carrots & bananas & pumpkins & broccoli & meat"





```
static String summarize(List<String> descriptions) {  
    StringBuffer output = new StringBuffer();  
    boolean isFirst = true;  
    for (String d: descriptions) {  
        if (!d.isEmpty()) {  
            if (!isFirst) {  
                output.append(" & ");  
            }  
            String lastWord = lastWord(d);  
            output.append(lastWord);  
            isFirst = false;  
        }  
    }  
  
    return output.toString();  
}
```

```
static String lastWord(String s) {  
    return s.trim().split(" ")[s.trim().split(" ").length - 1];  
}
```






Declarative style for the win!

```
ty();  
  
String summarize(final St  
s.asList(descriptions).strea  
    .filter(NON_EMPTY)  
    .map(lastWord)  
    .reduce(joinOn(" & "))  
    .orElse("");  
  
tion<String, Strin  
ys.asList(ph
```