

Enumerated Types

- Enumerated types (enums) in Java are way more versatile than enums in C
- Enums are a special type of class
 - You can declare fields and methods
 - In their most basic form they are very simple
 - Simple enum:

```
1 public enum FoodGroup {  
2     CANDY, CANDYCANES, CANDYCORNS, SYRUP;  
3 }
```

Using Enums

NO!

```
1      public class PoisonDetector {
2          private final FoodGroup edible;
3
4      @
5      private PoisonDetector (Food food)
6      {
7          if (food.isSweet()) {
8              if (food.isPeppermint() && food.isStripecy()) {
9                  edible = FoodGroup.CANDYCANES;
10             } else if (food.isLiquid()) {
11                 edible = FoodGroup.SYRUP;
12             } else if (food.looksLikeCorn()) {
13                 edible = FoodGroup.CANDYCORNS;
14             } else {
15                 edible = FoodGroup.CANDY;
16             }
17         } else {
18             edible = NULL;
19         }
20     }
21
22     public FoodGroup canIEatIt() { return edible; }
```

Easy Fix

```
1 public enum FoodGroup {  
2     CANDY, CANDYCANES, CANDYCORN, SYRUP, DONOTEAT;  
3 }
```

Add a default/
error value to
the enum

```
1 public class PoisonDetector {  
2     private final FoodGroup edible;  
3  
4     @private PoisonDetector (Food food)  
5     {  
6         if (food.isSweet()) {  
7             if (food.isPeppermint() && food.isStripecy()) {  
8                 edible = FoodGroup.CANDYCANES;  
9             } else if (food.isLiquid()) {  
10                edible = FoodGroup.SYRUP;  
11            } else if (food.looksLikeCorn()) {  
12                edible = FoodGroup.CANDYCORN;  
13            } else {  
14                edible = FoodGroup.CANDY;  
15            }  
16        } else {  
17            edible = FoodGroup.DONOTEAT;  
18        }  
19    }  
20  
21    public FoodGroup canIEatIt() { return edible; }  
22 }
```

Set this to the
new default value
instead of null