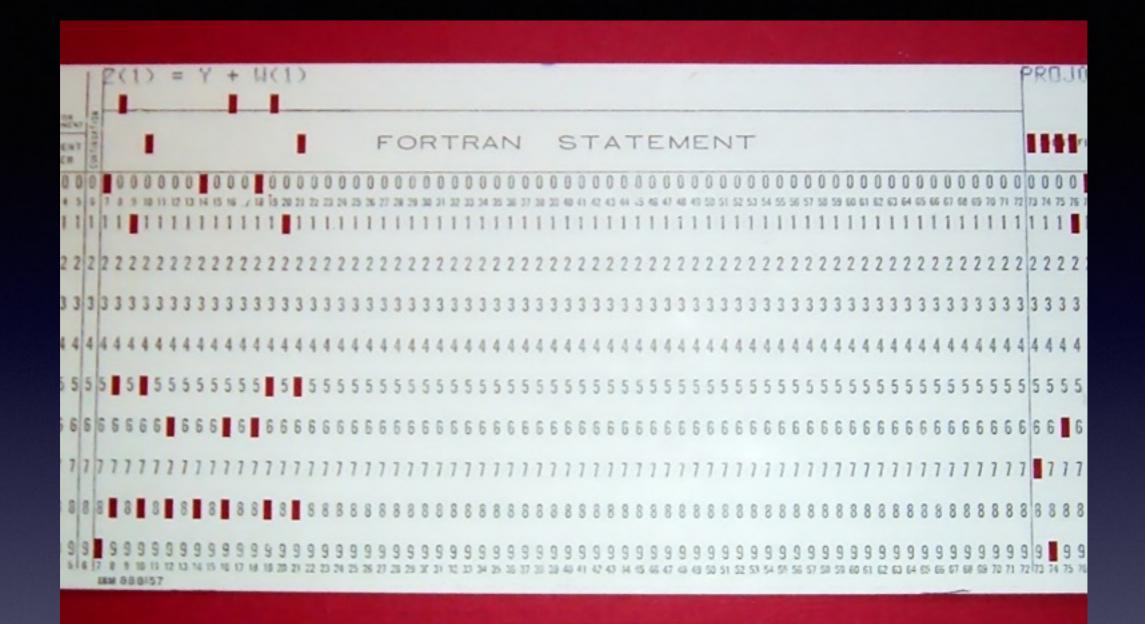
Project Jabberwocky

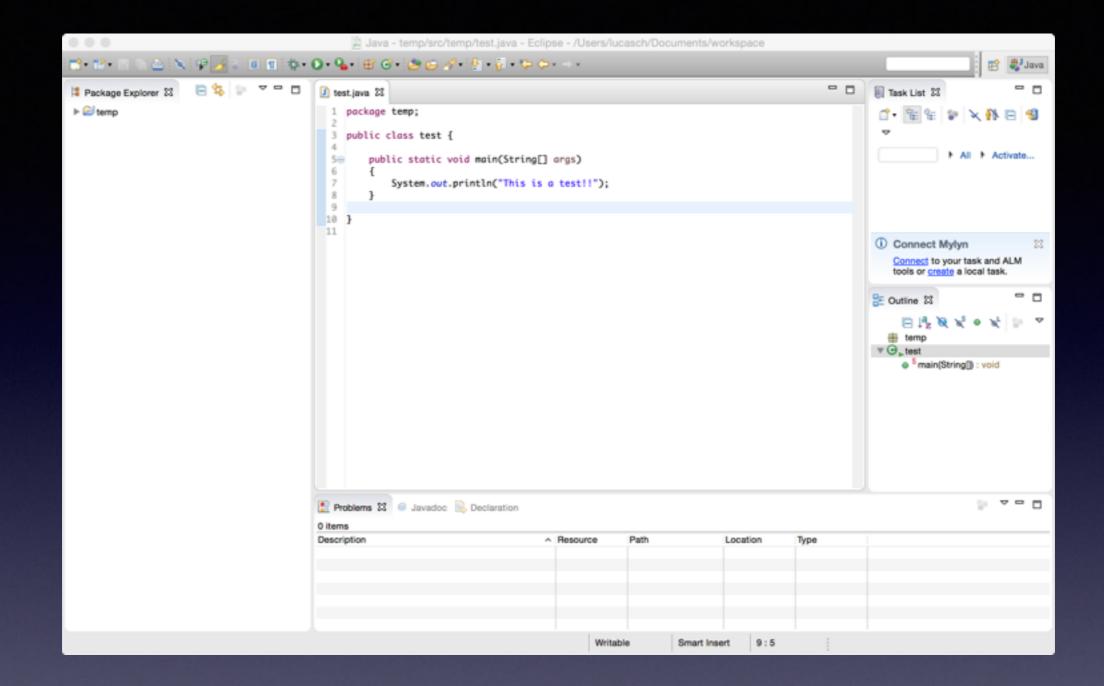
Lucas Chaufournier



The Beginning

Plain Text Editors

:q



Integrated Development Environments

```
File Edit Selection Find View Goto Tools Help
WORKSPACE FILES
                                public class test
public static void main(String□ args)
   test.java
                                        System.out.println("Hello");
                                        System.out.println("");
                                        System.out.println("Test");
                             9
                            10
                            11
                            12
                            13 }
```

Project Jabberwocky

A New Type of Programming Platform

Programming with Jabberwocky

- Start out with just a plain text editor.
- As a programmer programs, their coding ability is measured.
- Once Jabberwocky determines they are ready, features are unlocked.
- Jabberwocky slowly acclimates the user to the capabilities of an advanced programming environment.

Based off Cloud9



```
C9 - Cloud9
        C ff ( c9.io/mattpardee/c9
                                                                                                                      Cloud9 IDE
File Edit View Windows Help 😭 🂾 🔾 debug -
         Project Files
                                                                statusbar.js
                                      20 * (module.exports = ext.register( ext/statuspar/statuspar , {
                ▶ iii refactor
Project Files
                                     21
                                                        : "Status bar",
                ▶ iii revisions
                                     22
                                                        : "Cloud9 IDE, Inc.",
                                               dev
                ▶ iii richtext
                                     23
                                               alone
                ► iii run
                                     24
                                                        : ext.GENERAL,
                                     25
                                                       : markup,
                ▶ iii runpanel
                                                   n :{
id :"statusbar",
                                     26
                ▶ iii sandbox
                                     27
                ► isave
                                     28
                                                   data : skin,
                ▶ iii searchinfiles
                                     29
                                                    "media-path" : ide.staticPrefix + "/style/images/",
                                      30
                                                   "icon-path" : ide.staticPrefix + "/style/icons/"
                ► iii searchreplace
                                      31
                ▶ iii settings
                                      32
                                               expanded: false,
                ▶ iii splitview
                                     33
                                               nodes : [],
                v 📋 statusbar
                                     34
                                               toolItems: [],
                                      35
                                               prefsItems: [],
                                      36
                                               horScrollAutoHide: "false",
                    statusbar.js
                                      37
                                               edgeDistance: 3,

    statusbar.xml

                                               hook : function(){
var _self = this;
                                     38
                    style.css
                                      39
                                                   ide.addEventListener("openfile", function() {
                                      40 .

▶ iii stripws

                                     41 .
                                                       setTimeout(function() {

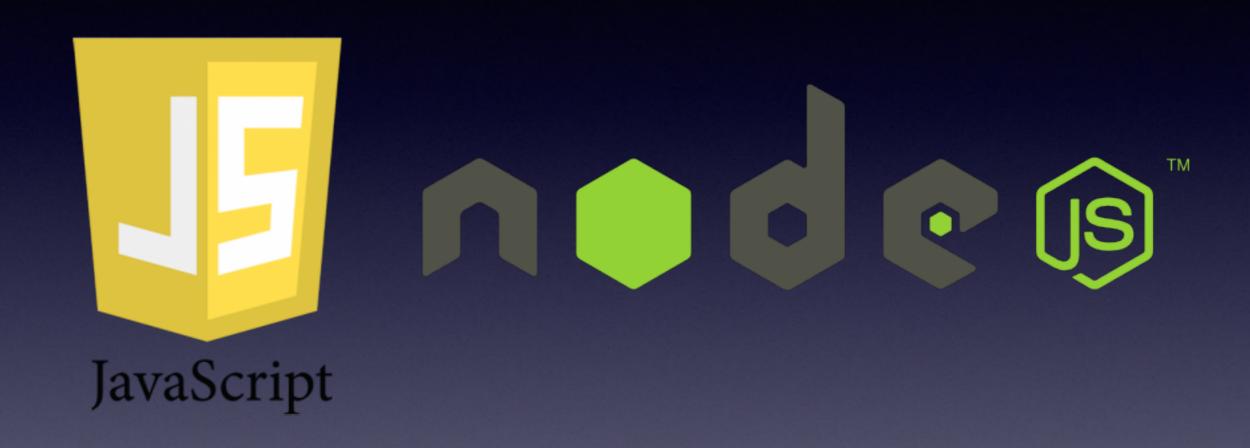
    iii tabbehaviors

                                      42
                                                           ext.initExtension(_self);
                ▶ iii tabsessions
                                      43
                                                       }, 1000);
                ▶ iii template
                                      44
                                                   D:
                                      45
                ▶ iii testpanel
                                     46
                                                   ide.addEventListener("loadsettings", function(e){
                ▶ iii testredbar
                                     47
                                                        var strSettings = e.model.queryValue("auto/statusbar");
                ▶ iii themes
                                      48 -
                                                        if (strSettings --- "true") {
```

Programmed With



Programmed With



Programmed With



MySQL Server

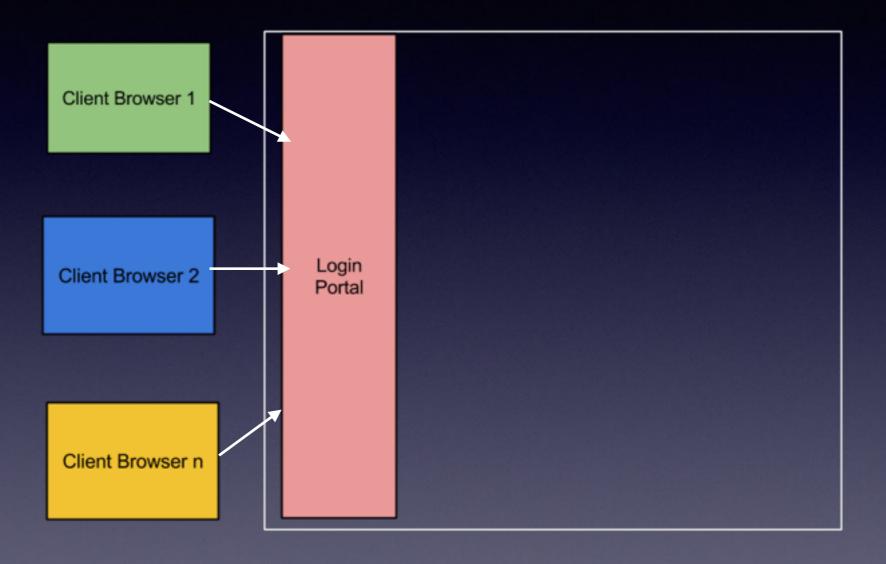
Client Browser 1

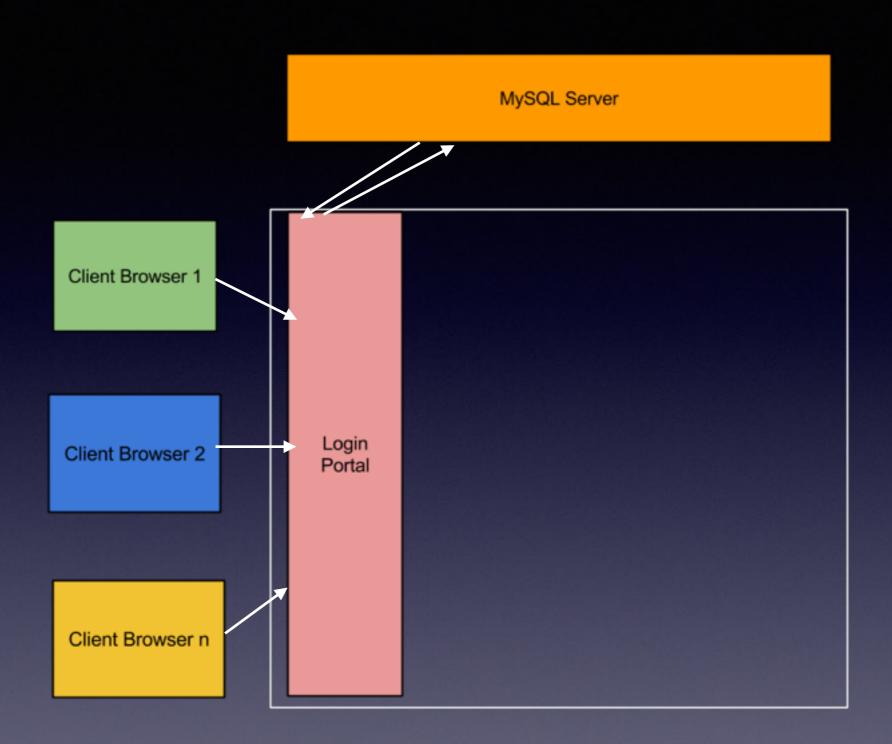
Client Browser 2

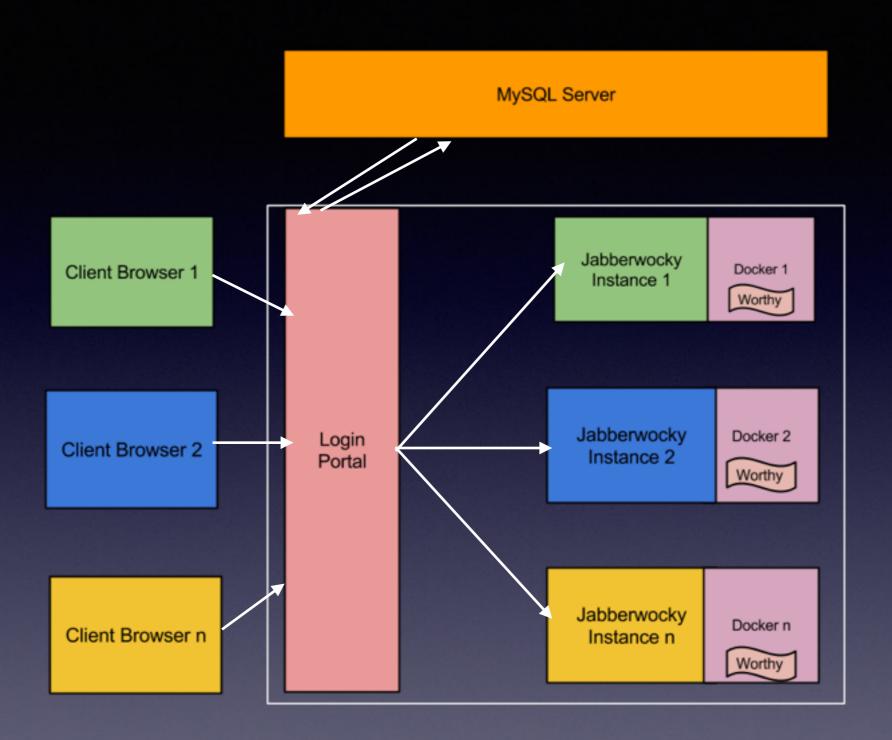
Jabberwocky Server

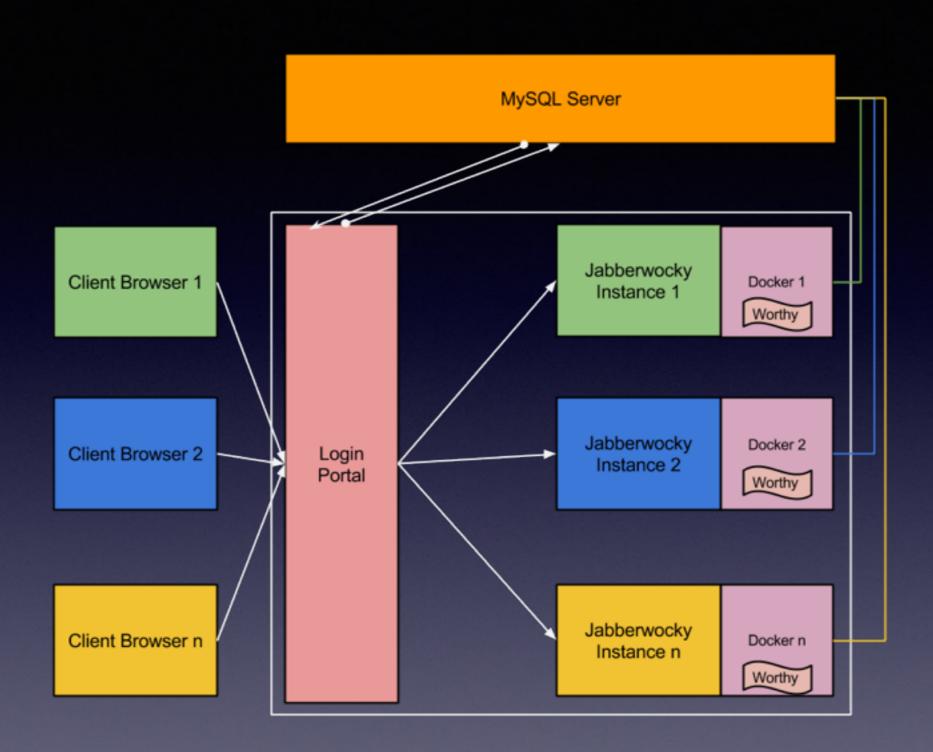
Client Browser n

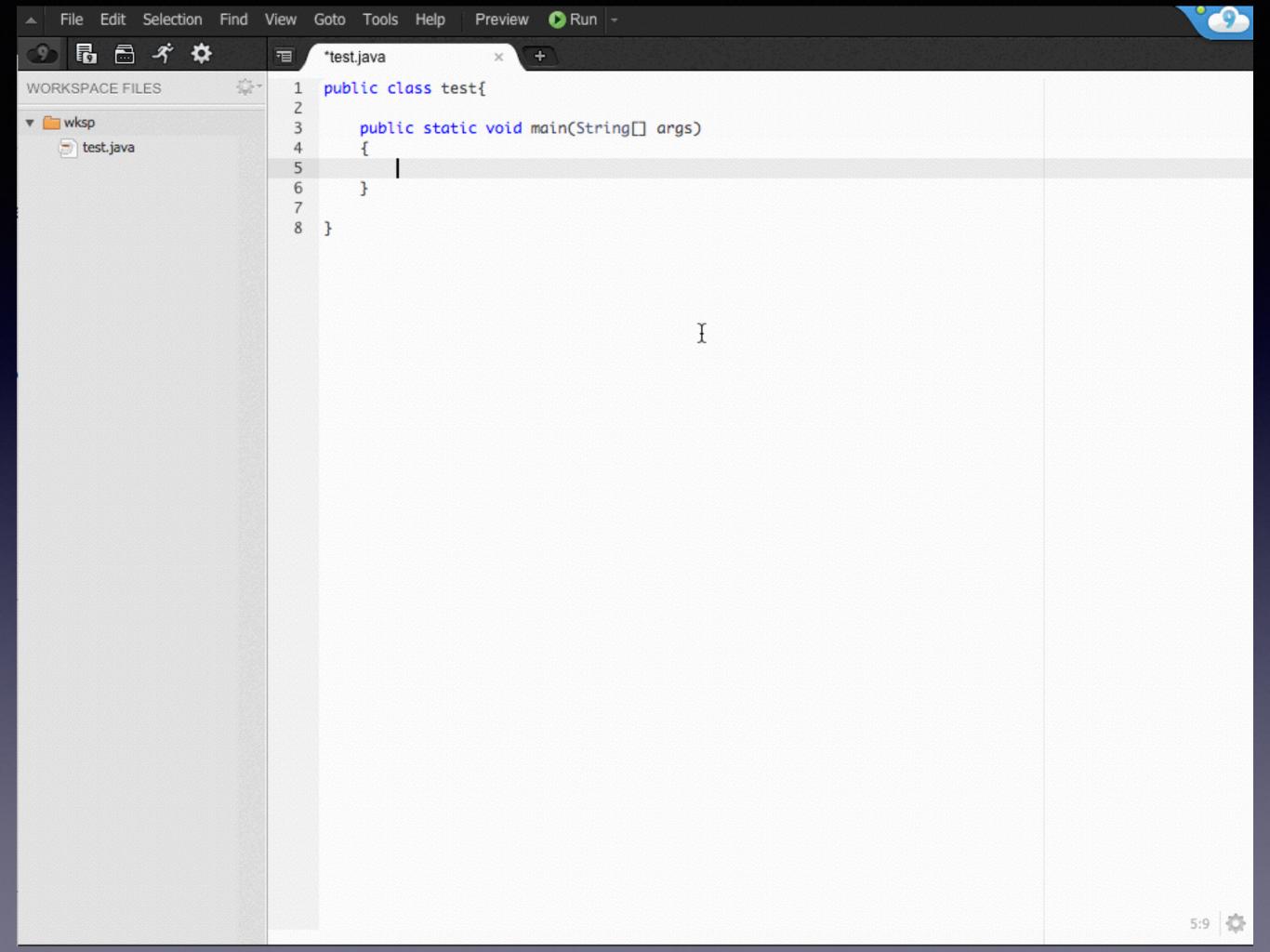
MySQL Server

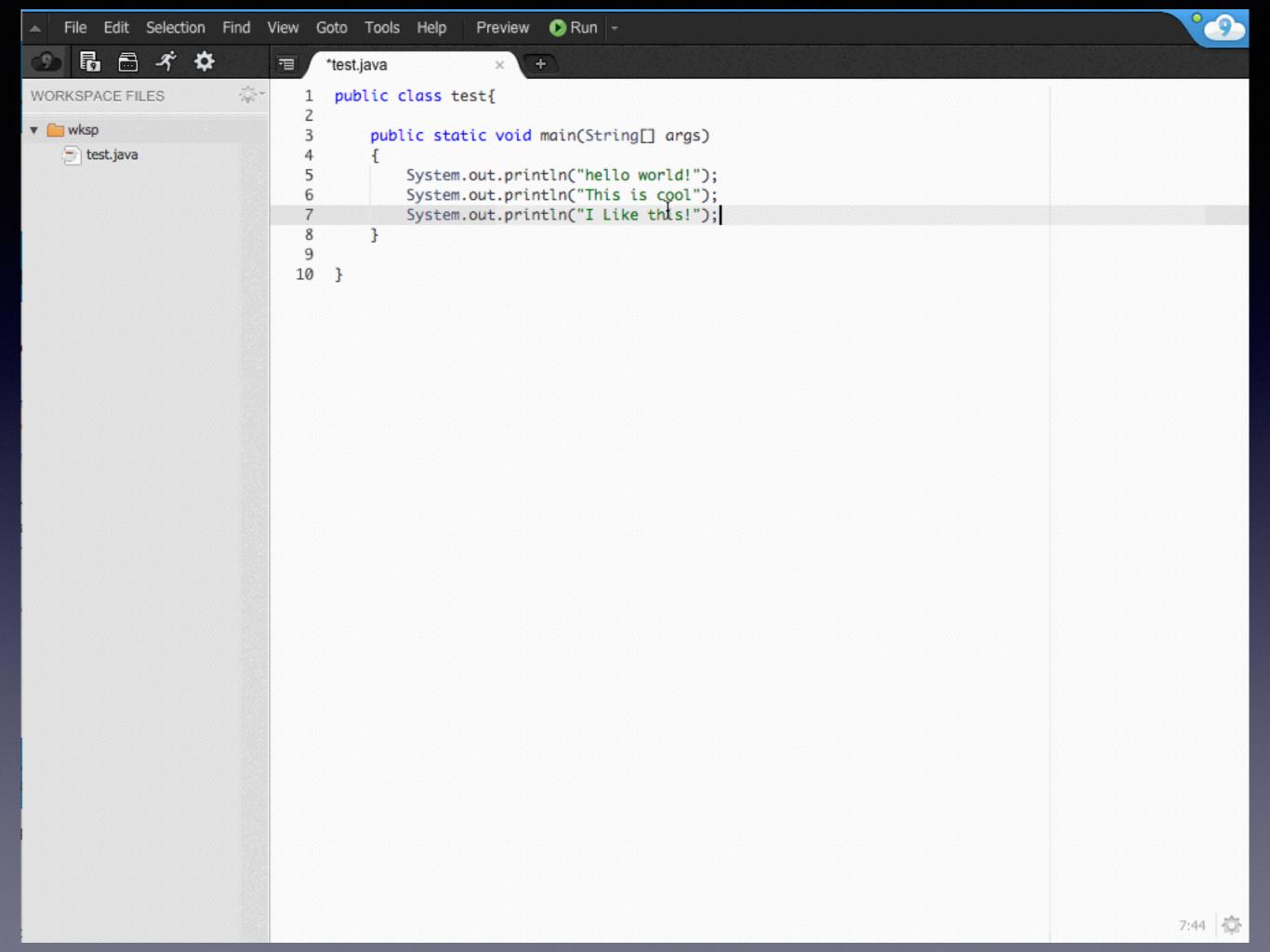


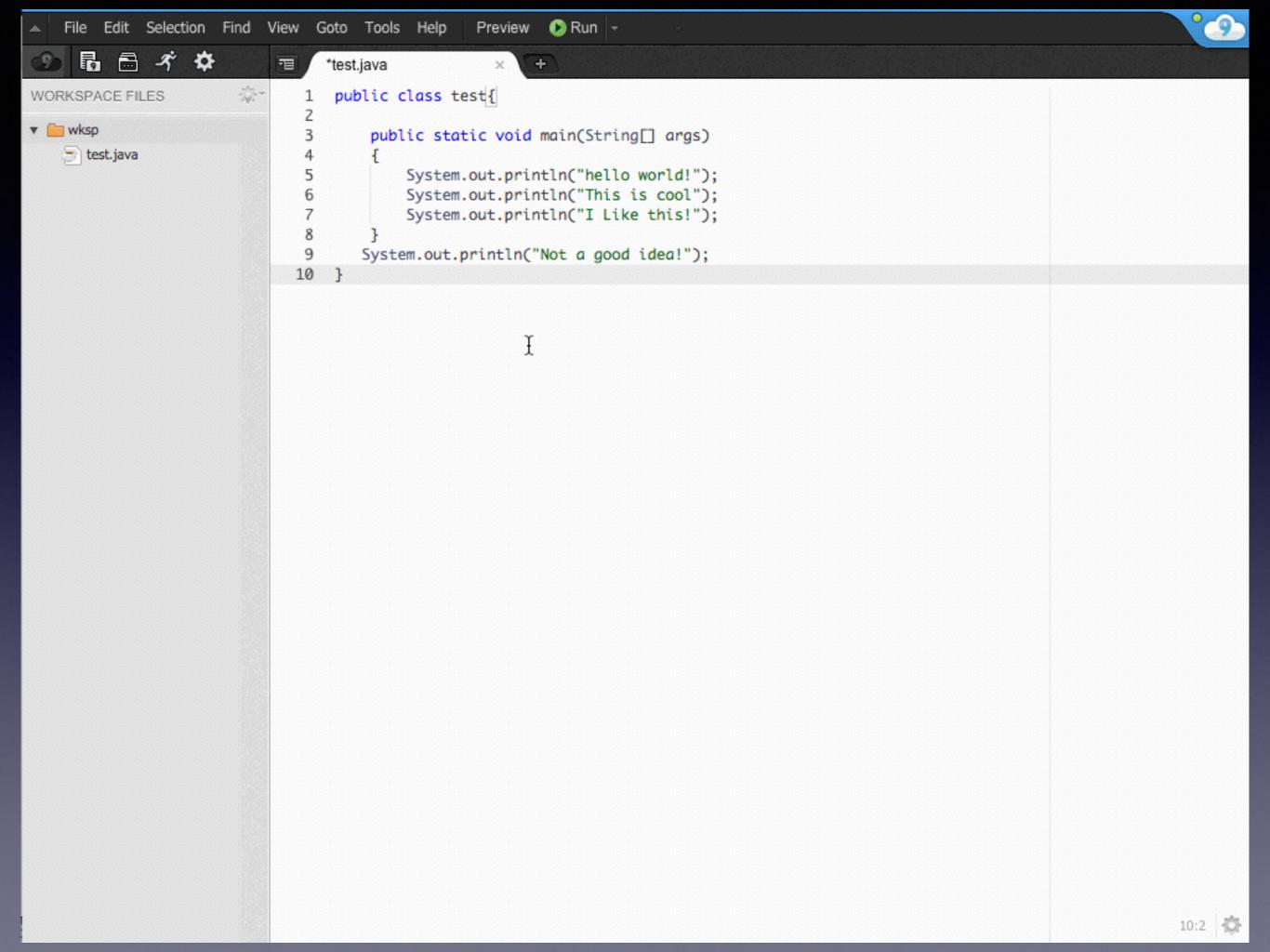












How does Jabberwocky Evolve?

```
for(int i = 0; i < x.length; i++)
{
}</pre>
```

```
for(int i = 0; i < x.length; i++)
while ( x == true )
```

```
if ( x == 7 )
{
}else{
}
```

 $\}$ while(x == 7);

```
for(int i = 0; i < x.length; i++)
                                                     if (x == 7)
                                                     }else{
                           switch(temp1)
                             case 1 : x = 7; break;
                             default : break;
                                                      do{
while (x == true)
                                                      while(x == 7);
```

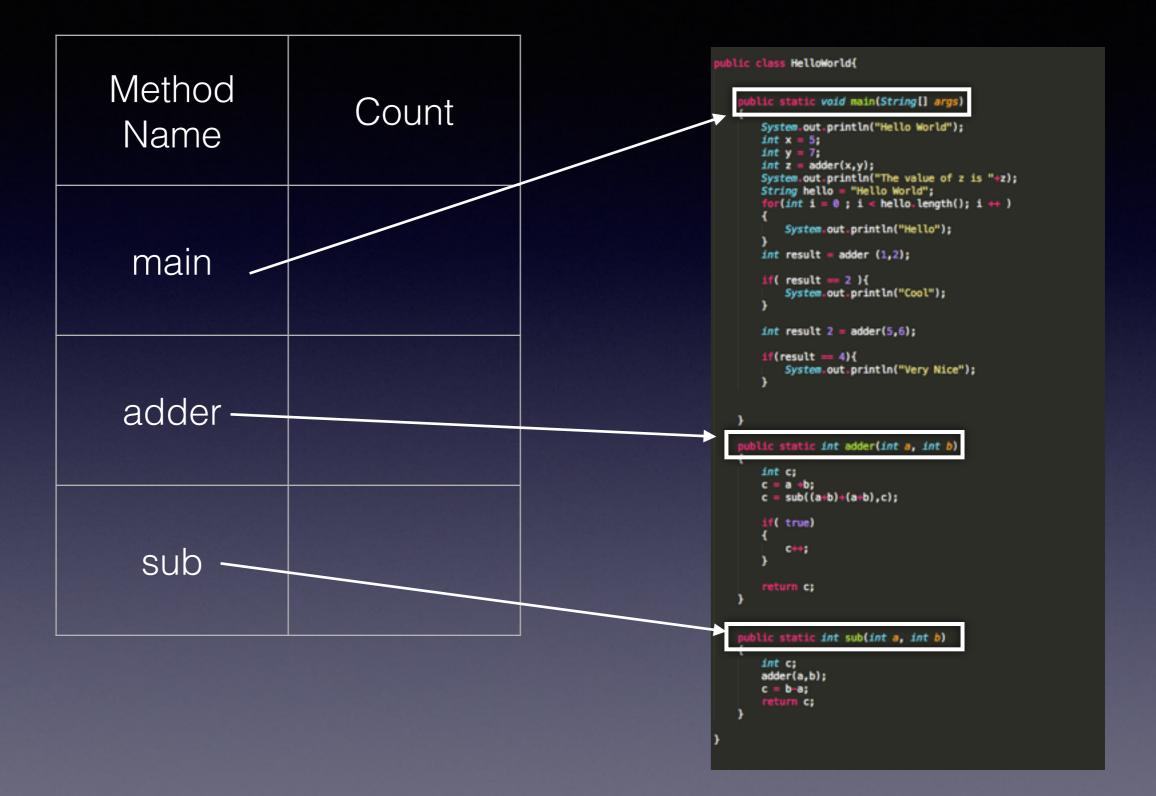
```
sublic class HelloWorld{
  public static void main(String[] args)
{
      System.out.println("Hello World");
      int x = 5;
int y = 7;
int z = adder(x,y);
System.out.println("The value of z is "+z);
      for(int i = 0; i < hello.length(); i ++ )</pre>
           System.out.println("Hello");
      int result = adder (1,2);
       if( result == 2 ){
          System.out.println("Cool");
      int result 2 = adder(5,6);
      if(result = 4){
          System.out.println("Very Nice");
   public static int adder(int a, int b)
      int c;
      c = a +b;
      c = sub((a+b)+(a+b),c);
      if( true)
{
           C++;
      return c;
  public static int sub(int a, int b)
{
      int c;
      adder(a,b);
      c = b-a;
      return c;
```

Method Count Name main

```
public class HelloWorld(
       olic static void main(String[] args)
       System.out.println("Hello World");
int x = 5;
int y = 7;
int z = adder(x,y);
System.out.println("The value of z is "+z);
        String hello = "Hello World";
        for(int i = 0 ; i < hello.length(); i ++ )</pre>
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        adder(a,b);
        c = b-a;
        return c;
```

Method Count Name main adder-

```
sublic class HelloWorld(
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int z = adder(x,y);
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        String hello = "Hello World";
        for(int i = 0 ; i < hello.length(); i ++ )</pre>
            System.out.println("Hello");
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        if( result == 2 ){
            System.out.println("Cool");
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        if( true)
            C++;
        return c;
  public static int sub(int a, int b)
{
       int c;
        adder(a,b);
        c = b-a;
        return c;
```



Method Name	Count
main	0
adder	
sub	

```
public class HelloWorld{
   public static void main(String[] args)
       System.out.println("Hello World");
       int x = 5;
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int z = adder(x,y);
System.out.println("The value of z is "+z);
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Method Name	Count
main	0
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        if( true)
            C++;
       return c;
   public static int sub(int a, int b)
{
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        adder(a,b);
        c = b-a;
       return c;
```

Method Name	Count
main	0
adder	
sub	

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public class HelloWorld{
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String hello = "Hello World";
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        if( result == 2 ){
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       c = a +b;
c = sub((a+b)+(a+b),c);
        if( true)
            C++;
       return c;
   public static int sub(int a, int b)
{
        int c;
        adder(a,b);
        c = b-a;
       return c;
```

Method Name	Count
main	0
adder	
sub	

```
public class HelloWorld(
   public static void main(String[] args)
        System.out.println("Hello World");
        int x = 5;
       int y = 7;
int z = adder(x,y);
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        if( true)
            C++;
        return c;
   public static int sub(int a, int b)
{
        int c;
        adder(a,b);
        c = b-a;
        return c;
```

Method Name	Count
main	0
adder	
sub	

```
public class HelloWorld{
   public static void main(String[] args)
        System.out.println("Hello World");
        int x = 5;
       int y = ";
int z = adder(x,y);
System but printful The value of z is "+z);
String hello = "Hello World";
       for(int i = 0; i < hello.length(); i ++ )</pre>
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        int c;
       c = a +b;
c = sub((a+b)+(a+b),c);
        if( true)
            C++;
        return c;
   public static int sub(int a, int b)
{
        adder(a,b);
       return c;
```

Method Name	Count
main	0
adder	4
sub	

```
public class HelloWorld{
   public static void main(String[] args)
        System.out.println("Hello World");
        int x = 5;
       int y = 7;
int z = adder(x,y);
System.cot.printtn( The value of z is "+z);
String hello = "Hello World";
       for(int i = 0; i < hello.length(); i ++ )</pre>
            System.out.println("Hello");
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       c = a +b;
c = sub((a+b)+(a+b),c);
        if( true)
            C++;
        return c;
   public static int sub(int a, int b)
{
        adder(a,b);
        return c;
```

Method Name	Count
main	0
adder	4
sub	1

```
public class HelloWorld{
   public static void main(String[] args)
        System.out.println("Hello World");
        int x = 5;
       int y = 7,
int z = adder(x,y);
System.out.p.inttn( The value of z is "+z);
String hello = "Hello World";
       for(int i = 0; i < hello.length(); i ++ )</pre>
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        if( true)
            C++;
        return c;
   public static int sub(int a, int b)
{
        adder(a,b);
        return c;
```

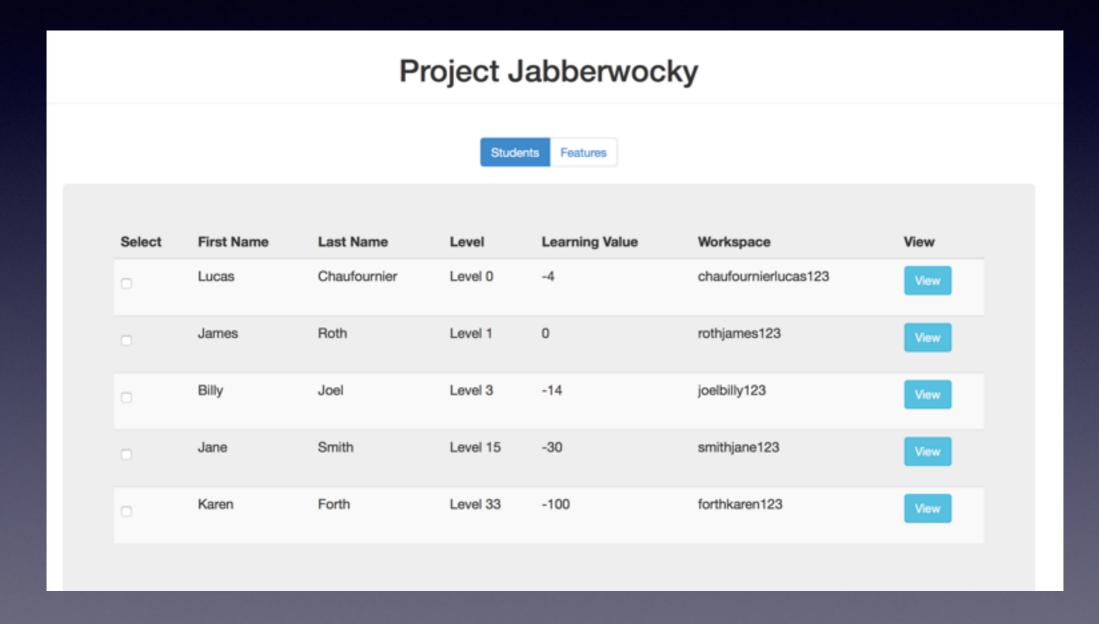
Level Advancing

- Code compiled, overall compile success/error rate and number of errors recorded.
- Features are unlocked, as programs increase in complexity.
- The more you use a programming construct, the faster autogeneration unlocks.

Classroom Support

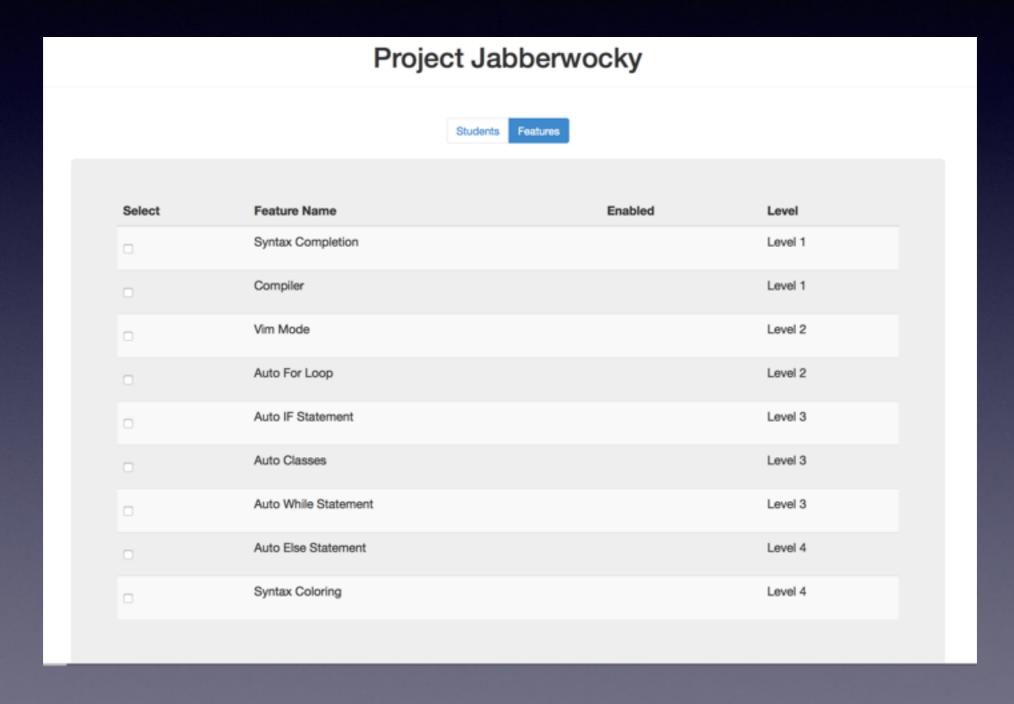
The Instructor Interface

Class Roster



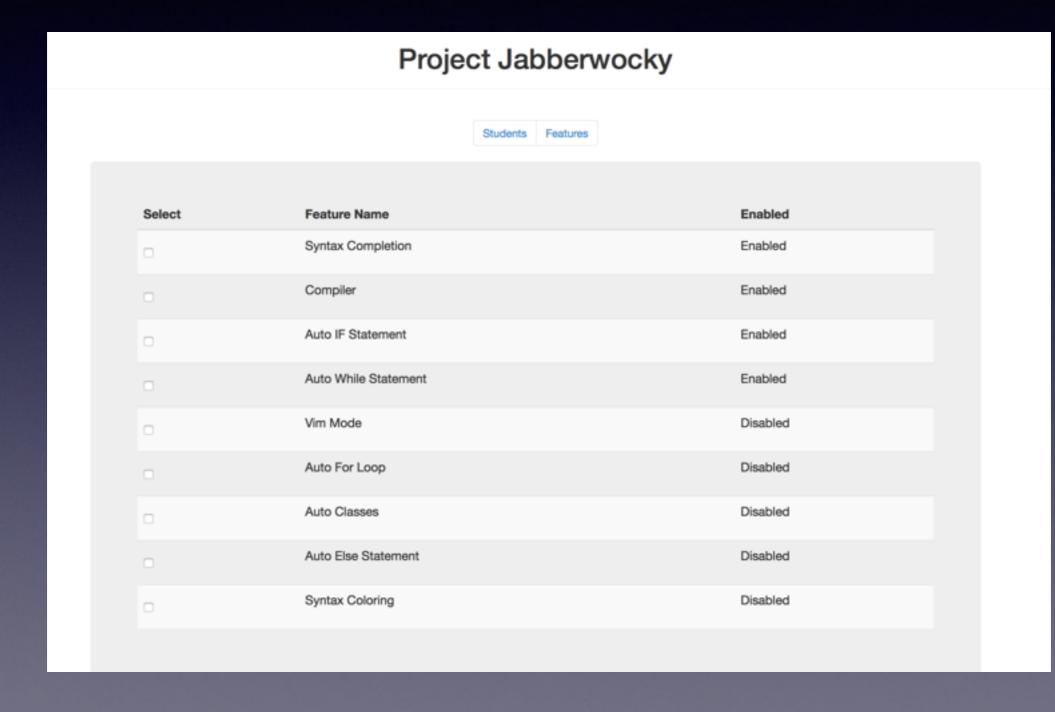
The Instructor Interface

Class Features



The Instructor Interface

Student Features



Language Support



Language Support





Language Support







outhon

Project Jabberwocky

Coming Spring 2015