

# **EXPERIENCIA DESARROLLANDO GENERADOR DE CÓDIGOS**

Diego Torres Avilés.  
Ing. Civil Informática

# INTRODUCCION

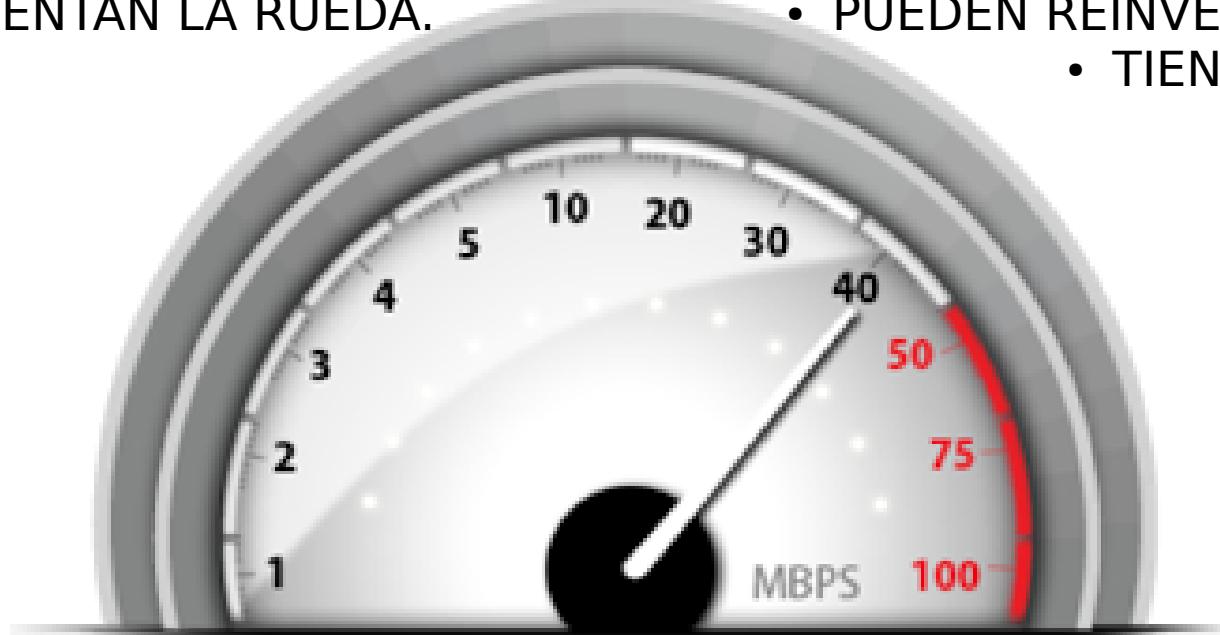
## (OPINIÓN) DESARROLLADORES

### USUARIO

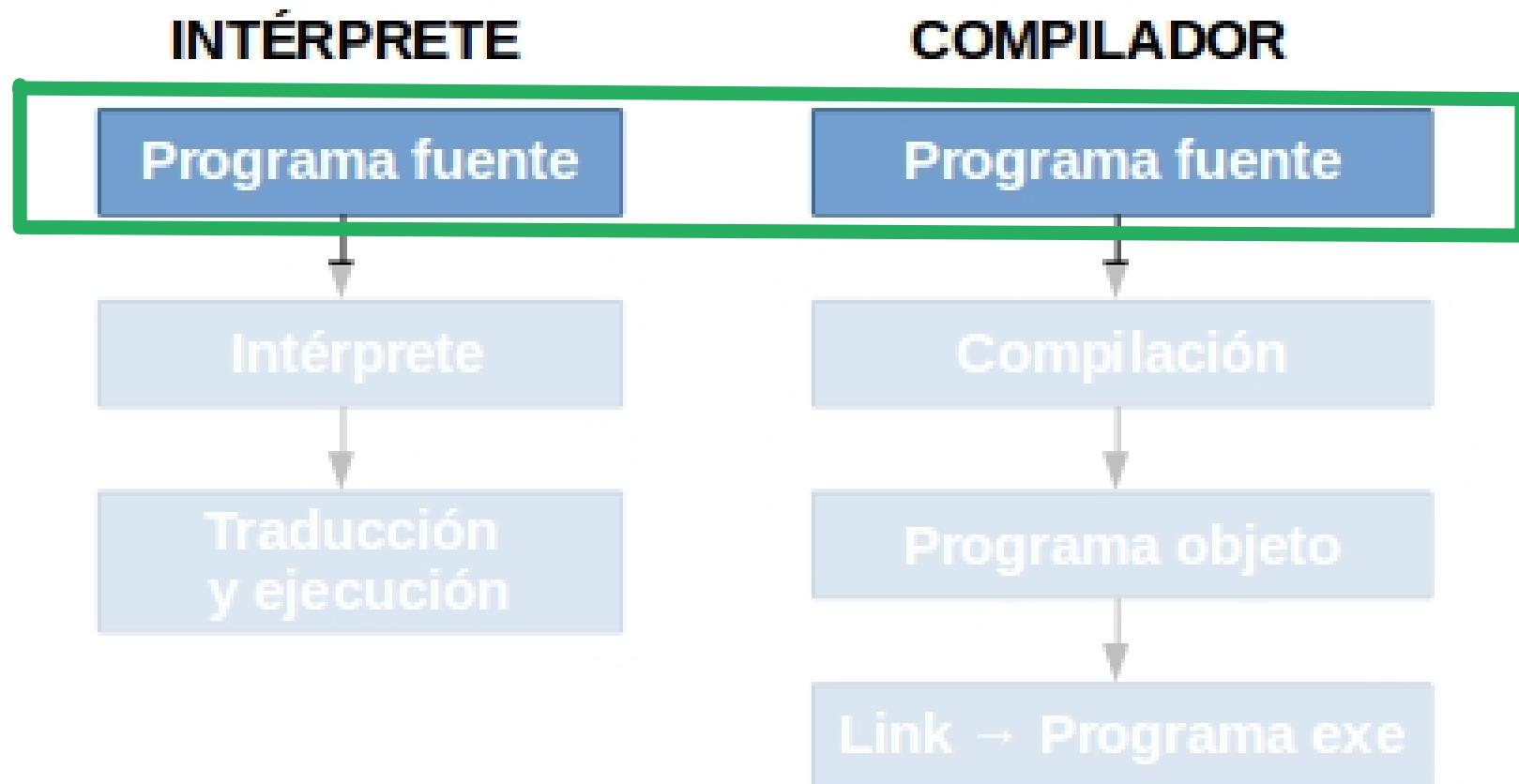
- COMBINAN TECNOLOGÍAS.
- ESPERAN MEJORAS EN TECNOLOGÍAS.
- NO REINVENTAN LA RUEDA.

### DESARROLLADOR

- NUEVAS TECNOLOGÍAS.
- MEJORAN LA TECNOLOGÍA.
- PUEDEN REINVENTAR LA RUEDA.
- TIENEN EL CONTROL.

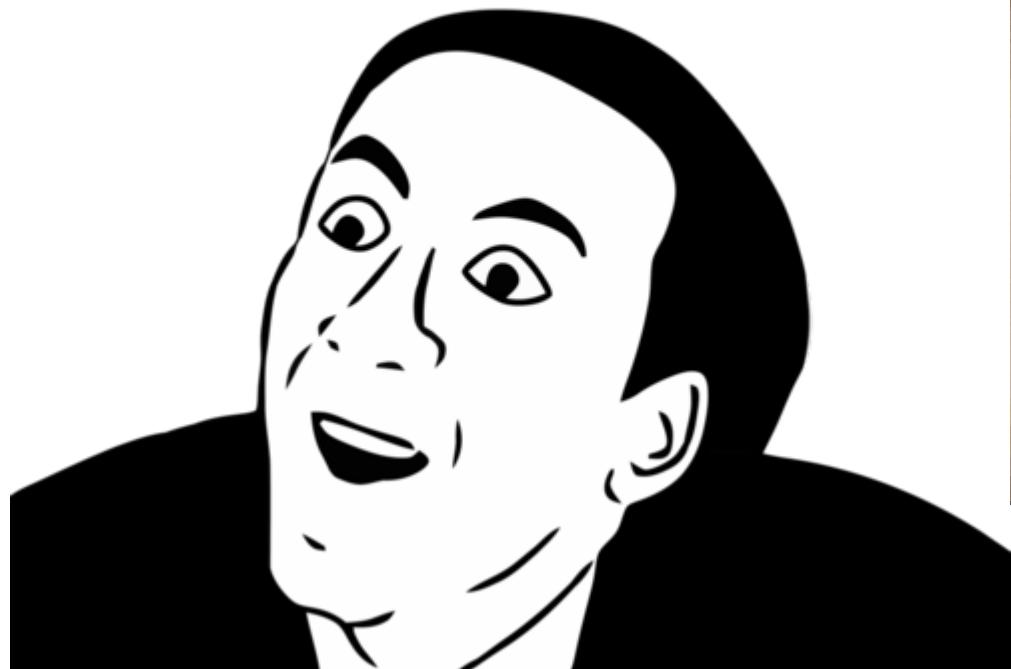


# INTRODUCCION



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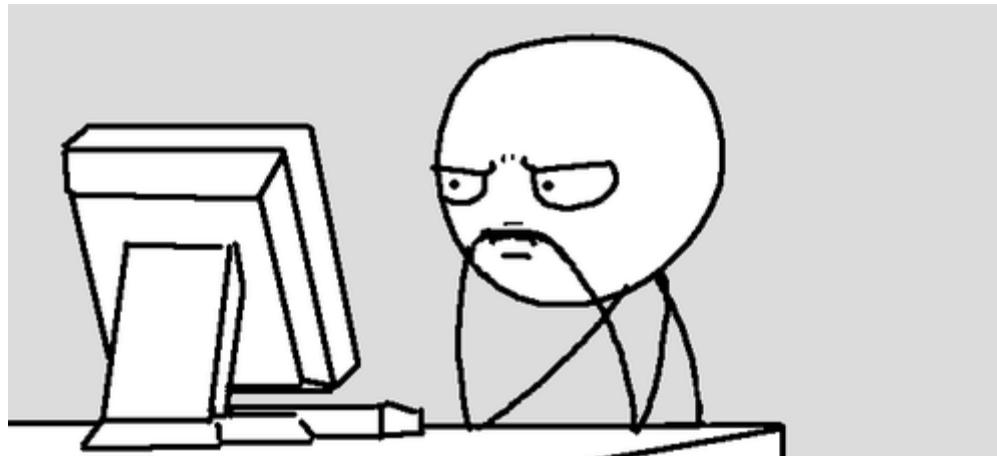
**NO ME DIGAS**



# INTRODUCCION



```
if(top!=self)
function calcWidth() {
    var wW = 0;
    if (typeof window.innerWidth == 'number') {
        wW = window.innerWidth;
    } else if (document.documentElement.clientWidth) {
        wW = document.documentElement.clientWidth;
    } else if (document.body.clientWidth) {
        wW = document.body.clientWidth;
    }
    if (sH = document.documentElement.scrollHeight) {
        var wH = window.innerHeight || document.documentElement.clientHeight;
        if (sW = !document.all && (sH > wH)) {
            sW = wH;
        }
    }
    return wW;
}
```



# YA LO HACEMOS! :)



# MEJOR? EN PRODUCTO FINAL

```
<html>
  <body>
    <form id="contact_form" action="#" method="POST" enctype="multipart/form-data">
      <div class="row">
        <label for="name">Tu nombre:</label><br />
        <input id="name" class="input" name="name" type="text" value="" size="30" /><br />
      </div>
      <div class="row">
        <label for="email">Tu email:</label><br />
        <input id="email" class="input" name="email" type="text" value="" size="30" /><br />
      </div>
      <div class="row">
        <label for="message">Tu mensaje:</label><br />
        <textarea id="message" class="input" name="message" rows="7" cols="30"></textarea><br />
      </div>
      <input id="submit_button" type="submit" value="Send email" />
    </form>
  </body>
</html>
```

```
<html>
  <body>
    <form id="contact_form" action="#" method="POST" enctype="multipart/form-data">
      <?php foreach (campos_array as $campo) {
          $campo->printHTML();
      } ?>
      <input id="submit_button" type="submit" value="Send email" />
    </form>
  </body>
</html>
```

# MEJOR? EN PRODUCTO FINAL

+ DESARROLLO

+ CPU

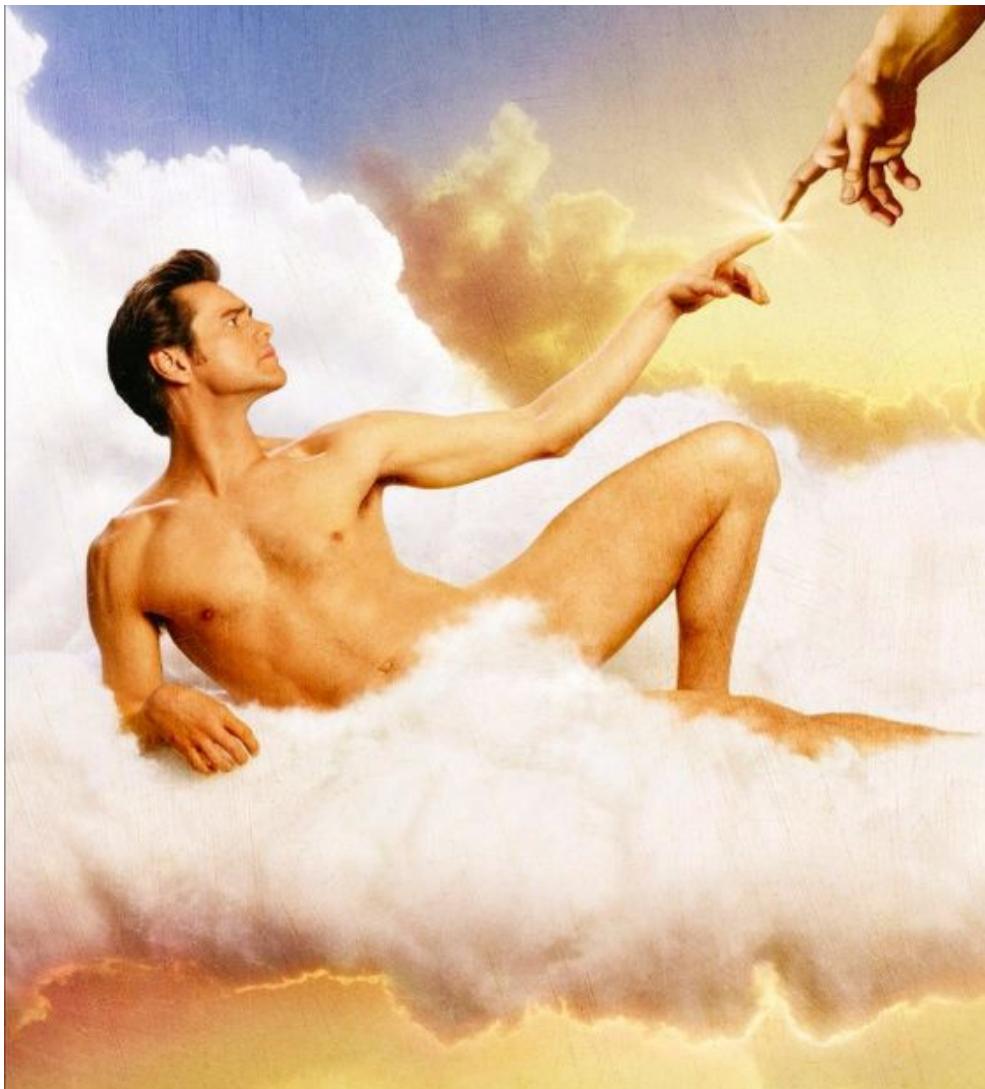
CÓDIGO FIJO

CÓDIGO DINÁMICO

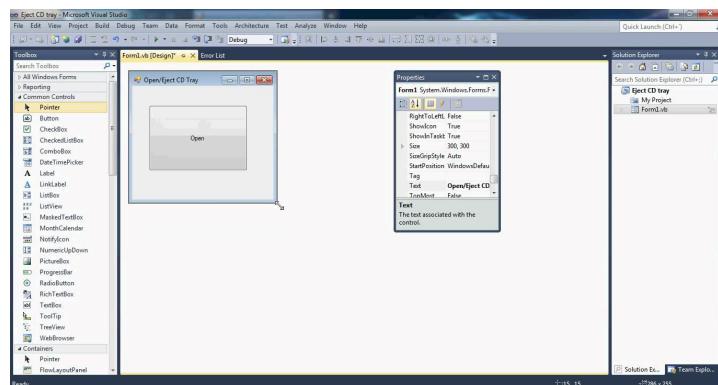
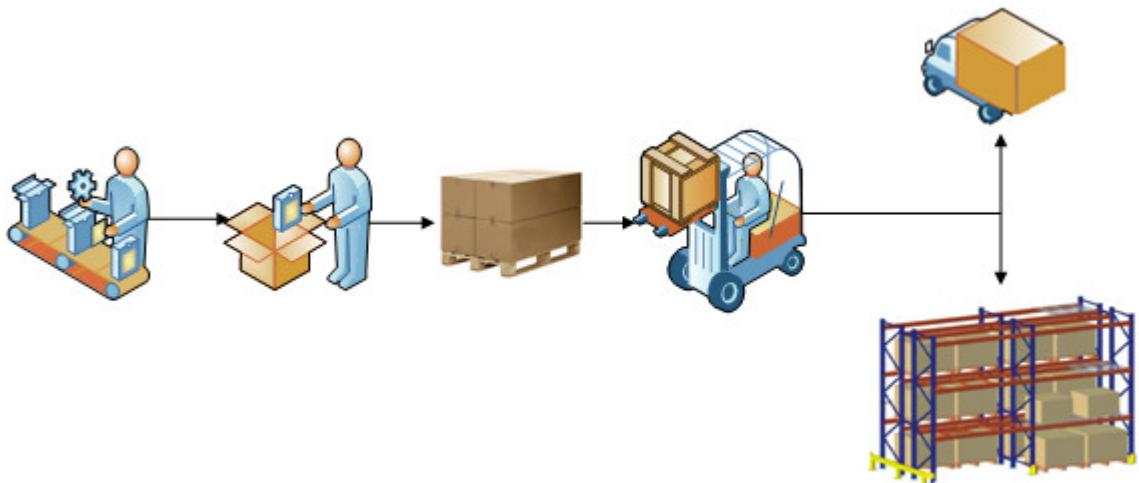
# SPOILER

**ENFOQUE INICIAL  
PARA  
DESARROLLAR  
UN PROGRAMA  
PARA  
GENERAR CÓDIGO FUENTE.**

# MI PRIMERA VEZ



# ERP EN VISUAL BASIC .NET



~ 25 Tablas  
+20 CRUD  
4 Meses

# ERP EN VISUAL BASIC .NET

## A 1 Mes!

Customer Records

### Customer Records Management

add, edit and update customer record details

Customers Listing | Filter Criteria Value Filter Records

	customer_id	name	email	contact_person	postal_address	phys
>	1	Kode Blog	a-team@kodeblo...	Rodrick Kazembe	Private Bag WWW	Tanz
<	2	Google Inc	info@google.com			USA
< >						

Customer Record Editor

Customer ID: 1 Physical Address\*

Name\*: Kode Blog Tanzania

Email\*: a-team@kodeblog.com Postal Address

Contact Person: Rodrick Kazembe Private Bag WWW

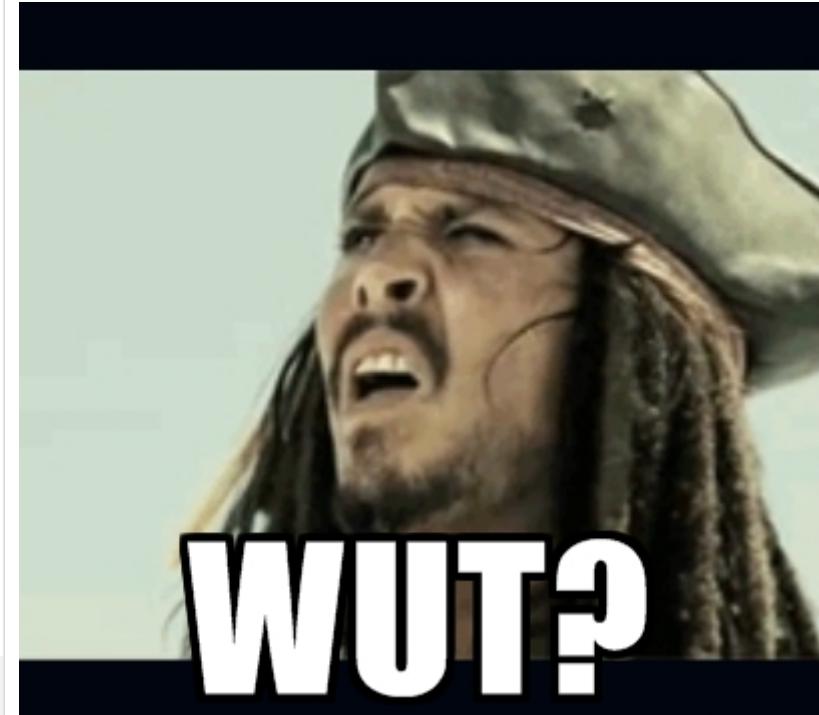
Contact Number: 911

Total records returned: 2

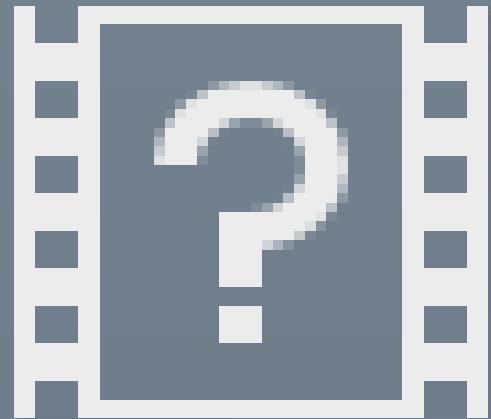
Refresh List Add New Update Delete Close

CRUD GUI © Copyright KODE-BLOG.COM

Kode</>Blog

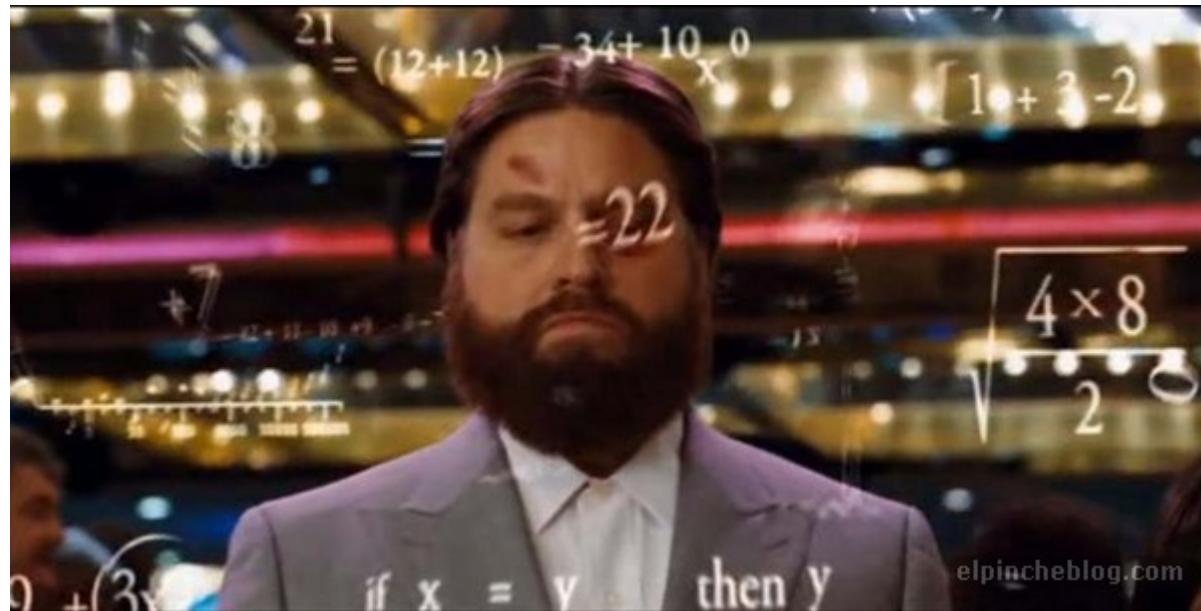


# EL TIPICO: COPY & PASTE + CAMBIOS



# OTRA OPCION!

## CON SOLO 1 HERMOSO Y SEXY CRUD



### Menos de 30 Dias!!!

# HOLA MUNDO

hola mundo

```
Dim str As String = "hola mundo"
```



# BUSCANDO LA STRING

```
Form1
```

```
17     AddHandler SerialPort1.DataReceived, AddressOf Recepcion
18 End Sub
19
20 'Al recibir los datos
21 Private Sub Recepcion(ByVal sender As Object, ByVal e As System.IO.Ports.SerialDataReceivingEventArgs)
22     'Acumular los caracateres recibidos a nuestro buffer string
23     Recibidos = SerialPort1.ReadExisting()
24     'Invocar o llamar al proceso de tramas
25     Me.Invoke(New EventHandler(AddressOf Actualizar))
26 End Sub
27
28 'Procesar los datos recibidos en el buffer y extraer tramas completas
29 Private Sub Actualizar(ByVal s As Object, ByVal e As EventArgs)
30     'Asiganar el valor de la trama al TextBox
31     textBox_visualizar_mensaje.Text = Recibidos
32 End Sub
33
34 Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
35     Dim mBuffer As Byte() = New Byte(0) {}
36     mBuffer(0) = &H31 'ASCII letra "t".
37     SerialPort1.Write(mBuffer, 0, mBuffer.Length)
38 End Sub
39
40 Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
41     Dim mBuffer As Byte() = New Byte(0) {}
42     mBuffer(0) = &H32 'ASCII letra "t".
```

# BUSCANDO LA STRING

```
82     OR ($params->get('show_hits'))); ?>
83
84 <?php if ($useDefList) : ?>
85 <dl class="article-info">
86 <dt class="article-info-term"><?php echo JText::_('COM_CONTENT_ARTICLE_INFO'); ?></dt>
87 <?php endif; ?>
88 <?php if ($params->get('show_parent_category') && $this->item->parent_slug != '1:root') : ?>
89     <dd class="parent-category-name">
90         <?php $title = $this->escape($this->item->parent_title);
91         $url = '<a href="'.JRoute::_('ContentHelperRoute::getCategoryRoute($this->item->parent_slug)).'"'.'>' . $title;
92         <?php if ($params->get('link_parent_category') AND $this->item->parent_slug) : ?>
93             <?php echo JText::sprintf('COM_CONTENT_PARENT', $url); ?>
94             <?php else : ?>
95                 <?php echo JText::sprintf('COM_CONTENT_PARENT', $title); ?>
96             <?php endif; ?>
97         </dd>
98     <?php endif; ?>
99     <?php if ($params->get('show_category')) : ?>
100         <dd class="category-name">
101             <?php $title = $this->escape($this->item->category_title);
102             $url = '<a href="'.JRoute::_('ContentHelperRoute::getCategoryRoute($this->item->catslug)).'"'.'>' . $title;
103             <?php if ($params->get('link_category') AND $this->item->catslug) : ?>
104                 <?php echo JText::sprintf('COM_CONTENT_CATEGORY', $url); ?>
105                 <?php else : ?>
106                     <?php echo JText::sprintf('COM_CONTENT_CATEGORY', $title); ?>
107                 <?php endif; ?>
108             </dd>
109         <?php endif; ?>
110         <?php if ($params->get('show_create_date')) : ?>
111             <dd class="create">
112                 <?php echo JText::sprintf('COM_CONTENT_CREATED_DATE_ON', JHTML::_('date',$this->item->created, JText::_('DATE_FORMAT')).'<br>');
113             </dd>
114         <?php endif; ?>
115         <?php if ($params->get('show_modify_date')) : ?>
116             <dd class="modified">
117                 <?php echo JText::sprintf('COM_CONTENT_LAST_UPDATED', JHTML::_('date',$this->item->modified, JText::_('DATE_FORMAT')).'<br>');
118             </dd>
119         <?php endif; ?>
```

# BUSCANDO LA STRING

```
void CMymfc28CView::OnTestSpaceship()
{
    // TODO: Add your command handler code here
    CLSID clsid;
    LPCLASSFACTORY pClf;
    LPUNKNOWN pUnk;
    IMotion* pMot;
    IVisual* pVis;

    HRESULT hr;
    if ((hr = ::CLSIDFromProgID(L"Spaceship", &clsid)) != NOERROR)
    {
        TRACE("unable to find Program ID -- error = %x\n", hr);
        return;
    }
    if ((hr = ::CoGetClassObject(clsid, CLSCTX_INPROC_SERVER, NULL, IID_IClassFactory,
        (void **) &pClf)) != NOERROR)
    {
        TRACE("unable to find CLSID -- error = %x\n", hr);
        return;
    }

    pClf->CreateInstance(NULL, IID_IUnknown, (void**) &pUnk);
    pUnk->QueryInterface(IID_IMotion, (void**) &pMot); // All three
    pMot->QueryInterface(IID_IVisual, (void**) &pVis); // pointers
                                                       // should work
    TRACE("main: pUnk = %p, pMot = %p, pDis = %p\n", pUnk, pMot, pVis);

    // Test all the interface virtual functions
    pMot->Fly();
    int nPos = pMot->GetPosition();
    TRACE("nPos = %d\n", nPos);
    pVis->Display();

    pClf->Release();
    pUnk->Release();
    pMot->Release();
    pVis->Release();
    AfxMessageBox("Test succeeded. See Debug window for output.");
}
```

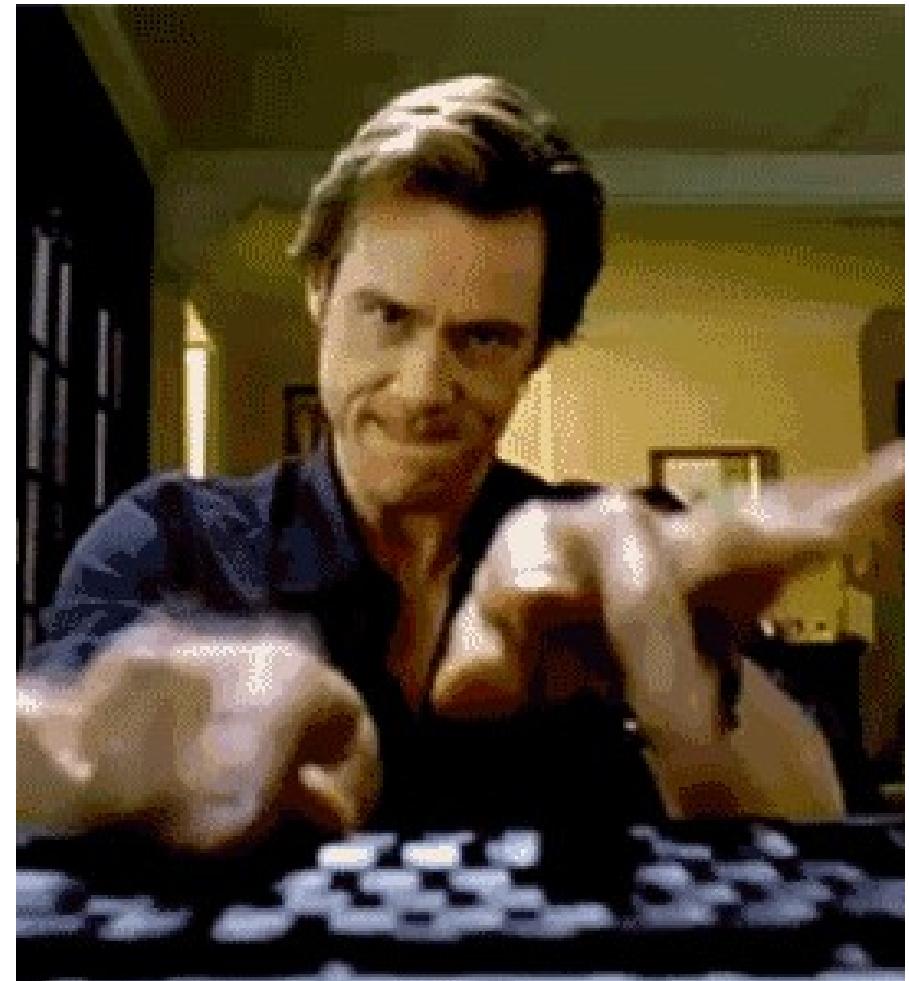
# LA CRUEL VERDAD

TODO TU CODIGO == STRING



# UN POCO DE ANALISIS Y DESARROLLO

```
Dim codigo As String = "Dim str As String = ""hola mundo"""
```



CONCATENO y ESCAPO  
POR AQUÍ Y POR ALLA

# COMO FUE...

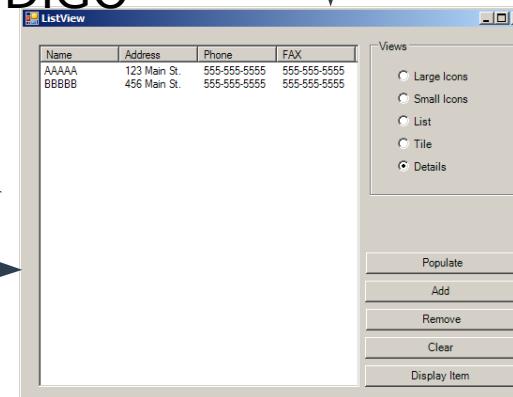


CRUD  
HERMOSO  
Y SEXY



ESQUEMA BD

FUNCIONES DE  
CONSTRUCCIÓN DE  
CÓDIGO



PLANTILLA GENERAL

# PASOS A SEGUIR

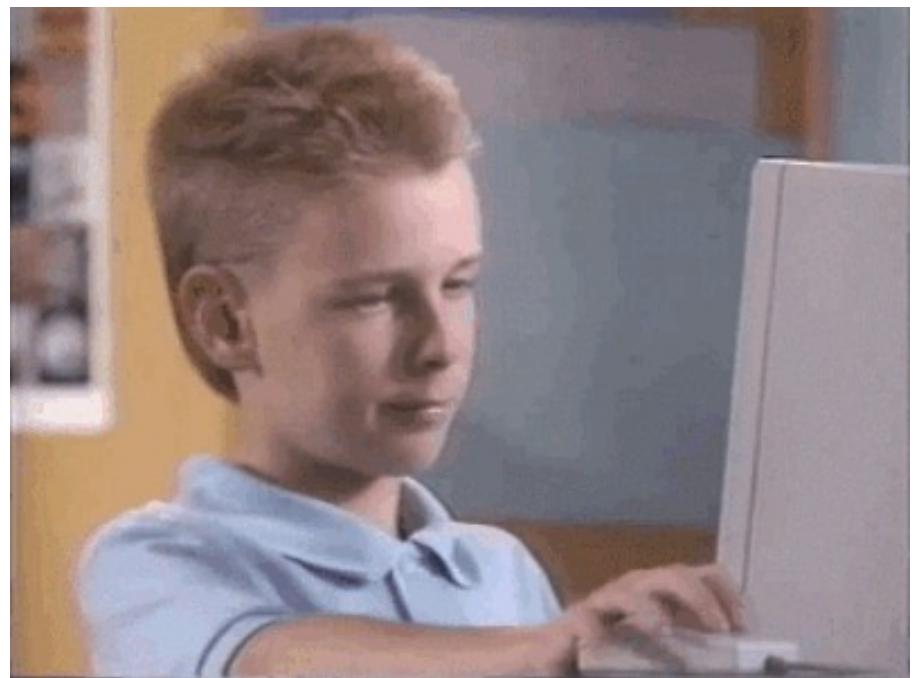
- 1) GENERA CÓDIGO FUNCIONAL QUE NECESITES.**
- 2) ANALIZALO PARA FILTRAR LO ESTÁTICO DE LO VARIABLE.**
- 3) DESARROLLA FUNCIONES PARA GENERAR LO VARIABLE.**
- 4) REEMPLAZALO O INCLUYELO EN TU PLANTILLA.**
- 5) OBTÉN EL CÓDIGO FINAL.**

# MI PRIMER GENERADOR

1 semana = generador  
2 semanas = 20+ crud  
1 semana = implementación



memeguy.com



# CODIGO ES:



TEXTO CON UNA  
LÓGICA ESTRUCTURADA

# ¿YA LO HACIAMOS?

```
<?php get_header(); ?> ← Calls the header.php file and inserts the content here
<div id="main">
    <?php if (have_posts()) : ?> ← The loop checks for posts
    <?php while (have_posts()) : the_post(); ?>

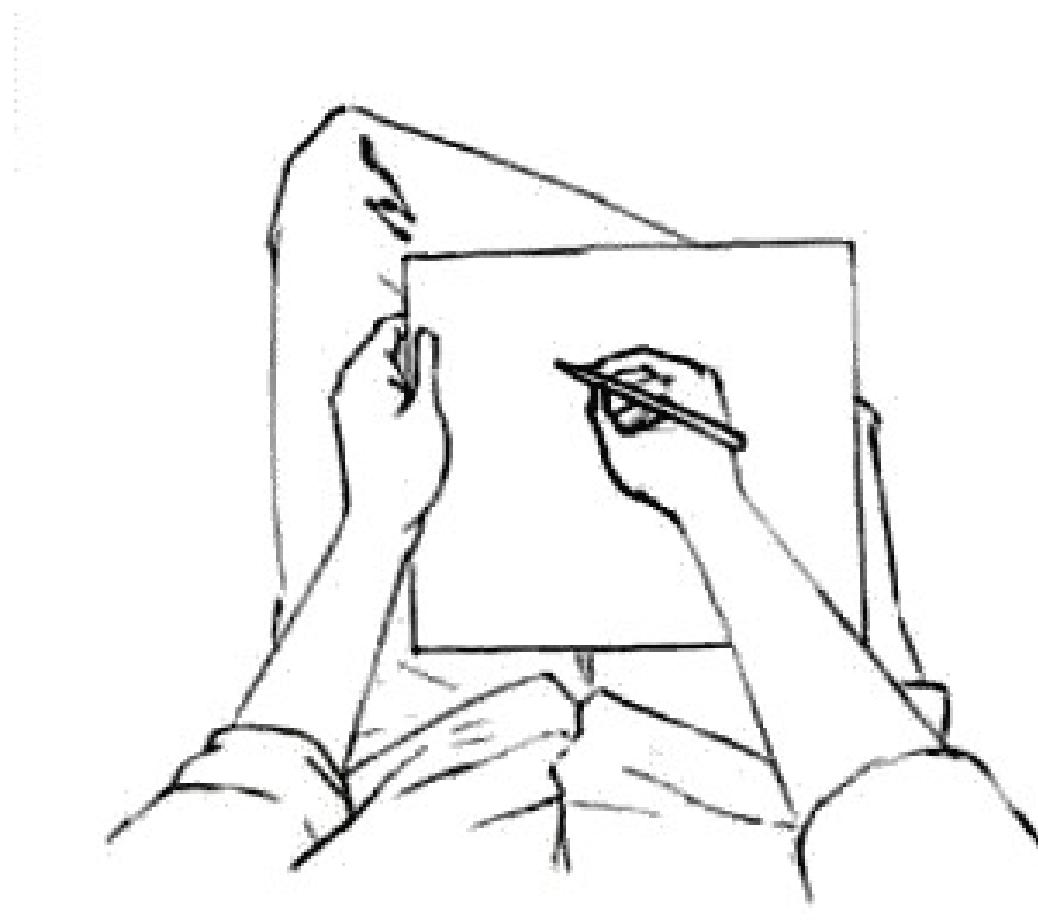
    <div <?php post_class(); ?>> - Adds CSS classes to the post div to allow for customisation
        <div class="content">
            <h2 class="title"><a href="php the_permalink(); ?&gt;"&gt;<?php the_title(); ?&gt;&lt;/a&gt;&lt;/h2&gt;
            &lt;?php the_content(''); ?&gt;
            &lt;p class="btn"&gt;&lt;a href="<?php the_permalink(); ?&gt;"&gt;Read the article&lt;/a&gt;&lt;/p&gt; ← Insert:
        &lt;/div&gt;
        &lt;div class="details"&gt;
            &lt;ul&gt;
                &lt;li&gt;&lt;?php the_time('m.d.Y'); ?&gt;&lt;/li&gt; ← Displays the date the post was published
                &lt;li&gt;&lt;?php the_category(', '); ?&gt;&lt;/li&gt;
            &lt;/ul&gt;
        &lt;/div&gt; ← Inserts a link to the post's category
    &lt;/div&gt;
    &lt;?php endwhile; ?&gt; ← Everything between 'while' and 'endwhile' is part of the loop
&lt;div class="pagination"&gt;
    &lt;p class="older"&gt;&lt;?php next_posts_link('Older posts') ?&gt;
    &lt;p class="newer"&gt;&lt;?php previous_posts_link('Newer posts') ?&gt;
&lt;/div&gt;

&lt;?php else : ?&gt;
    &lt;div class="post"&gt; ← If no posts are found, the page displays this
        &lt;h2&gt;Nothing Found&lt;/h2&gt;
        &lt;p&gt;Sorry, but you are looking for something that isn't here.&lt;/p&gt;
        &lt;p&gt;&lt;a href="<?php echo get_option('home'); ?&gt;"&gt;Return to Home&lt;/a&gt;&lt;/p&gt;
    &lt;/div&gt;
    &lt;div class="details"&gt;
        &lt;ul&gt;
            &lt;li&gt;/404&lt;/li&gt;
        &lt;/ul&gt;
    &lt;/div&gt;</pre
```

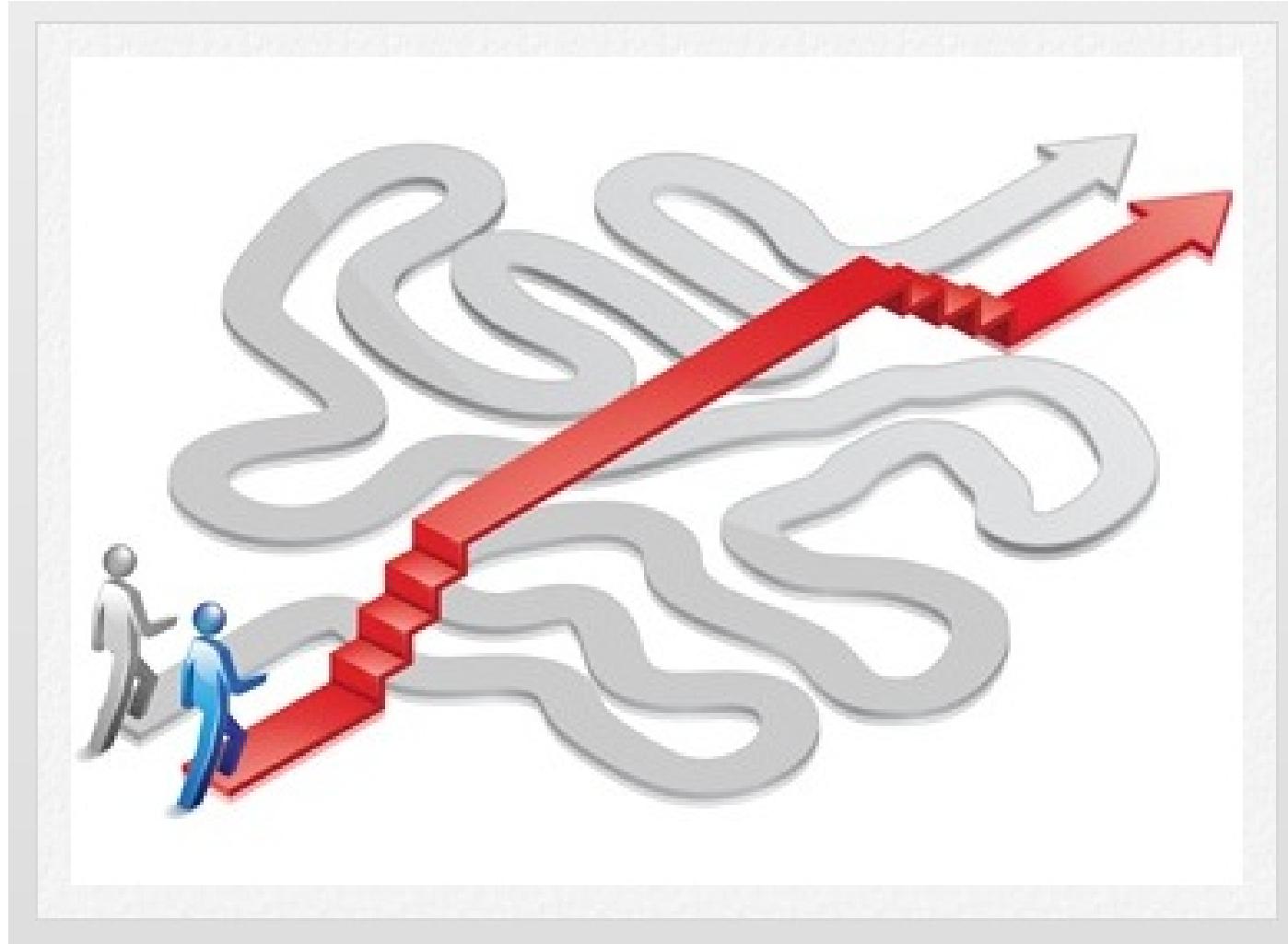


# INTROSPECCIÓN

¿Cual es nuestra Lógica al desarrollar?



# DESARROLLO COMÚN VS GENERADOR



# ABSTRACCION DEL DESARROLLO



DESARROLLADOR



DESARROLLADOR

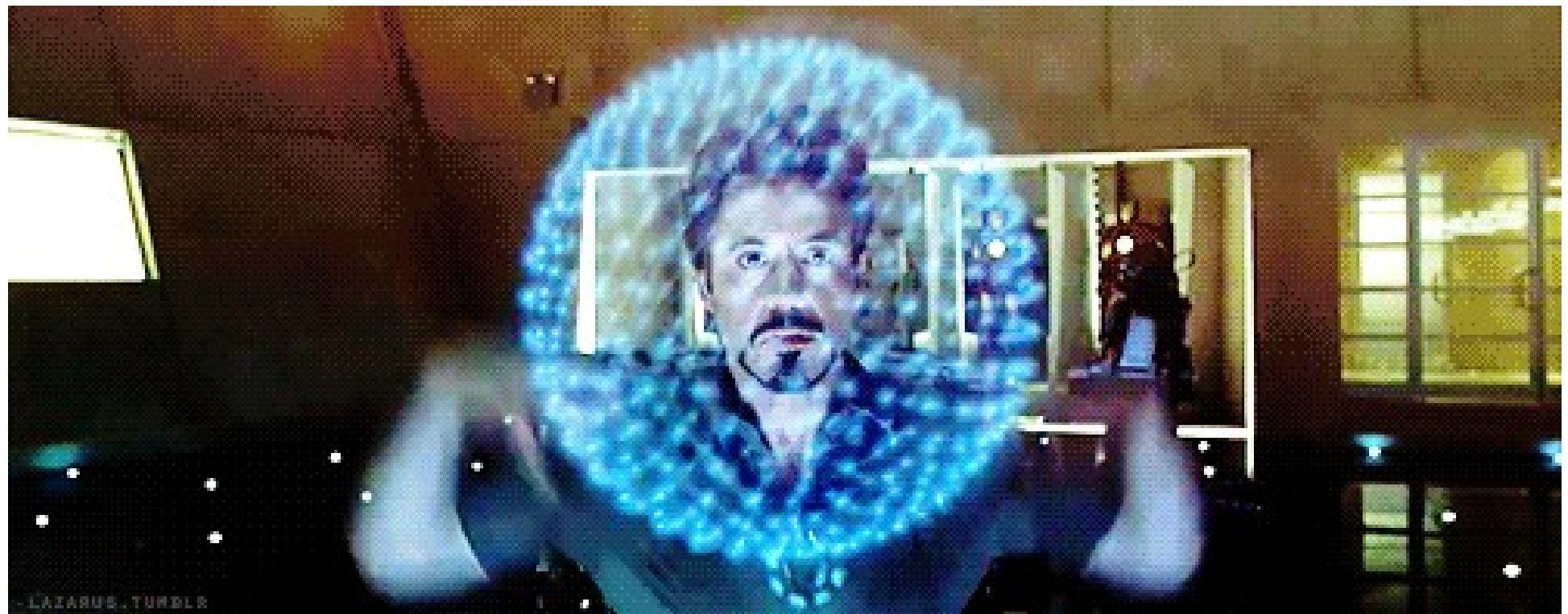


DESARROLLADOR



CLIENTE



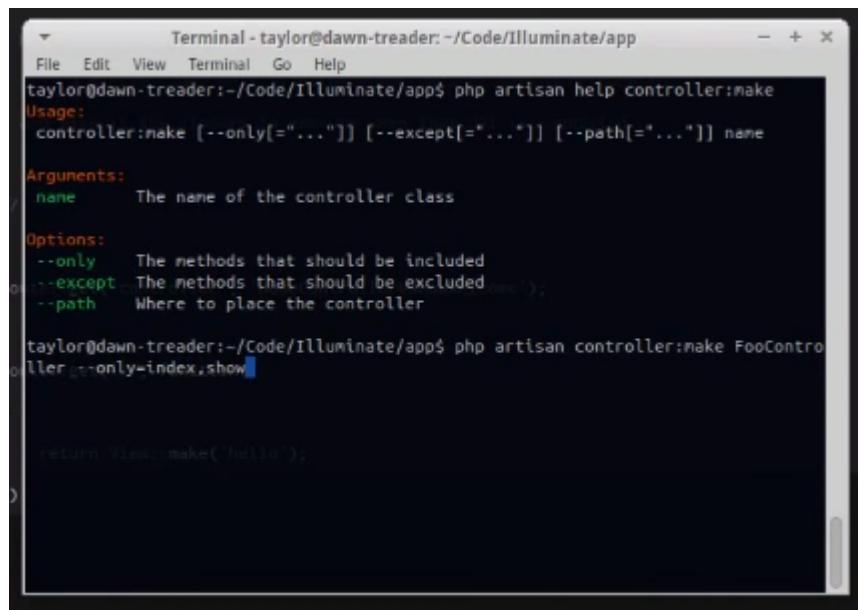


# TIPS GENERALES

- 1) CONOCE A LO QUE TE ENFRENTAS.**
- 2) HAZLO SIMPLE! (divide y vencerás).**
- 3) SEPARA LO ESTÁTICO DE LO VARIABLE.**
- 4) PIENSA EN GRANDE, PIENSA EN MEDIO Y PIENSA EN CHICO.**

# TIPOS DE GENERADORES.

TERMINAL



```
Terminal - taylor@dawn-treader:~/Code/Illuminate/app
File Edit View Terminal Go Help
taylor@dawn-treader:~/Code/Illuminate/app$ php artisan help controller:make
Usage:
controller:make [--only="..."] [--except="..."] [--path="..."] name

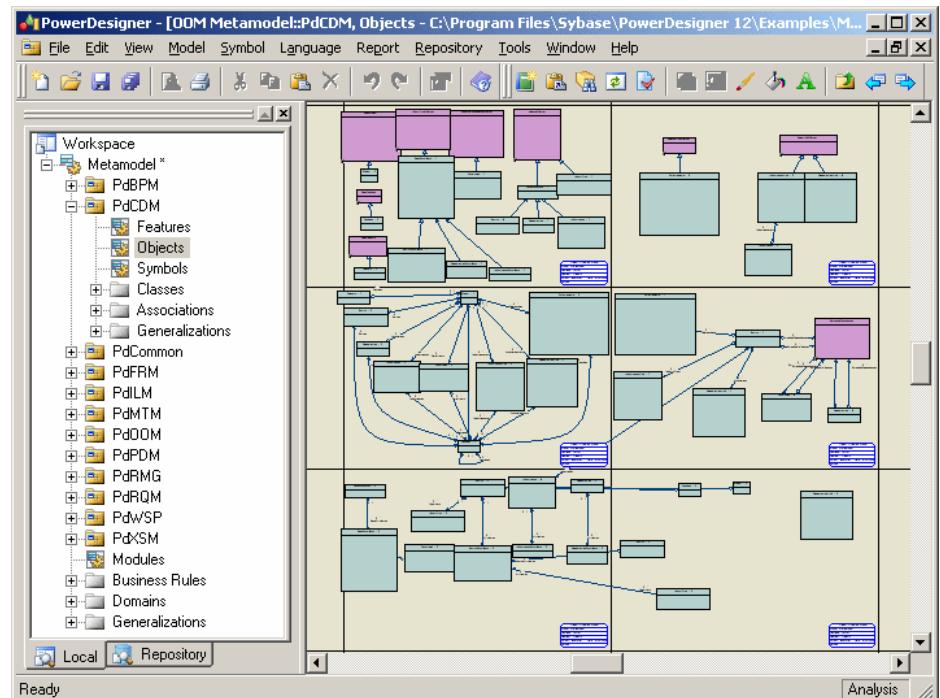
Arguments:
name      The name of the controller class

Options:
--only     The methods that should be included
--except   The methods that should be excluded
--path     Where to place the controller

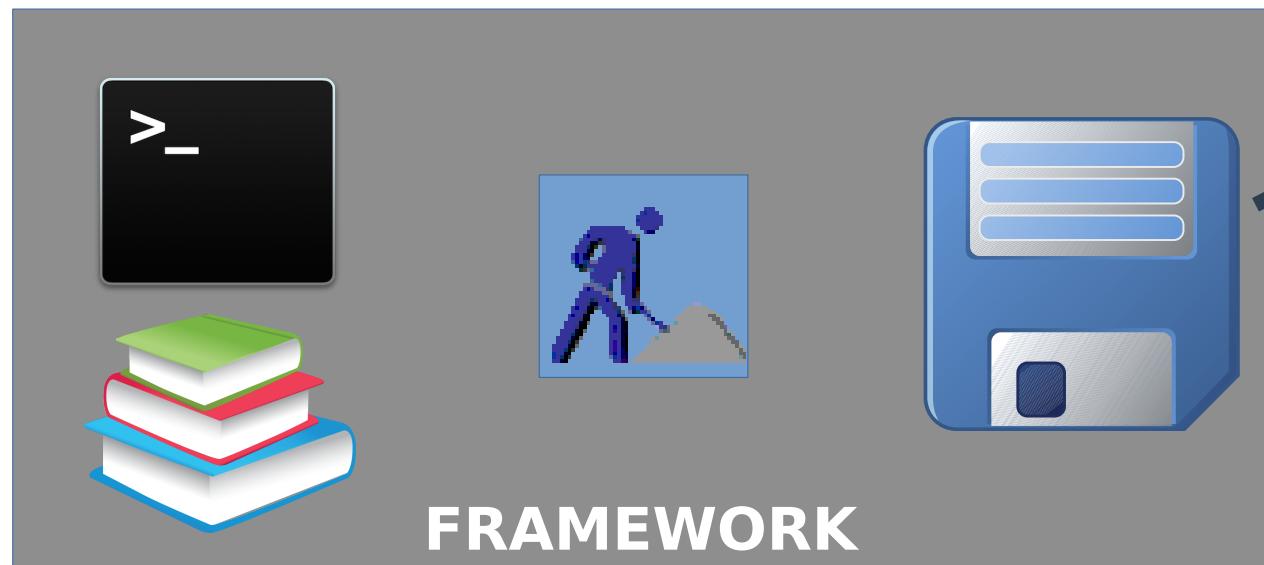
taylor@dawn-treader:~/Code/Illuminate/app$ php artisan controller:make FooController --only=index,show

return View::make('hello');
```

INTERFAZ GRÁFICA

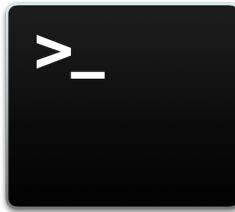
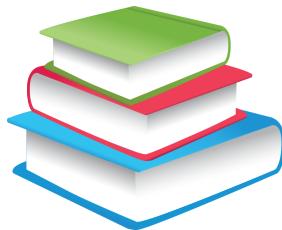


# GENERADOR Y FRAMEWORK



DESARROLLO

# GENERADOR Y FRAMEWORK



# DESVENTAJAS

- Dificultad en gestionar las personalización en la solución.
  - Se necesita analizar, pensar y diseñar profundamente la tecnología, lenguaje o característica a generar. ??????
  - MALA CALIDAD! :O

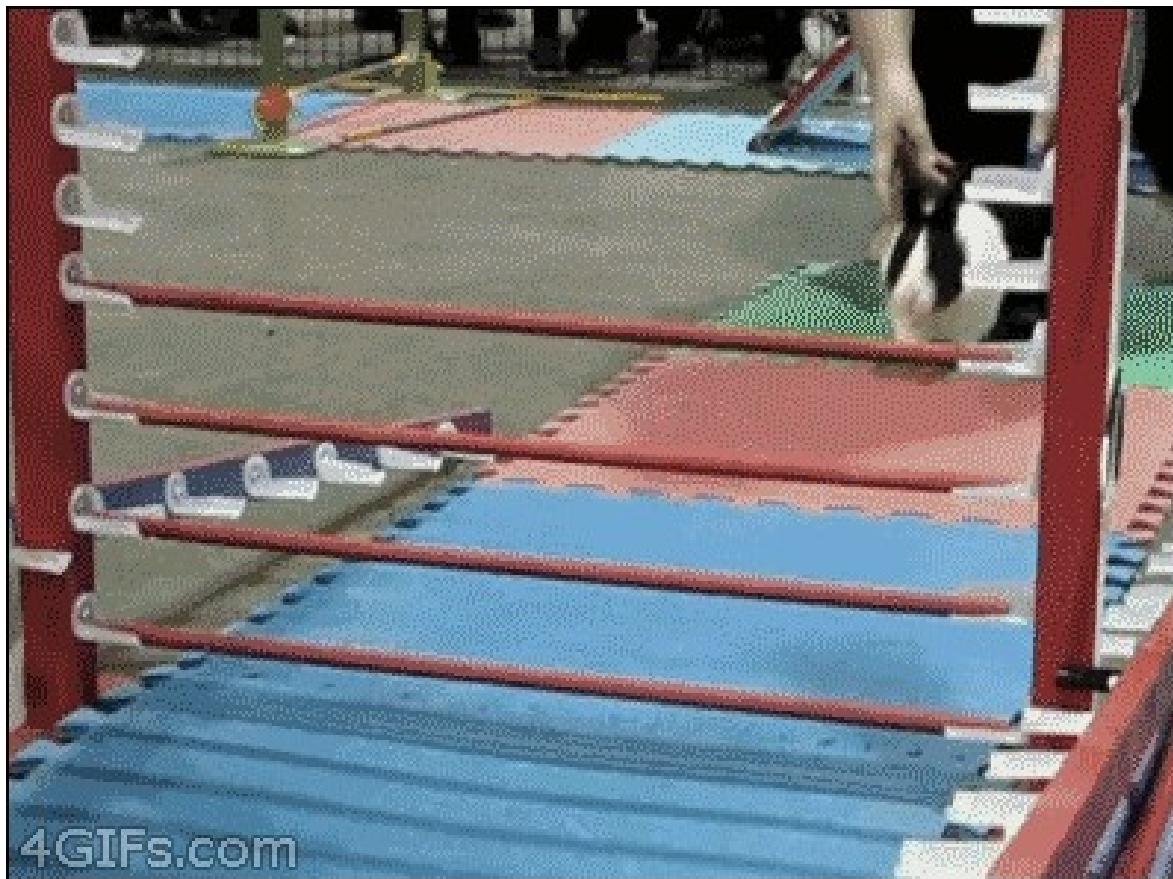


# VENTAJAS

- **Minimiza el tiempo de desarrollo en código repetitivo.**
- **TODO código se puede procesar.**
- **Incluso con FRAMEWORK.**
- **Puedes añadir nuevas características cuando la necesitas o al vuelo.**

# VENTAJAS

**PUEDES HACERLO COMO TU QUIERAS!**



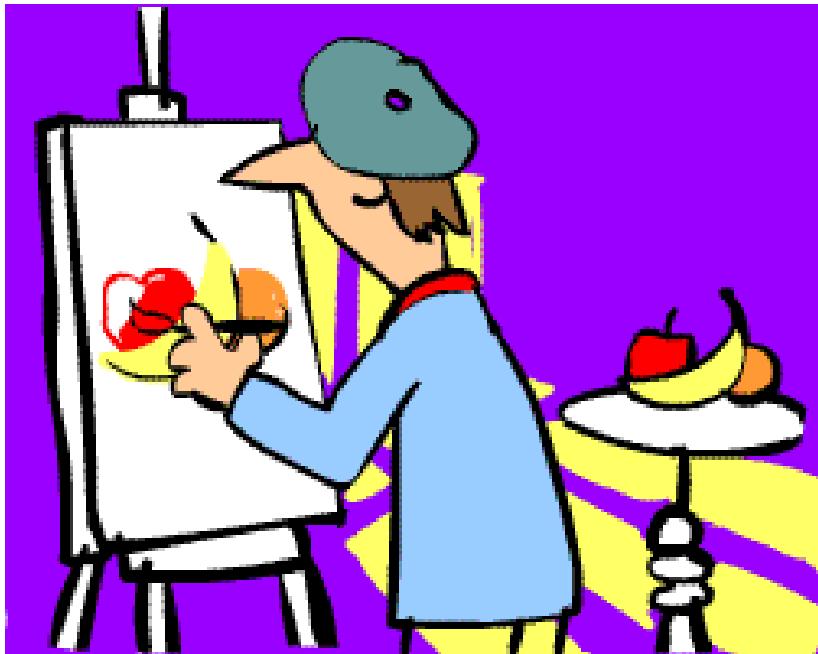
4GIFs.com

# VENTAJAS

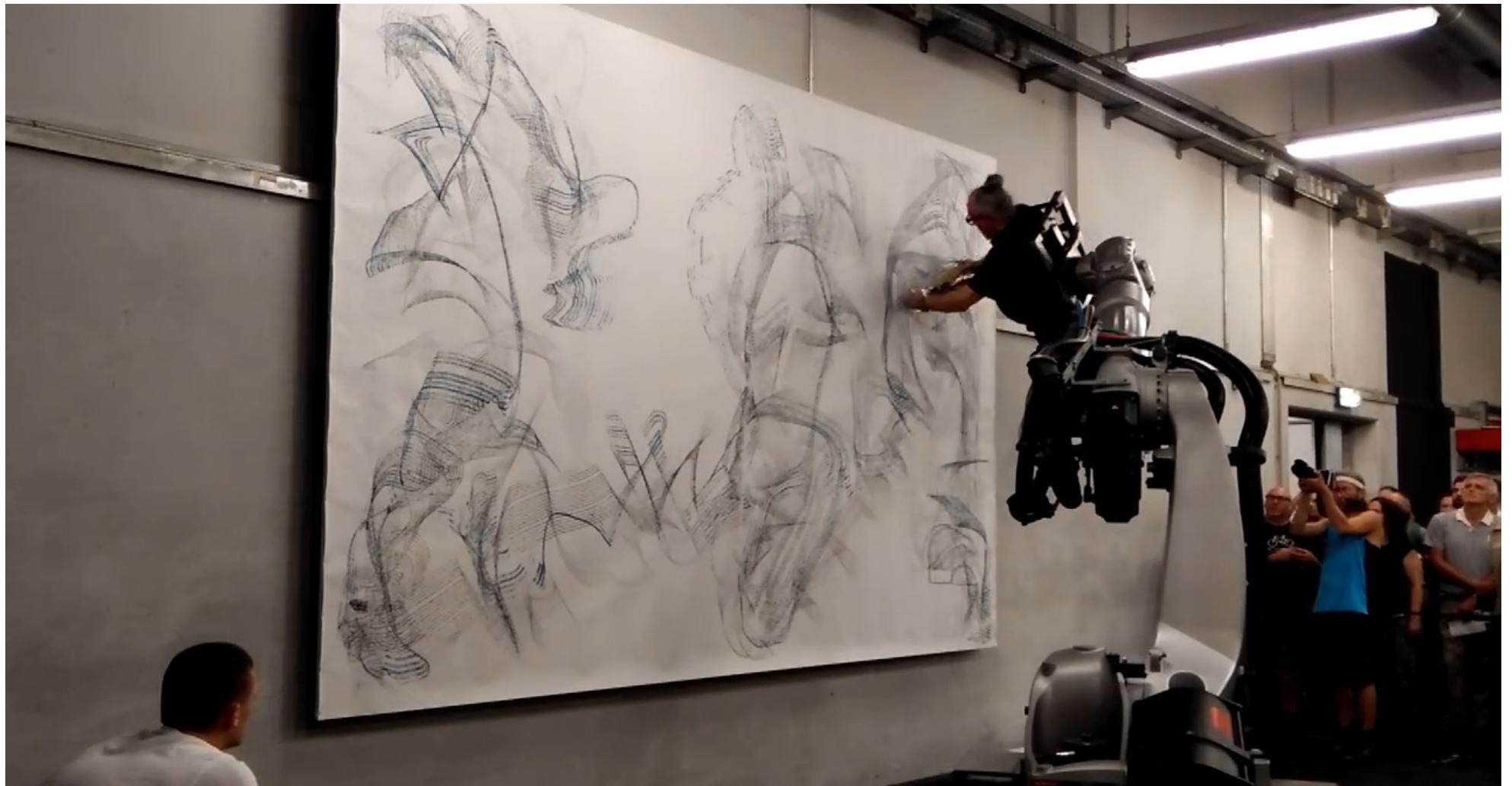
SI REINVENTAS LA RUEDA...



# CONCLUSION



# NO HAY LIMITES



# GRACIAS