ZdGravatar URL
for Real Studio

Put a Gravatar in your app

zdGravatar URL is a class written in REALbasic. It allows you to use the Gravatar.com API by generating the URL needed to retrieve a Gravatar member's avatar given his/ her email address.

zdGravatarURL can handle all functionalities provided by the Gravatar API for avatar:

- No email address embedded in the generated URL. Only a 128 bits hash
- The avatar's size can be customized from 1 pixel up to 2048 pixels
- Use predefined default avatars or your own custom picture if the address email is unknown to Gravatar's server
- The display of the default avatar can be forced for testing purpose
- 4 rating levels available for returned avatar: G, PG, R, X
- A secured URL ('https://') can be generated if needed
- Optional file-type extension .jpg on demand for compatibility purpose
- No needs of an API key for your application and no subscription required

Gravatar URL User's Guide

Getting started

Using zdGravatarURL is very simple. You just have to import the zdGravatarURL.rbo file in your Real Studio project. To do this, use the Import command from the File menu and navigate to the zdGravatarURL file location. You can also drag & drop the zdGravatarURL class from one project window to another one.

Properties

- **`EmailAddress As String`**

Every Gravatar member is identified by his/her email address. This property should contain the member's address for which you want to retrieve the avatar.

```
// Simple use of zdGravatarURL
Dim theAvatar As New zdGravatarURL
theAvatar.EmailAddress = "example@domain.com"
HTMLViewer1.LoadPage theAvatar.AvatarURL
```

Important: The member's email address never appears in the URL generated by zdGravatarURL. A MD5 128-bits hash calculated from the specific email address requested is used to identify the Gravatar member's account.

- **`DefaultImage As String`**

If the MD5 hash isn't recognized, then the server sends a default picture. If you prefer, you can use your own customized pictures as a default pictures by passing its URL as a string to the DefaultImage property. There are a few conditions which must be met for default image URL:
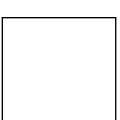
1. MUST be publicly available (e.g. cannot be on an intranet, on a local development machine, behind HTTP Auth or some other firewall etc)
2. MUST be accessible via the HTTP or HTTPS protocol on the standard ports, 80 and 443, respectively
3. MUST have a recognizable image extension (jpg, jpeg, gif, png)
4. MUST NOT include a query string (if it does, it will be ignored)

Default images are passed through a security scan to avoid malicious content.

```
// Use of a custom default avatar URL
Dim theAvatar As New zdGravatarURL
theAvatar.EmailAddress = "example@domain.com"
// Set the default picture URL
theAvatar.DefaultImage = "http://www.mywebsite.com/images/mydefaultavatar.png"
// Display the avatar in a HTMLViewer
HTMLViewer1.LoadPage theAvatar.AvatarURL
```

The Gravatar API also provides a set of predefined default avatars. Some of them can vary depending on the hash. To access this set of pictures you can use the constants described in the table after the code example:

```
// Using one of the Gravatar default image
Dim theAvatar As New zdGravatarURL
theAvatar.EmailAddress = "example@domain.com"
// We choose the mistery man avatar
theAvatar.DefaultImage = zdGravatarURL.kDefaultMisteryMan
// Display the avatar in a HTMLViewer
HTMLViewer1.LoadPage theAvatar.AvatarURLtheAvatar.AvatarURL
```

Avatar	Constant	Value	Description
	kDefaultGravatar	*An empty string*	This is the generic image returned by Gravatar when the **DefaultImage** property is not defined.
	kDefaultMysteryMan	"mm"	A simple, cartoon-style silhouetted outline of a person. Does not vary by email hash.
	kDefaultIdentIcon	"identicon"	A geometric pattern based on the email hash.
	kDefaultMonsterID	"monsterid"	A generated 'monster' with different colors, faces, etc...
	kDefaultWavatar	"wavatar"	A generated faces with different backgrounds and features.
	kDefaultRetro	"retro"	Awesome generated, 8-bits arcade-style pixelated faces.
	kDefaultBlank	"blank"	A transparent PNG image. *The border has been added for demonstration purposes*.
None	**kDefault404**	"404"	Do not load any image if none is associated with the email hash. Instead return an HTTP 404 (file not found) response.

- **ForceDefault As Boolean**

If this property is set to true, Gravatar will always serve your application with the default image as set in the **DefaultImage**.

```
// Use of ForceDefault
Dim theAvatar As New zdGravatarURL
theAvatar.EmailAddress = "example@domain.com"
theAvatar.DefaultImage = zdGravatarURL.kDefaultWavatar

#if DebugBuild Then
  // Force the use of the default avatar when running in debug mode.
  theAvatar.ForceDefault = True
#endif

HTMLViewer1.LoadPage theAvatar.AvatarURL
```

- **Rating As String**

Gravatar allows members to self-rate their images so that they can indicate if an image is appropriate for a certain audience. By default, only 'G' rated images are displayed unless you set the **Rating** property to a higher level.

zdGravatarURL implements 4 constants to set the level of rating you want. If there is no pictures matching this rating level, then Gravatar will search for an image with a lower level of rating. If there no image available, then Gravatar will return the default image as set with the **DefaultImage** property.

Rating	Constant	Value	Description	Can send back
G	**kRatingG**	"g"	Suitable for all audience	G
PG	**kRatingPG**	"pg"	Rude gestures, provocatively dressed individuals, the lesser swear words, mild violence.	PG, G
R	**kRatingR**	"r"	Harsh profanity, intense violence,nudity, hard drug use.	R, PG, G
X	**kRatingX**	"x"	Hardcore sexual imagery, extremely disturbing violence.	X, R, PG, G

- **Size As Integer**

By default, the pictures served by Gravatar are scaled to 80 x 80 pixels. If you want another size, you can set this property to this size within the 1 to 2048 pixels range. Note that avatars are always square. If you want to go back to the default size, use **zdGravatarURL.kSizeDefault** constant.

```
// Using the Size property
Dim theAvatar As New zdGravatarURL
theAvatar.EmailAddress = "example@domain.com"

// We need a 256 x 256 pixels image
theAvatar.Size = 256

HTMLViewer1.LoadPage theAvatar.AvatarURL HTMLViewer1 = theAvatar.AvatarURL
```

- **UseSSL As Boolean**

If your are serving pages over SSL ('https://' prefix), then you want to serve your avatar over SSL too to avoid annoying browser warnings. For this purpose, set this property to **True**.

Shared Methods

- **Function VersionSTring() As String** *(introduced in v1.1)*

Return the version of the zdGravatarURL class. The version 1.1 of zdGravatarURL will return the string "1.1".

Methods

- **Function EmailAddressHash(inEmailAddress As String = "") As String** *(introduced in v1.1)*

It returns the hash for the passed email address. If inEmailAdress is empty it returns the hash for the content of the EmailAddress property.

- **Function URL() As String**

Return a properly formatted URL given all the settings of the instance of the zdGravatarURL class. Use this URL in your application when you want to retrieve the Gravatar of your user.

```
//-- Simple use of zdGravatarURL

// Create a new instance of zdGravatarURL
Dim theAvatar As New zdGravatarURL
// Set the user email address
theAvatar.EmailAddress = "example@domain.com"
// Build the Gravatar URL and display the avatar in a HTMLViewer
HTMLViewer1.LoadPage theAvatar.AvatarURL
```

- **Function URL(inEmailAddress As String) As String**

Return a properly formatted URL given all the settings of the instance of the zdGravatarURL class, except for the **EmailAddress** property. The email address passed to the function is used to generate the hash used to identify the Gravatar member's account.

Calling this function doesn't affect the **EmailAddress** property's content.

The code example below described how to use this function to create an array of Gravatar URLs from an array of email addresses and all based on the same settings.

```
Function BuildURLsArray(inAddresses() As String) As String()

  //-- Return an array of Gravatar URLs generated from an array of addresses.
  // Note that the EmailAddress property is not used here.

  // Instantiate and setup a zdGravatarURL
  Dim theAvatar As New zdGravatarURL
  theAvatar.DefaultImage = zdGravatarURL.kDefaultIconMonsterID
  theAvatar.Rating = zdGravatarURL.kRatingPG
  theAvatar.Size = 128

  // Creating an array of URLs of the same size
  Dim theLastIndex As Integer = inAddresses.Ubound
  Dim theURLs() As String
  Redim theURLs( theLastIndex )

  // Loop through all provided addresses
  For i As Integer = 0 To theLastIndex
    // Generate the i-th URL
    theURLs( i ) = theAvatar.URL( inAddresses( i ) )
  Next

  // Return the result
  Return theURLs

End Function
```

Requirements

zdGravatarURL works with any type of project in Real Studio: desktop, web and console and you can use it with any IDE release since 2009r4 and on any platform: Mac OS X, Windows, Linux.

License

The zdGravatarURL and its demo application are distributed under the X11 License:

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This documentation contains excerpts of text from the Gravatar website.

Contact:

The zdGravatarURL project is hosted at http://code.google.com/p/zd-gravatarurl/. For any question about zdGravatarURL, feel free to contact us with the email address starting by 'zaatar' provided in the members list in the Project home page. If you find a bug in zdGravatarURL or an error in this documentation, please report it with the issue system at http://code.google.com/p/zd-gravatarurl/issues/list.