

**Student Name: Gary Healy**

**Student Number: C12726809**

**Project URL: [http://1-dot-picboxgaryhealy.appspot.com/picture\\_box](http://1-dot-picboxgaryhealy.appspot.com/picture_box)**

**Project on GitHub:  
<https://github.com/gazh1987/dt2283cloud-CA2>**

**Cloud CA2 – Picture Box**



**Contents**

**User Guide: Page2**

**Developer Guide: Page 7**

## User Guide

Picture Box is a new Web Application that allows users to upload images for public or private viewing.

On the main screen of the website there is a welcome message followed by a link to a login page if the user is logged out or a link to a logout screen if the user is logged in. There is also a link to an upload page for logged in users that redirects users to a page where they can upload images to the site.

Below the welcome message and login/logout and upload image links you can find all the images that were uploaded by various users of the web application. Below each image the user can see extra information about each image. The extra information is:

- **FileName:** This is the name of the file followed by the type of file it is.  
E.g. Koala.jpg means that the koala part is the name of the file and the .jpg means that the file is a jpeg image file.
- **Size:** This is the size of the file in bytes.
- **Upload Date:** This is the date that the image was uploaded.
- **Image Status:** This tells the user whether or not the image is a public or private image.
- **Email of Uploader:** This displays the email address of the user that uploaded the image.

Below this information is either one or two buttons, depending what user is logged in. The first button is a “**View Larger Image**” button that allows the user to view a larger version of the image. This button is universal across each user. The second button is a “**Delete Image**” button. This button allows the user to delete the uploaded image. Administrators of the site can delete any image they please but a member of a site can only delete images he/she uploaded to the site. A guest is not allowed to delete any image. For more information on the privileges of each user, see the appropriate section below.

## User Guide for Guest

When a guest visits the website, he/she will be presented with the main page in the website. A guest can only view public images.

### View Larger Images

If the guest would like to view a larger version of the image, he/she can click the “**View Larger Image**” button.

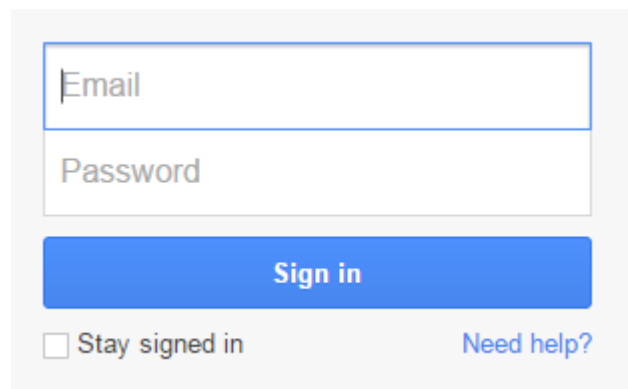
**FileName:** Koala.jpg  
**Size:** 780831  
**Upload Date:** Wed Dec 10 14:41:12 UTC 2014  
**Image Status:** public  
**Email of Uploader:** gazh1987gae@gmail.com  
[View Larger Image](#)

### Log In

If a guest would like to log in, he/she can do so by clicking the link located below the “Welcome Guest” welcome message. Its says “**You can sign in here.**”

**Welcome Guest**  
**You can [sign in here.](#)**

When a guest clicks this link he/she will be redirected to the Gmail login page. The user should enter his email address and password in the text field provided and press sign in. A user must have a valid Gmail email address to use picture box.

A screenshot of the Gmail login interface. It features two text input fields: the top one is labeled 'Email' and the bottom one is labeled 'Password'. Below these fields is a prominent blue button with the text 'Sign in'. At the bottom left, there is a checkbox followed by the text 'Stay signed in'. At the bottom right, there is a blue link that says 'Need help?'.

## User Guide for Member

***For information on how to log in, see “User guide for Guest” section and see [Log In](#).***

Once logged into the site as a member, the user will be presented with the same style of interface as a guest would but with added functionality. A member can see all images, public and private.

### Upload Image

A guest can also upload images. To do this the user must click on the upload image link located at the top of the page.

## Welcome Member

You are logged in as (email): **gazh1987@gmail.com**

You can [sign out here](#).

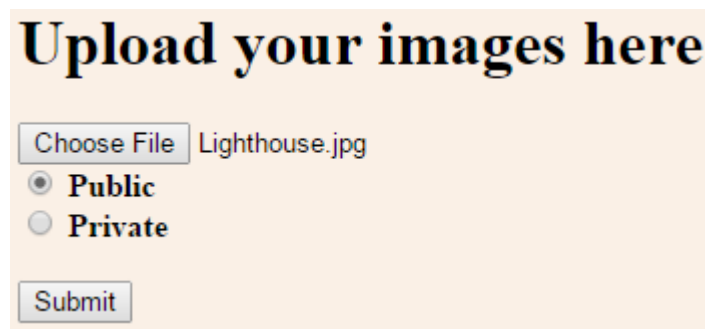
[Upload Image](#)

*If you cannot view your uploaded image, try refreshing the page.*

When the user clicks this link he/she will be presented with the upload page. For a user to upload an image, he/she must click the “**Choose File**” button and browse their computer and click the image they wish to upload. When the file is uploaded the name of the file will appear beside the “**Choose File**” button. If no file is uploaded then “**No file chosen**” will be displayed beside the button.

Next, the user must choose whether they want the image to be a public image or a private image. The user must click the appropriate radio button that corresponds with their choice.

When finished, the user clicks the “**Submit**” button. This will upload the image to the site.



**Upload your images here**

Lighthouse.jpg

☒ **Public**

☐ **Private**

To view the image on the site, the user must scroll to where it is displayed.

### Delete Image

A member is only allowed to delete images that he/she uploaded to the site. To do this the user should scroll to the uploaded image and click the “**Delete Image**” button. This will erase the image from the application.



**Warning:** *You will not be prompted with an “are you sure you want to delete this image message and you cannot restore a deleted image. Once the button is pressed the image is deleted for good and you must upload it again.*

### Log Out

If a user would like to log out of the app, he/she can find the log out link at the top of the page. It says **“You can sign out here”**. To log out, the user should click this link.

## Welcome Member

You are logged in as (email): **gazh1987@gmail.com**

You can [sign out here](#).

[Upload Image](#)

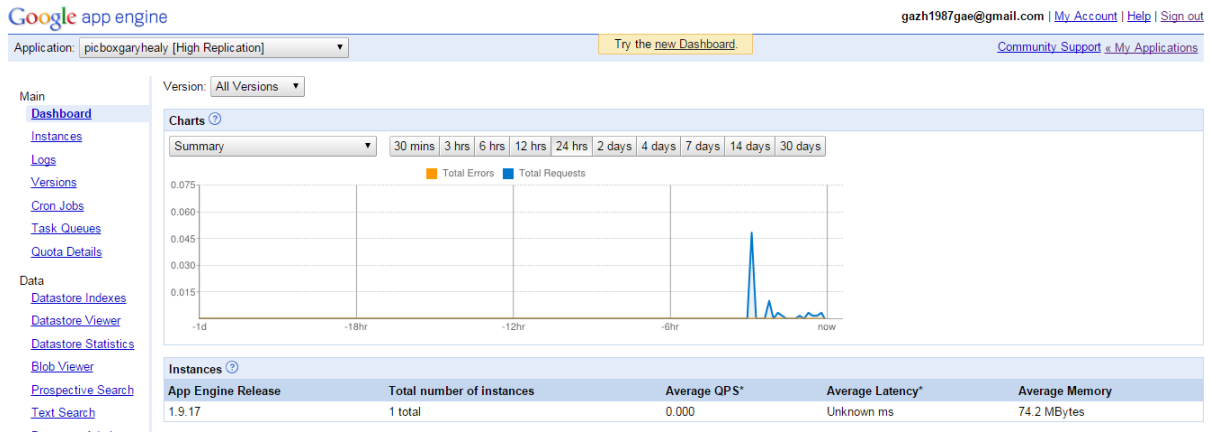
*If you cannot view your uploaded image, try refreshing the page.*

## User Guide for Administrator

The administrator of the system can do all the same things as a member, only an administrator can delete any image he/she wishes. For information on how to do this, see the **“Delete Image”** section in the **“User Guide for Image”** section.

### Deleting blob store and data store data in the Google App Engine Dashboard

An administrator can also delete images and extra data about images by visiting the dashboard in the app engine. To do this, he/she must log in to **“appengine.google.com”** login using his/her Gmail email and password. This will bring the administrator to the dashboard.



To delete an image from the blobstore the administrator should click the **“Blob Viewer”** link on the left hand side of the screen underneath the heading **“Data”**. This will bring the administrator to the Blob Viewer screen.

Prev 30 1-6 Next 30

Order: [Ascending](#) | [Descending](#)

<input type="checkbox"/> File Name	Content Type	Size	Creation Date
<input checked="" type="checkbox"/> <a href="#">Lighthouse.jpg</a>	image/jpeg	548.1 KBytes	2014-12-10 09:15:35
<input type="checkbox"/> <a href="#">Koala.jpg</a>	image/jpeg	762.5 KBytes	2014-12-10 06:41:12
<input type="checkbox"/> <a href="#">Tulips.jpg</a>	image/jpeg	606.3 KBytes	2014-12-10 06:38:59
<input type="checkbox"/> <a href="#">Jellyfish.jpg</a>	image/jpeg	757.5 KBytes	2014-12-10 06:38:16
<input type="checkbox"/> <a href="#">Penguins.jpg</a>	image/jpeg	759.6 KBytes	2014-12-10 06:37:57
<input type="checkbox"/> <a href="#">Desert.jpg</a>	image/jpeg	826.1 KBytes	2014-12-10 06:37:18

Delete

Prev 30 1-6 Next 30

To delete an image, the administrator should click the checkbox to the left of the image he/she wants to delete and then click the **“Delete”** button at the bottom of the list. This will delete the image from the web application. The user can check as many images as he/she wants to delete.

To delete extra data associated with the image from the datastore the administrator should click the **“Datastore Viewer”** link on the left hand side of the screen underneath the heading **“Data”**. This will bring the administrator to the Datastore viewer screen.

Prev 20 1-7 Next 20

ID/Name	blobKey	imageStatus	user
<a href="#">id-5028441721823232</a>	AMfiv67RAevc5v2N4V77wXn8eRH/Eut2wmpaPz8ffm8gPp4H-M-FYv0X32V5aZnCr89Yv6t8GduGZi-hZ7ky_uocpv1Tw0eL1M5r1tccm/WGtTGT0OoCn8hvaRCNbd2m3gX1NaEuvHUAwA9fN_uYogMloque45yK8kuk1Gg	private	gabh1987gae@gmail.com
<a href="#">id-502949534213120</a>	AMfiv67Y0uXk02zyE2a-vdBIQdG2hIPvZnDiB-Gu8Y1Nkiskf1urtpoCX_ZqyaUWwAdH9FQT-58U9UfWwKAB-AIFP5-Zkw8H5a35LQXV1X1DpRdP8gJHm90taZ28X1Mg7RWf4hqvkt05CPY1MbkU4ejut1GXY1czy2FcbvJM	public	gabh1987gae@gmail.com
<a href="#">id-503449504728932</a>	AMfiv644XIX48Decoyg38ndA3v4Y1D0_8mgwhYbvV0hGkqTVd8fHwYF2aWwV1CMNtaZdRd4qClyhZ8J28FAXA4uvBxt1P1VjgaaH1aRsaWEVvmlCBY2qk1MMeLUPUsh1AC1tcsTSY1QJ2N4A-Wv8nH4AeX_g_W3kMoc30F3oo	private	gabh1987gae@gmail.com
<a href="#">id-5049391875244544</a>	AMfiv64P7eQgw2nXpWpa3pxiO2CfVJub8u0gUjwUEFchQiaH43aB1X1B7FNQZ8mjb28COX18qmY1Q2MIOH2X863waTPURO7eg55LmVjyq87hQELe_8ap8a5Anhy_eFNyYUAMXv9VLMV1EDv1tghk4aZ3cgvKvRRC4dhu1EocTu0	public	gabh1987gae@gmail.com
<a href="#">id-5070720295738888</a>	AMfiv6RLZ57Hy0DwhY0PRV_9vY3aOnfY0Y5p-u4ZV7z0Y0Mkwa2RYXyBup-8k1axL7AUenD28bJ8yMvWUJy411i0d5fclJ5au5g7vE7g3MjU9k4FgD4H1RnzgKx4-VYFaw_d_znDk1Bdaz4U5ghvW8aPQIB9V_RwU	public	gabh1987gae@gmail.com
<a href="#">id-50716999101812738</a>	AMfiv675DUaZRPDk2899AKAG18zkrSWaGTBRPhz_BuF8Xn14YXJm2E-VJhRnskaPGCEmY18kDULURyQalefhhsCKnNAK1Gp8Bxq8BxP6A98Hv2skT9-TtnoopKTO-V8LxMLTg5QmY10GJF42CGWULGJ2Dw74pm-aJw	public	gabh1987@gmail.com
<a href="#">id-50722849837445120</a>	AMfiv686vOZCQXGy18k8LZDhwg47mWp/aPIFUE1MgfyhneE8f83TVN1Q76FJVv9gDUuJdU04M-OYWIPJygS_MDR-8V7DY8Mvys-XEgocUf-PN7ZTSg5_jmAb-	public	gabh1987@gmail.com

Delete

Flush Memcache

Prev 20 1-7 Next 20

To delete a datastore entry the administrator should follow the exact same steps as he/she would to delete a blobstore entry. If you delete a datastore entry associated with a blobstore image, some

details about the image will be unavailable in the application, so deleting a datastore entry that is associated with an image that is in the blobstore is not advisable. If the blobstore image has already been deleted then it is ok to delete the datastore entry associated with it.

## Developers Guide

This guide will instruct the developer in steps how to download the source code of Picture Box from Git Hub and deploy to the Google App engine.

1. The developer should open up the Git shell and type “**git clone https://github.com/gazh1987/dt2283cloud-CA2**”. This will clone the Picture Box repository onto the developer’s machine.

```
Windows PowerShell
Copyright (C) 2009 Microsoft Corporation. All rights reserved.

C:\Users\gazh1987\Documents\GitHub [master +13 ~0 -0 ! +6 ~8 -1 !]> git clone https://github.com/gazh1987/dt2283cloud-CA2
```

2. Once the repository has been cloned, the developer should open the “**dt2283cloud-CA2**” repository and copy the “**Picture Box**” file. The developer should then paste this file into his/hers Eclipse workspace.
3. The developer should then open Eclipse and select the Workspace that he/she just copied the Picture Box folder into. When Eclipse opens the user should be able to open the Picture Box project in the package explorer window on the left hand side and browse through the projects files.
4. Now that the project has been downloaded successfully, we need to be able to deploy it to Google App Engine. To do this, the developer must create a new Application on the app engine. Go to <https://appengine.google.com/> and log in. When logged in the developer will be presented with something similar to the page below.

### My Applications

« Prev 20 1-5 of 5 Next 20 »			
Application	Title	Storage Scheme	Status
<a href="#">iecomstudenthealy2garylab5</a>	lab5	High Replication	Running
<a href="#">iedithealy2garylab4app</a>	lab4App	High Replication	Running
<a href="#">ieditstudenthealy2gary</a>	Lab 3 Application	High Replication	Running
<a href="#">ieditstudenthealygarypicb</a>	Picture Box	High Replication	Running
<a href="#">picboxgaryhealy</a>	Picture Box	High Replication	Running
<div>Create Application</div> <div>You have 20 applications remaining.</div>			
« Prev 20 1-5 of 5 Next 20 »			

The developer should click the “**Create Application**” button at the bottom of the list.

5. The developer will be presented with the screen below. He/ She should enter in an “**Application Identifier**” and “**Application Title**” and then click the “**Create Application**” button.

6. This will create a new Application for the developer to deploy Picture Box onto. Next, the developer should go back to Eclipse and right click the Picture Box project and click "Properties".
7. The developer should navigate to **"Google -> App Engine"** from the left hand side menu. This should display a screen like the one below. In the **"Deployment"** section, the developer should enter in the **"Application ID"** of the Application he/she just created on google app engine. When finished, click the **"OK"** button at the bottom of the form.

The screenshot shows the Eclipse IDE's 'App Engine' configuration window. On the left, the 'Google' menu is expanded, and 'App Engine' is selected. The main window is divided into several sections:

- App Engine SDK:** The 'Use Google App Engine' checkbox is checked. Under 'App Engine SDK', 'Use default SDK (App Engine - 1.9.12)' is selected.
- Deployment:** The 'Application ID' field contains 'picboxgaryhealy' and the 'Version' field contains '1'.
- Datastore:** The 'Enable local HRD support' and 'Use Datanucleus JDO/JPA to access the datastore' checkboxes are checked. The 'Datanucleus JDO/JPA version' is set to 'v2'.
- Google Cloud SQL:** The 'Enable Google Cloud SQL' checkbox is unchecked.

At the bottom of the window, there are 'OK' and 'Cancel' buttons.

8. Now the developer should be able to deploy Picture Box to Google app engine. To do this, click the pull down menu next to the google icon on the top of the screen in Eclipse, then click **"Deploy to App Engine"**. When the Application is finished deploying it will open automatically in your browser.



