User Documentation

For Regular Users (User UI):

1. Open your favorite browser on your computer and enter **http://.....amazonaws.com/** in the address bar to access the login page of ImageBay.



Figure 1: Login page of ImageBay

2. If you are first time to ImageBay, please create a new account by clicking on the **SignUP** link on the middle or upper right corner of the login page to access the signup page for creating user account and password. Once finished, please click the Submit button to return to the login page.

Note: Username, Email, Password fields are mandatory. The retyped password must be the same as first password. The username and email address cannot be identical to other users.

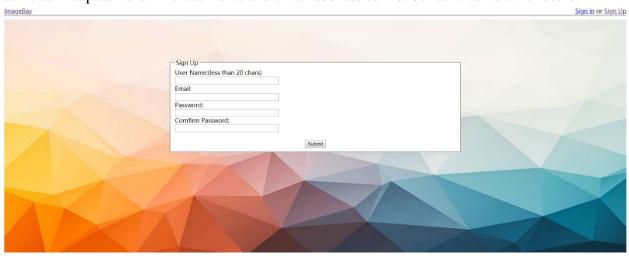


Figure 2: Signup page of ImageBay

3. If you already have an account, please sign in by clicking on the **SignIn** link on the middle of the login page and type in your username and password. By clicking **logIn** button and after verification, you will log into your own homepage.

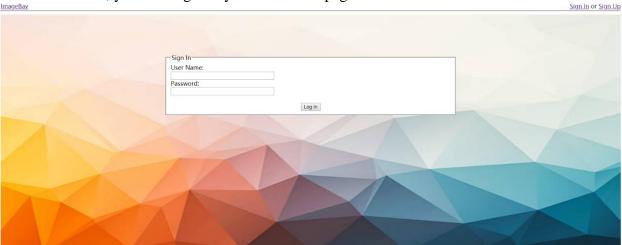


Figure 3: SignIn page of ImageBay

4. Click **Select** button to select pictures you desire to upload and click **upload** button to upload selected image to your own ImageBay. Once finished, the thumbnails of the uploaded pictures will be displayed automatically on the page.

Note: .jpg, .jpeg and .png file type is supported by our application, any other file types will not be accepted.



Figure 4: Thumbnails of uploaded pictures in homepage

5. Click the thumbnails of the uploaded pictures in the homepage, you are able to check this picture's transformations as well as the original pictures. Click **Back to HomePage** on the upper left of the page to return to homepage to upload or view other pictures.

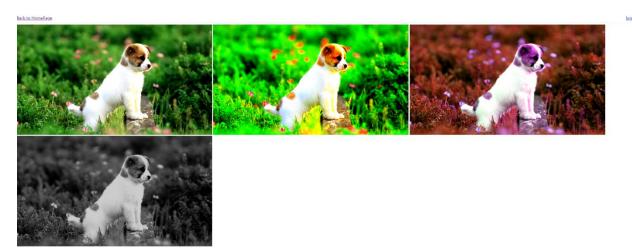


Figure 5: Original and Transformed pictures after clicking its thumbnail

6. Click **logout** link on the upper right of the homepage to log out your account. And you will be redirected to the login page of ImageBay.

For regular user (Manager UI):

- 1. To check the manager instance. You can use .pem file we provided to ssh into manager instance. The IP address of manager instance is '...'. The password is '...'. In the command line, do the steps below:
 - (1) Move pem file "ECE_1779.pem" to the directory ".ssh".
 - (2) SSH into the manager instance using the command: ssh -i .ssh/ECE_1779.pem ubuntu@.... -L 5901:localhost:5901
 - (3) Use the VNC client to log into the manager instance. Here we use the VNC port 5901. The managerUI should already be there. And worker pool is shown on the right side.

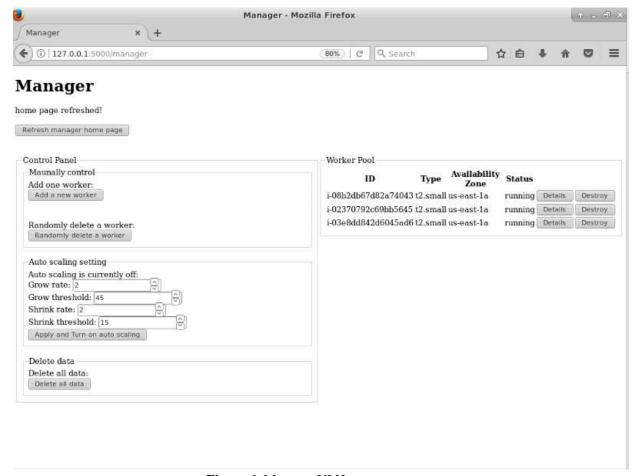


Figure 6: Manager UI Homepage

- 2. Click the **Refresh manager home page** to refresh this page.
- 3. Click **Add a new worker** to manually grow the worker pool by 1.
- 4. Click **Randomly delete a worker** to manually shrink the worker pool by 1. Note that the maximum number of instances is set to be 10, and the minimum is set to be 1.
- 5. By default, the auto scaling is off, but you can set the parameter and turn it on in "Auto scaling setting" by clicking **Apply and Turn on auto scaling**.
 - (1) **Grow rate** sets the ratio by which to expand the worker pool (e.g., a ratio of 2 doubles the number of workers).
 - (2) **Grow threshold** sets CPU threshold for growing the worker pool.
 - (3) **Shrink rate** sets the ratio by which to shrink the worker pool (e.g., a ratio of 4 shuts down 75% of the current workers).
 - (4) **Shrink threshold** sets CPU threshold for shrinking the worker pool
- 6. Click **Delete all data** to delete all data in database together with images in S3 bucket.
- 7. Click **Details** in the worker pool to direct to "Instance Info" page to view the CPU utilization for specific instance.
- 8. Click **Destroy** in the worker pool to manually delete a specific worker instance.

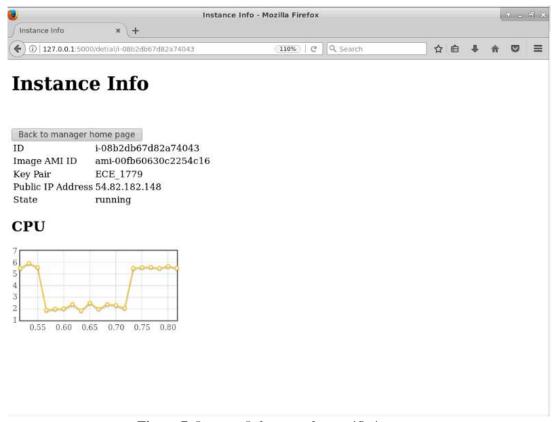


Figure 7: Instance Info page of a specific instance