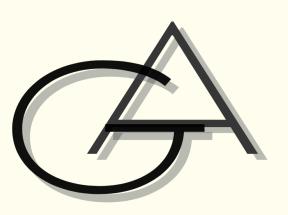






Graphics' Axis: Platform for Graphic Designers with Robust Image Watermarking Technique for Copyright Protection

# **USER MANUAL**



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# GRAPHICS' AXIS: PLATFORM FOR GRAPHIC DESIGNERS WITH ROBUST IMAGE WATERMARKING TECHNIQUE FOR COPYRIGHT PROTECTION

An Undergraduate Thesis

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In Partial Fulfillment

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by

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#### Disclaimer

This software project and its corresponding documentation entitled "Graphics' Axis: Platform For Graphic Designers With Robust Image Watermarking Technique For Copyright Protection" is submitted to the College of Information and Communications Technology, West Visayas State University, in partial fulfillment of the requirements for the degree, Information Technology. It is the product of our own work, except where indicated text.

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## **Getting Started**

# **Introduction**

Graphics' Axis is a platform for graphic designers where their posted images will have an embedded watermark to protect the copyright owner of the users. The users:

- should create their account
- can upload images
- can edit their profile

## **System Requirement**

This website requires:

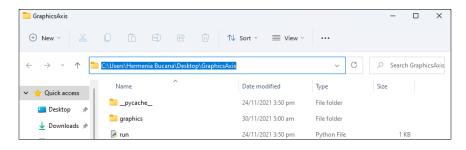
- Internet connection
- Personal Computer/ Laptop/ Tablet

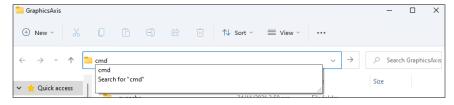
# **Installation**

There is no need to install Graphic's Axis since for now, it is only available on website.

#### Download and system setup/run on local web server

- Download zip folder of the system from: (insert link file directory of system).
- Extract the downloaded zip file of the system.
- Open the extracted folder of the system.
- On the folder path directory, click and type "cmd" to open the command prompt.





• To run the program, type "run.py" on the command prompt, and press enter.

```
C:\Windows\System32\cmd.exe

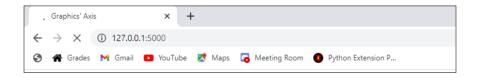
Microsoft Windows [Version 10.0.22000.493]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Hermenia Bucana\Desktop\GraphicsAxis>run.py_
```

• Open the application by copying the local link provided (the highlighted one).

```
C:\Users\Hermenia Bucana\AppData\Roaming\Python\Python39\site-packages\flask_sqlalchemy\__init__.py:872: FSADeprecationW
arning: SQLALCHEMY TRACK_MODIFICATIONS adds significant overhead and will be disabled by default in the future. Set it
to True or False to suppress this warning.
warnings.warn(FSADeprecationWarning(
* Debuggger is active!
* Debugger PIN: 446-468-916
* Running on http://127.0.0.1:5000/
```

• Lastly, paste the copied URL address on your browser.



#### **Libraries/Installation Requirements**

Here are the python libraries needed to run the application:

#### # Flask 2.0.1

Flask is a Python framework that is used for building web applications.

#### Installation

Within the activated environment, use the following command to install Flask:

-pip install Flask

#### Usage

-From flask import Flask

### #Flask-SQLAlchemy 2.5.1

Flask-SQLAlchemy is an extension for Flask that adds support for SQLAlchemy to your application.

#### Installation

You can install SQLAlchemy using this source:

https://pypi.org/project/Flask-SQLAlchemy/

or simply within the activated environment, use the following command to install SQLAlchemy:

-pip install Flask-SQLAlchemy

### Usage

-From flask sglalchemy import SQLAlchemy

## #Flask-Bcrypt 0.7.1

Bcrypt hashing for your Flask.

#### Installation

You can install Flask-Bcrypt 0.7.1 using this source:

https://pypi.org/project/Flask-Bcrypt/

or simply within the activated environment, use the following command to install Flask-Bcrypt:

-pip install Flask-Bcrypt

#### Usage

-From flask\_bcrypt import Bcrypt

#### #Flask-WTF

Simple integration of Flask and WTForms, including CSRF, file upload, and reCAPTCHA.

#### Installation

You can install Flask-WTF using this source:

https://pypi.org/project/Flask-WTF/

or simply within the activated environment, use the following command to install Flask-WTF:

-pip install Flask-WTF

#### Usage

-From flask wtf import FlaskForm

# # NumPy

NumPy is the fundamental package for array computing with Python.

Installation

Within the activated environment, use the following command to install NumPy:

-m pip install numpy == 1.21.4

Usage

import numpy as np

## #opency-python 4.5.5.64

Wrapper package for OpenCV python bindings.

Installation

You can install opency-python using this source:

https://pypi.org/project/opencv-python/

or simply within the activated environment, use the following command to install SQLAlchemy:

-pip install opency-python

Usage

-import cv2

#### #WTForms 3.0.1

Form validation and rendering for Python web development.

Installation

You can install Flask-Bcrypt 0.7.1 using this source:

https://pypi.org/project/WTForms/

or simply within the activated environment, use the following command to install WTForms:

-pip install WTForms

Usage

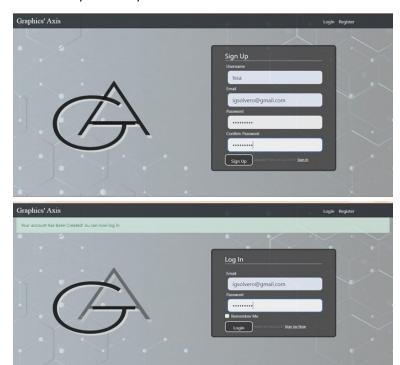
-from wtforms import StringField, PasswordField, SubmitField, BooleanField, TextAreaField

-from wtforms.validators import DataRequired, Length, Email, Equal-To, ValidationError

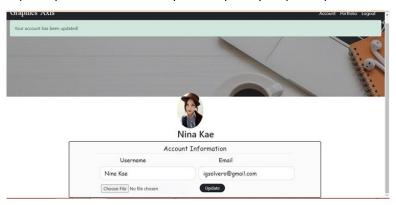
 Open "routes.py" file and change the source path of the static folders of UPLOADS for the original image, DATASET for the watermark logo, and RESULTS for the watermarked image.

# How to use Graphics' Axis

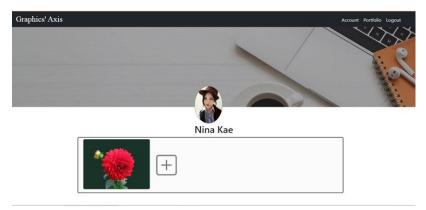
• To create an account, go to the website and click "Register." Click the Log In button if you already have an account.



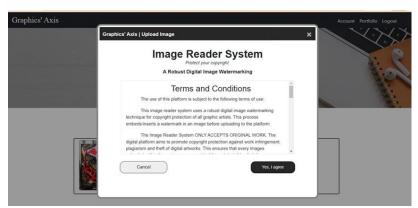
• Update your information and you can upload your profile picture.



You may edit your profile by clinking Account on the upper right corner
of the screen. Portfolio is where you can see and post your images, and
as the Log out button if you want to leave the website. Click the add
button to upload image.



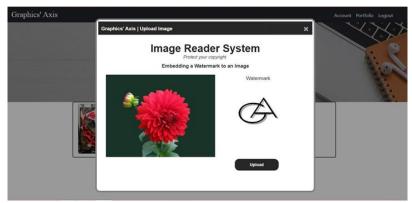
 By clicking the add button, the image reader system will pop up where the Terms and Conditions of using the image watermarking application is stated.



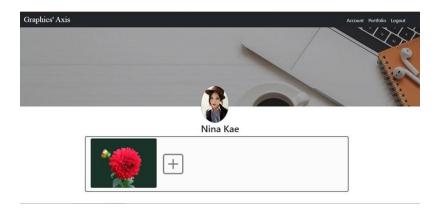
 Once you click agree, you will be asked to upload your image and the website's logo to be embedded to the image is shown on the right side.



You can choose image from your local drive and click upload.



 The image will be uploaded to user's portfolio once the process is done. The user then will be redirected back to their portfolio and the watermarked image is uploaded as well.



• You can repeat the process to add another image. Once your done, you can log out from the website.

### **Troubleshooting**

When a user logs in, the uploaded watermarked image by another user still appears in the portfolio page. If the user wants to upload another image, the previous image is replaced.

### Frequently Asked Questions (FAQs)

Can we upload any image format on the platform?

- For now, our platform can only accept JPEG and PNG image format.

Where will our data be stored?

-The platform uses SQLite Library database to store your data in the cloud.

Is internet connection needed to access the platform?

-Yes, since this is an online platform, internet connection is required.

Is this platform can be accessed using mobile devices?

-Unfortunately, the developers were not able to navigate it on mobile devices. For now, you can use your personal computer to access the platform.

Can I upload images from my own device?

-Yes, the platform accepts images from your local device in JPEG or PNG format.

Is there really an invisible watermark attached in our images once uploaded to the platform?

-Yes absolutely, the developers made sure that the image reader system (which is responsible for the watermarking) functions very well before deploying it to the platform to perform the watermark embedding to the images.

#### **Contact Us**

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