

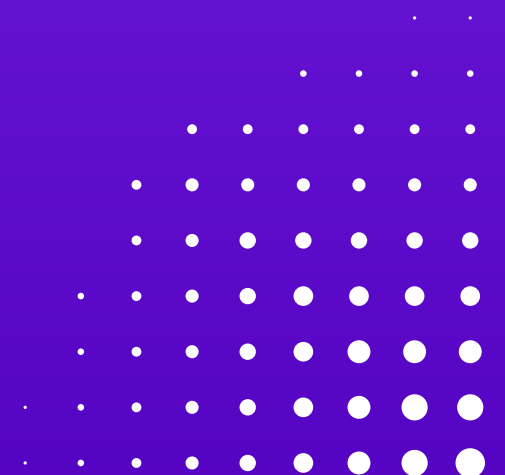


Final Project

PiConfess+: Lightweight Anonymous Confession App on Raspberry Pi

Made by
Group
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Date
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Repository & Video Links

Below are attached our Final Project Youtube video and our Github Repository for this project.



Video

<https://www.youtube.com/watch?v=DwVm6SApvBs>



Source Code

https://github.com/pramvin/Final_Project.git



System Architecture





Module Design

Database Schema

```
CREATE TABLE confessions (  
  id INT AUTO_INCREMENT PRIMARY KEY,  
  confession TEXT NOT NULL,  
  timestamp DATETIME DEFAULT  
CURRENT_TIMESTAMP,  
  is_nsfw BOOLEAN DEFAULT FALSE,  
  love_reacts INT DEFAULT 0,  
  laugh_reacts INT DEFAULT 0,  
  cry_reacts INT DEFAULT 0,  
  shy_reacts INT DEFAULT 0  
);
```

Frontend

`index.html`:

Landing Page

`main.js`:

Handles AJAX fetch &
reaction updates

Backend

`submit_confession.php`:

Handles POST submission of new confessions

`react.php`:

Updates reaction counters

`search.php`:

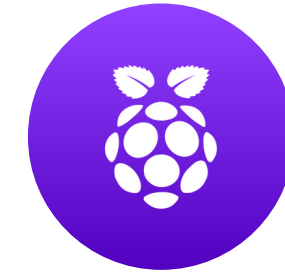
Searches confession content

`trending.php`:

Returns top confessions



Headless Setup Summary



Flash DietPi image using Etcher

Copy `dietpi-wifi.txt.sample` scripts to microSD

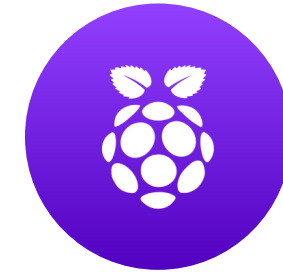
Edit `dietpi-wifi.txt.sample` for campus/home Wi-Fi → save as `dietpi-wifi.txt`

Boot system (Phase 1): Applies headless setup and scripts

Boot system (Phase 2): Serial login using `screen /dev/tty.usbmodem* 115200`



Software Installation



Use `dietpi-software` to install:

76 LAMP: Apache, MariaDB, PHP (might be different for each person)

Commands:

```
sudo systemctl status apache2  
sudo mysql_secure_installation  
sudo apt install git
```



Application Deployment



Clone Github repo:

```
git clone https://github.com/pramvin/Final_Project.git
```

Move files to web root:

```
sudo mv /var/www/Final_Project/* /var/www/html/.
```

```
sudo chown -R www-data:www-data /var/www/html
```

```
sudo chmod -R 755 /var/www/html
```



MariaDB Setup



Login:

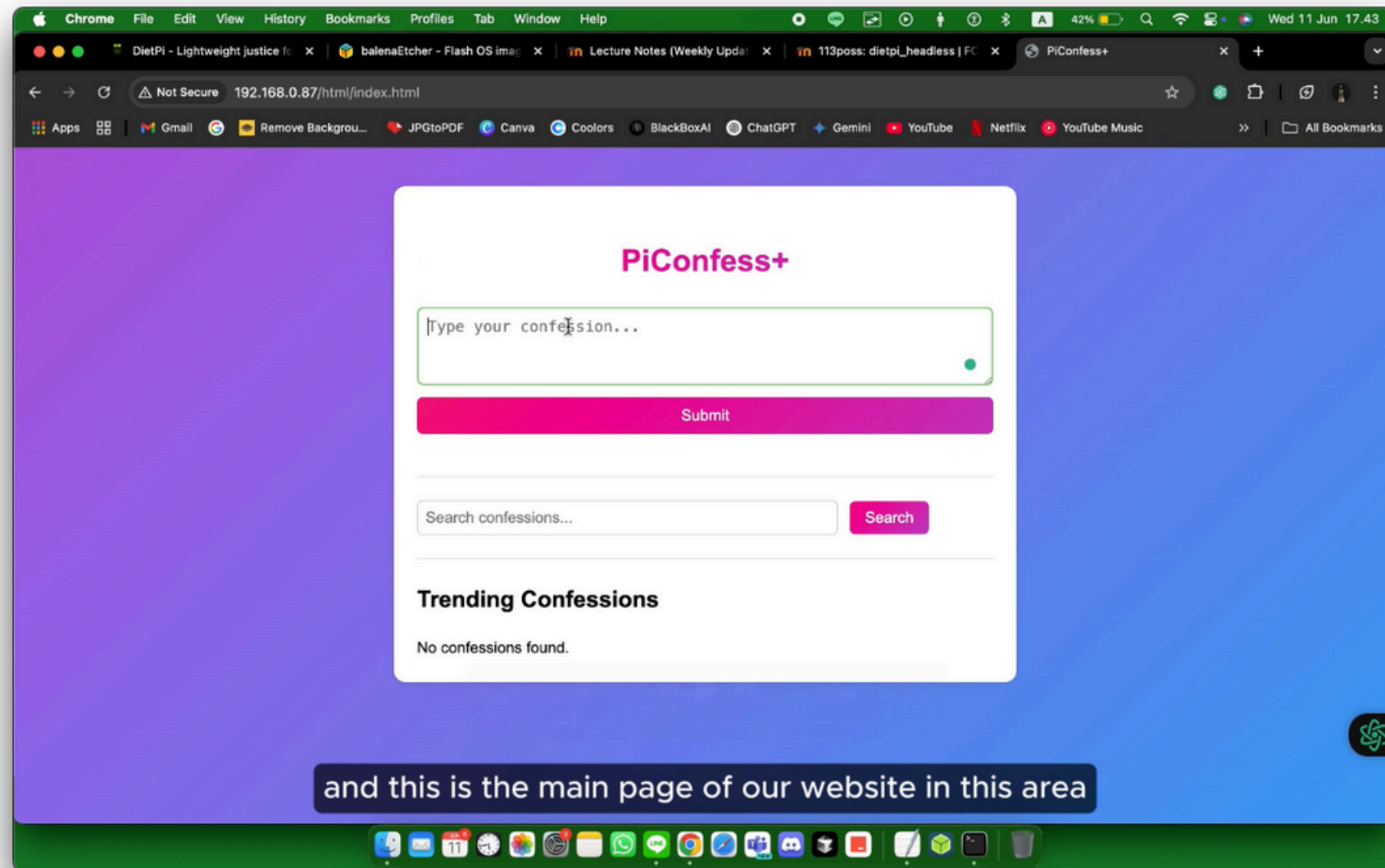
```
sudo mariadb -u root -p
```

SQL Setup:

```
ALTER USER 'root'@'localhost' IDENTIFIED BY  
'change_password';  
CREATE DATABASE database_db;  
USE database_db;  
-- Create confessions table here
```

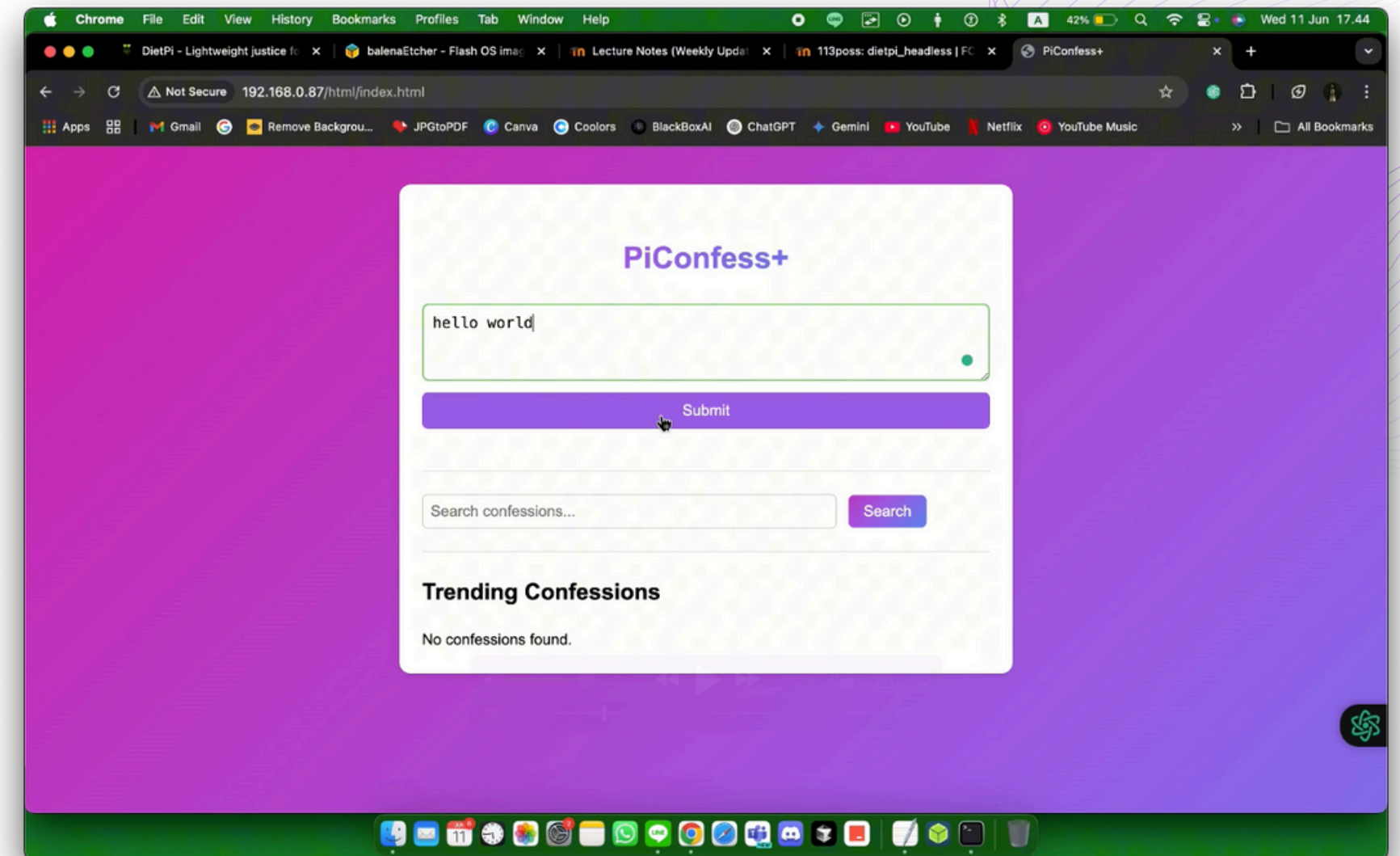



1 Access via browser



Use ip addr command to show ip addresses. The ip is not always your local network ip addresses, you must use the ip of the remote (raspberry).

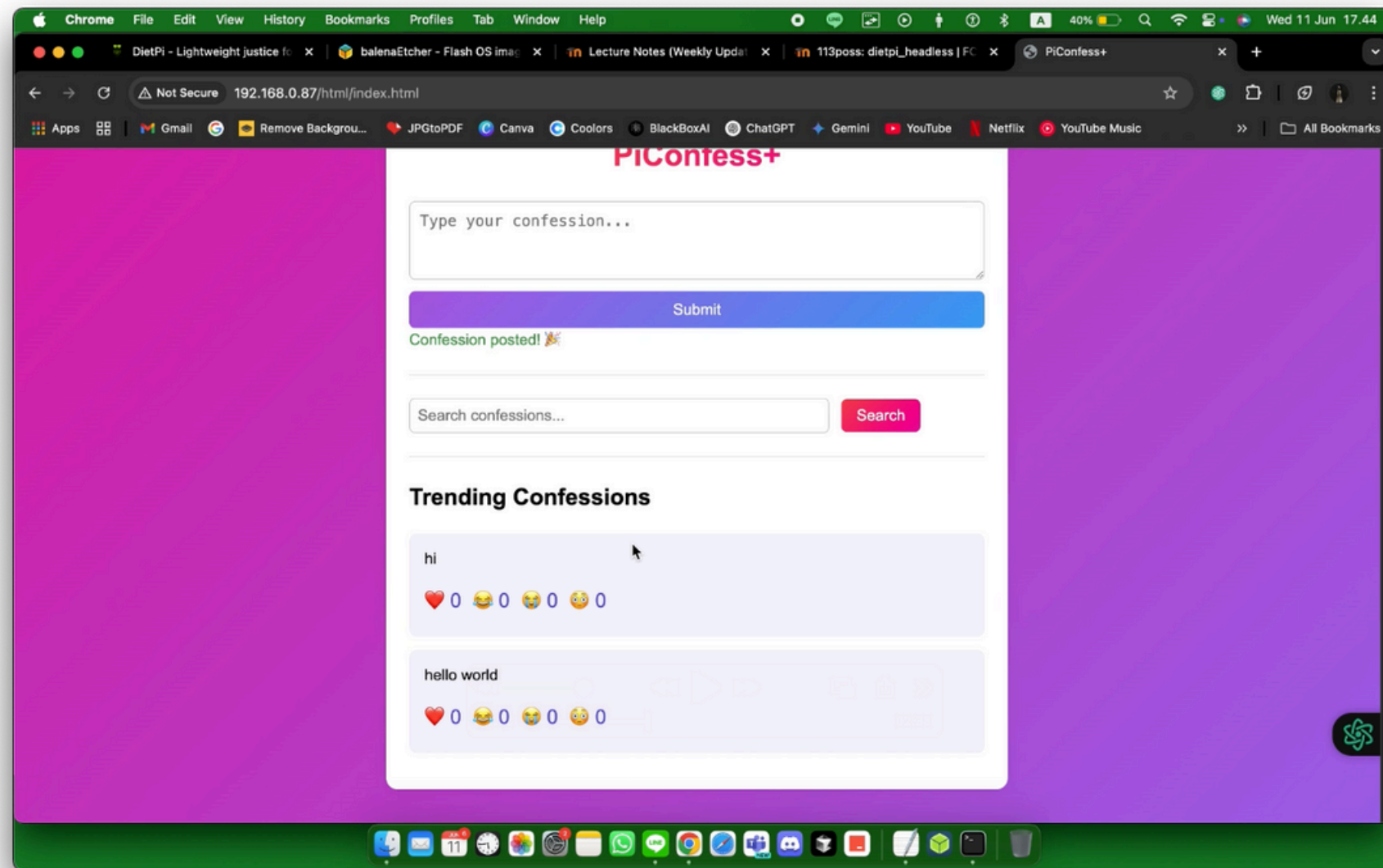
2 Submit anonymous confessions



The text that the user input, will be automatically shown under the Trending Confessions.

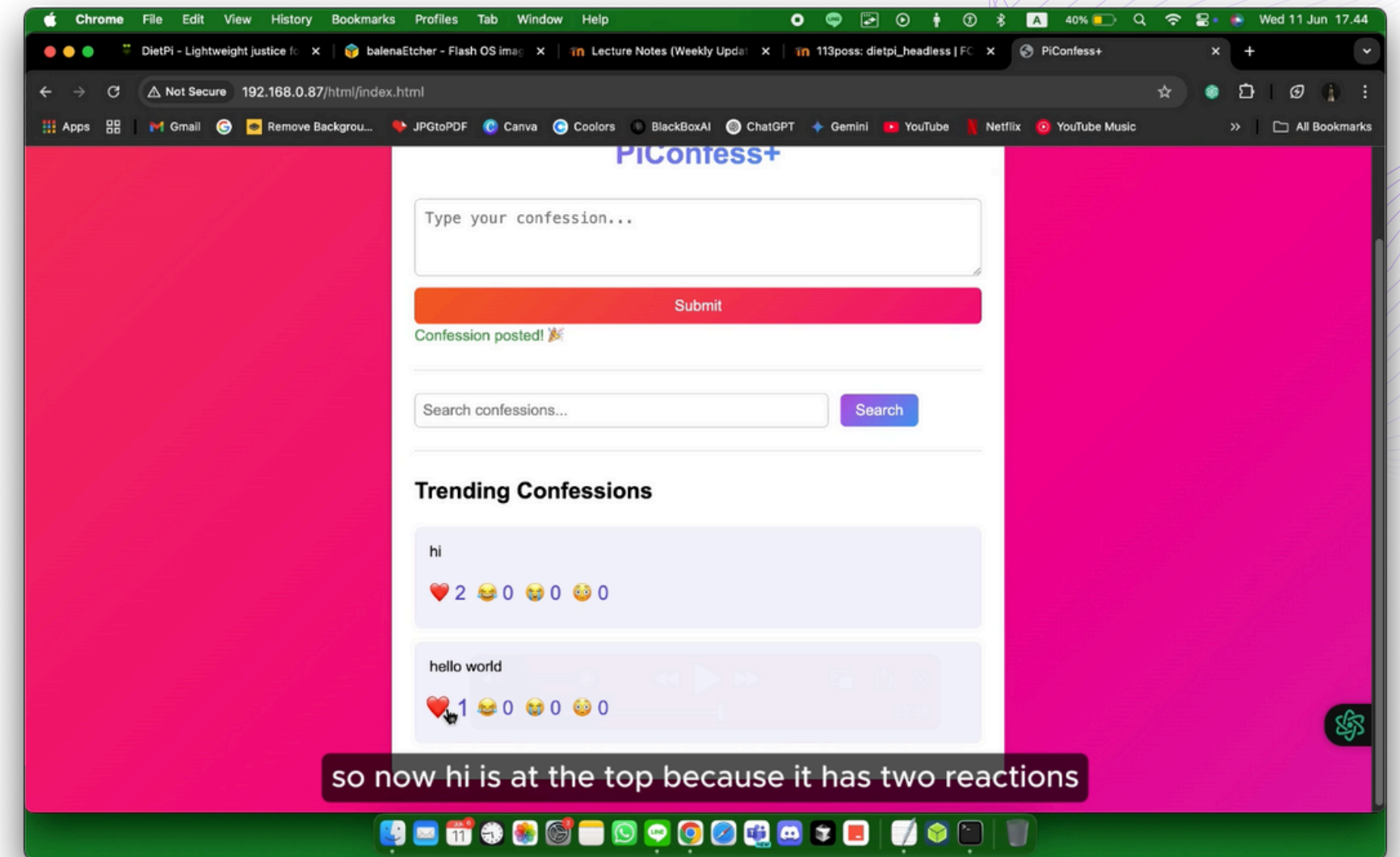


3 View trending confessions



The Trending Confessions will have three confessions as display or as top three. If have more, can be seen by searching it.

4 React with: Love, Laugh, Cry, Shy



Confession with the most reactions will be put at the top of the list (calculated by the total reactions each confessions as).



Thank You

Thank you for the attention!

Video

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Source Code

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