CODING NOMADS

3) Example Flask App   Lesson

An Example Flask App: Microblog 🔖

6 min to complete · By Brandon Gigous

Contents

- Introduction
- Features of Microblog
- Microblog Source Code
  - Directory Structure
- Summary: Microblog / Ragtime Example Project Architecture

As mentioned in the Flask course overview, throughout this course you will be building a music sharing social networking app called Ragtime.
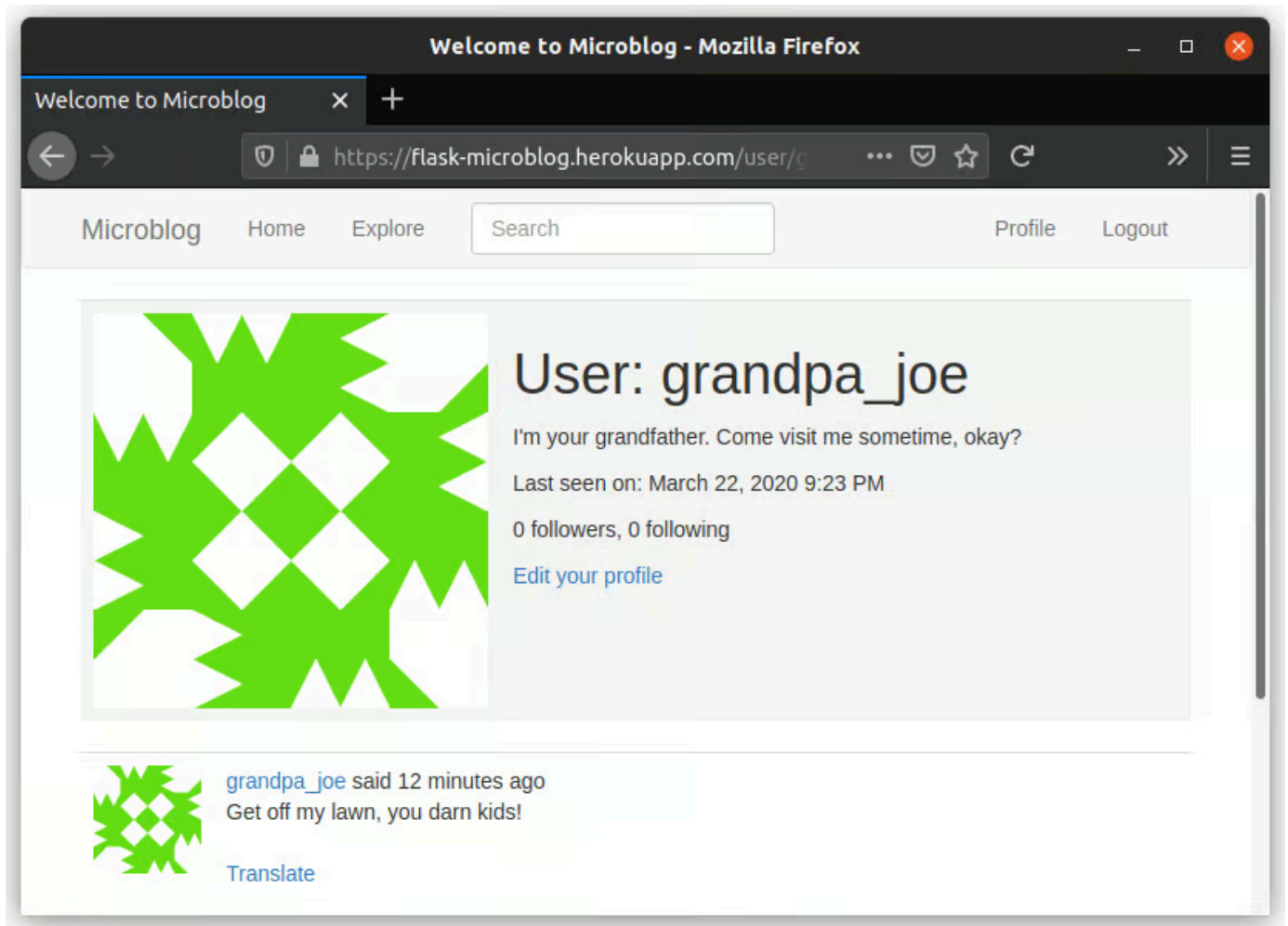
Ragtime will be based on an open source application called Microblog. This lesson takes a look at Microblog so you can see an example of the architecture you'll use to build your own Python + Flask app. This gives you a chance to see all the cool features written into Microblog. But fear not, you *won't* need to know how everything works in order to succeed in this course!

Features of Microblog

Microblog is written entirely with Flask and a handful of extensions, and has many features you would expect in a current-day web app.

- Storing users and content in a database
- Attractive styling of the webpages
- Email delivery and verification
- User authentication and registration
- User permissions and roles

- Creating and editing blog posts and profiles

- Users can follow other users

- Provides an Application Programming Interface (API)

Microblog Source Code

Now give you an idea of just how lightweight Flask can be, let's go ahead and open up the source code of Microblog. Remember, don't feel too worried about knowing anything about how it works yet! You will learn all of it (and probably more!) in this course.

Once you click the link above, you won't have to focus on anything more than the list of files and folders. In case you're not familiar with Github, they start below Miguel's thumbnail picture and have dates associated with them.

Now you might be looking at all those files and folders, and you're wondering where to start. That will be left up to you! However, here are some guideposts to help you get a feeling for what you're looking at:

Directory Structure

- `app` folder – this is where the entirety of the web app lives!

  - `api` folder – The files here define how the site can be interacted with, like for grabbing data from the site

  - `auth` folder – Files that determine how the users of Microblog login and register, and what they can and can't do

  - `errors` folder – Definition of possible HTTP errors encountered on Mi

  - `main` folder – As you can probably tell, this is where the most of the important functionality goes

  - `static` folder – This is where images for the site go, but some CSS styling and JavaScript files could also go here

  - `templates` folder – Basically this is all the HTML that defines the structure of the website

- `deployment` folder – This defines how microblog is configured for when it gets deployed (to the site you just tried out previously!)

- `migrations` folder – This folder contains scripts for upgrading (and downgrading) the database as the site gets developed

- `config.py` – Where configuration options for the Microblog app get set, like database and email options

- `microblog.py` – The web app gets instantiated here and becomes the Flask application instance

So go ahead, be curious. But don't get too lost, because remember, all of it will be addressed in the course. As you explore, make sure you click the link to the file or folder itself, and not the commit message to the right of it.

That's it! In a total of just 63 files, some smaller than others, is an entire web app. The amazing part? You can actually go much smaller: an app in only *one* file. In the next section, you'll actually build this web app yourself!

Summary: Microblog / Ragtime Example Project Architecture

- The social media app that you will build in this course, Ragtime, is based on an open source application called Microblog

- Microblog has many nice features that you're going to take advantage of including working with databases, authentication, email and more.

- Please clone the Microblog source code and explore the files and folders within.

Free webinar: Is now a good time to get into tech?

Starting soon! How you can break into software engineering, data science, and AI in 2025 without spending $10k+ or quitting your day job.

What you'll learn:

- State of the tech job market – what's the deal with layoffs, AI taking our jobs, and shady coding bootcamps?

- Who IS getting jobs right now – and the skills in high demand

- What it really takes to get a technical job today – it's more than just tech skills

- And finally, is pursuing these paths still worth your time and money?

Register Here

Previous   Next → Build and Run Your First Flask App