Lab 10: Deploying your application

In this lab you will be setting up a server on a cloud computing platform and deploying your website to it.

Overview

There are many hosting services available that provide a server available on the internet. The hosting company sorts out the hardware and gives you details to connect to your server (usually a virtual machine) and deploy your code. These services will host a web server and your files. They are typically running a full operating system so you can run Java, Python code, send emails, and do almost everything your desktop machine can do. There are many hosting companies that offer similar services: Amazon Web Services, Microsoft Azure and Google Cloud. These are premium services that offer high reliability and can cost a lot. However, they all offer free tiers for a fixed period. If you are interested in deploying a website permanently, there are cheaper alternatives: A2 Hosting and Vultr for example.

The course suggests two different options. We previously followed the Mega-tutorial and used <u>Heroku</u>, however since 2022 Heroku no longer provides a free level of service. An alternative free service is PythonAnywhere. You can use either.

Deploying your project

Read though the <u>Mega-tutorial</u>: <u>chapter 18</u> for instructions on deploying a Flask app via Heroku. Many of the steps are similar regardless of which hosting service you use.

- If using Heroku, set up a <u>Heroku account</u> and do the <u>Heroku Python Tutorial</u>. The tutorial sets up a Django project, but the steps for Flask are mostly similar. The Heroku toolset is installed on Linux in the lab machines. Launch your project on Heroku.
- If using PythonAnywhere, setup a PythonAnywhere account and follow the PythonAnywhere. Flask tutorial. Launch your project on PythonAnywhere.