# Deploying A Personal Project to Heroku

During Software Hut you will deploy applications to two providers. Heroku (a commercial provider that offers a free hosting plan) will be used to deploy your personal projects, for example applications created during training sessions. Your team project will be deployed to a Software Hut demo server provided by epiGenesys, so that your application can only be accessed by your team, the module staff, and your customer.

#### **Prerequisites**

- You are using CiCS Linux.
- You have created a Rails application using the Rails template, and the application is stored in a personal repository in GitLab (see Using Ruby on Rails with CiCS Linux for instructions).

### Sign up to Heroku

Before you can use Heroku to deploy your applications you will need to sign up for a free account.

- 1. Open a web browser and navigate to: <a href="https://signup.heroku.com">https://signup.heroku.com</a>
- 2. Enter your first name, last name and University email address.
- 3. Select **Student** as your role and **Ruby** as your primary development language.
- 4. If displayed, check the "I'm not a robot" box.
- 5. Click Create Free Account.
- 6. Log into your University email account, and when the Heroku confirmation email arrives click the link to open the confirmation page.
- 7. On the confirmation page, enter and confirm a password.
- 8. Click **Set Password And Log In** to proceed to confirm your account.
- 9. Click the link to proceed to your Heroku dashboard.

In future you can navigate directly to: <a href="https://dashboard.heroku.com">https://dashboard.heroku.com</a>

## Configure the Heroku Command Line Interface (CLI) on CiCS Linux

The first time you use Heroku on CiCS Linux, you will need to carry out the following steps to configure the Heroku Command Line Interface (CLI) to access your Heroku account:

- 1. Start the Terminal, by pressing the Windows key on your keyboard to open the dash and typing Terminal, or by pressing CTRL+ALT+T.
- 2. Type heroku login and press enter.
- 3. At the email address prompt, enter your University email address.

- 4. At the password prompt, enter the password you used to sign up to Heroku.
- 5. If you are signed in successfully, you will see "Logged in as {email address}"

### **Deploy to Heroku**

- 1. Start the Terminal, by pressing the Windows key on your keyboard to open the dash and typing Terminal, or by pressing CTRL+ALT+T.
- 2. Type cd \$U/Hut/my-project-name and press enter (substitute 'my-project-name' with the name you used when generating an application previously, e.g. 'training1').
- 3. Ensure that any recent changes have been pushed to GitLab see **Using Ruby and Rails on CiCS Linux** for instructions.
- 4. If this is the first time the application has been deployed to Heroku, type heroku create and press enter to configure the application for deployment.

If the configuration is successful a URL will be displayed in the format:

https://unique-identifier.herokuapp.com

This is the URL you will need to visit to access the application after deployment. You should copy this and bookmark it.

- 5. Type git push heroku master and press enter, to deploy your application to Heroku. You will see from this command that Heroku uses a Git repository to store a copy of your application for deployment to their platform. It will take a few minutes for the deployment process to complete, and you will see various messages indicating progress.
- 6. If this is the first time the application has been deployed to Heroku, or if database migrations have been added to the application since the last deployment, type heroku run rake db:migrate and press enter to migrate the application's database on Heroku's platform.
- 7. Open a web browser and navigate to the URL from step 4 to access the deployed application (if you did not copy the URL, type heroku info to find it).

If you see any errors after deployment you can use the command heroku logs to view the most recent logs from your deployed application which can assist in debugging.

### **Destroy an Heroku application**

If you no longer wish to host an application on Heroku you can destroy it. This will completely remove the application and it's database from Heroku's platform. There are two routes for destroying an application:

From your Heroku dashboard (<a href="https://dashboard.heroku.com">https://dashboard.heroku.com</a>):

- o Click the application you wish to destroy.
- Open the **Settings** tab.
- o Click Delete app.
- o To confirm, type the application's name and click **Delete app**.
- From the application's directory in Terminal:
  - Type heroku info and press enter to display the application's name (this is the first line displayed, e.g. boiling-citadel-15662).
  - Type heroku apps:destroy --app APPNAME and press enter, substituting APPNAME with the application's name.
  - o To confirm, type the application's name and press enter.