Heroku: Postgres Database

Where We Are Now

- We've made an express app that can live both on our local machine, and on Heroku
- However, now our Express applications also use a Postgres database to server up content
- But if we try to run one of these applications on Heroku, we'd just get errors about there being no Postgres database available

Heroku Addons

- Because developers use all kinds of software for things like databases, mail servers, API integrations, Heroku has an addon system to hook in to other software
- Addons can be installed on the command line using the heroku addons command
- They can also be installed on the web at the "Resources" panel of your app
- Some addons cost money, so be careful when installing them

Installing Postgres

heroku addons:create heroku-postgresql:hobby-dev

- Run this command inside of your Heroku project to add the herokupostgresq1 addon to your app
- The hobby-dev portion of the command indicates we'll be using the hobby tier of this addon, which costs no money
- Running this will install the addon, create a database for you to use, and add a new environment variable called DATABASE_URL that contains all of the information we'll need to connect to Heroku's database

Side Note: Heroku Config

- Heroku injects a few environment variables by default, but you can add your own by adding things to the Heroku config
- DATABASE_URL is one of these, that the heroku-postgresq1 addon adds for us
- We can inspect them by running heroku config
- We can set our own by running heroku config:set [KEY=VALUE]
- You can also inspect and change them on the web under the "Settings" panel

Accessing Postgres on Heroku

- Beyond creating a database, we'll also need to create the same tables we made locally
- We can access a SQL command line by running heroku pg:psql
- This will allow us to write any of the same queries we've written in our GUI, like CREATE TABLE
- You can also try to use your GUI to connect to the database, using the DATABASE_URL config variable, but this may be tough depending on your GUI

Fixing up our Postgres Node Code

- A quick problem we have to solve is that Heroku provides a URL for connection, rather than each of the pieces of information seperately (Port, username, password etc.)
- To get around that, we just need to add some code that breaks down one of these URLs in to separate pieces
- You can find an updated version of the query module here:

https://gist.github.com/wbobeirne/ 1dee2743d6ee6f723a66908eaee009c2

Additional Reading

- Heroku's Node Intro: Databases
- Heroku's Full docs on Heroku Postgres