

CSC 337

DEPLOYING YOUR CODE TO HEROKU

Tools

- GitHub
 - version control system where we can store our code
- Heroku
 - free web hosting system that will pull our code from GitHub and make it available on the web

GitHub

Accept the assignment at:

<https://classroom.github.com/g/2yPGUbcY>

- Accept it and you will get a repository that you can add files to

The screenshot shows the GitHub interface for a repository named 'aeobourn/web-test'. The repository is private and has 7 commits, 1 branch, and 0 releases. The commit history is as follows:

File	Commit Message	Time Ago
app.json	Create app.json	20 minutes ago
package-lock.json	Add files via upload	4 hours ago
package.json	Rename app.json to package.json	20 minutes ago
server.js	Rename file_server.js to server.js	28 minutes ago
test.html	Create test.html	5 hours ago

At the bottom of the page, there is a button to 'Add a README with an overview of your project'.

Two red arrows point from the top of the page to the 'Create new file' and 'Upload files' buttons in the repository header.

GitHub

- Add all of your files to your GitHub
- Do NOT add your `node_modules` folder
 - instead add `package.json`
 - specifies all necessary node packages that the server needs to install
 - if you use this, you won't need to install anything on the server
 - create this file by running
`npm init`
on the command line in folder that contains your project
 - you will be prompted for information. Most can be left the default value but main should be your main .js file

Example package.json

```
{
  "name": "25",
  "version": "1.0.0",
  "description": "example",
  "main": "cookie_service.js",
  "dependencies": {
    "client-sessions": "^0.8.0",
    "cookie-parser": "^1.4.4",
    "express": "^4.16.4",
    "fs": "^0.0.1-security",
    "mysql": "^2.17.0"
  },
  "devDependencies": {},
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit
1"
  },
  "keywords": [
    "example"
  ],
  "author": "Allison",
  "license": "ISC"
}
```

If your node packages are installed globally copy the bold dependencies information from the left and paste them into your package.json file. Delete any unneeded dependencies.

GitHub

- Add an `app.json` file to your GitHub. It should be in the following format:

```
{  
  "name": "Node.js Sample",  
  "description": "A barebones Node.js app using Express 4",  
  "repository": "https://github.com/heroku/node-js-sample",  
  "logo": "https://rawgit.com/heroku/node-js-sample/master/public/node.svg",  
  "keywords": ["node", "express", "static"]  
}
```

- Replace all blue/green text with values appropriate for your app.

Code Changes

- In order for your code to run you will need to make the following changes:
 - 3000 (the port number) should be changed to **process.env.PORT**
 - this is a variable name representing the port number that Heroku will assign to your program
 - change this in your server side code AND client side code
 - All references to localhost should be changed to the address that your program will be at
 - it will be in the format `http://some-name-you-choose.herokuapp.com`
 - note that Heroku doesn't allow duplicate names so make sure that the name you pick is unique

Heroku

- Create a [free Heroku account](#)
- Once your account is created and verified, you can deploy your app by visiting the following link (of course, replace `<YOUR-REPOSITORY-NAME>` with the name of your repository, such as `hw5-sheets-mygithubname`):

<https://heroku.com/deploy?template=https://github.com/uacs337spring2019/<YOUR-REPOSITORY-NAME>>

- When the page loads, click the purple “Deploy” button.
- When the deployment finishes, you should see “Your app was successfully deployed.” Click the “View” button.
- This will take you to your deployed app, which will look like
`http://some-name-you-choose.herokuapp.com`

Adding a Database

- Navigate to the Heroku dashboard for your project by clicking the icon made of nine blue dots that will be on the upper right of any Heroku page
- Select your project
- Click on the Resources menu option
- Type ClearDB into the search box under Add-ons and select the result
- Click the Settings menu option
- Press the reveal config vars button
- You will see something like `mysql://bf13c37ec2b89a:b2e8435b@us-cdbr-iron-east-02.cleardb.net/heroku_af0310c62926023?reconnect=true`
 - The red portion is the database host
 - The blue portion is the database name
 - The green portion is the user
 - The purple portion is the password