Ideas Into Code

Things you'll need, and specialist things that the project teams asked for

Prerequisites

❖ Github

❖ Heroku

Starting a repo – the laptop end

❖ Using the terminal window, cd into the directory that you want to add to github

❖ If you haven't got a directory yet, make one.

❖ Add a file called "readme.txt" that describes your repo

❖ In the terminal window, type:

git init

git add .

git commit -m "first commit"

See https://help.github.com/articles/create-a-repo/

Starting a repo – the Github end

- ❖ Go to your github page, e.g. https://github.com/bodacea

  - ❖ click the "+" at the RHS top of the page

  - ❖ select "new repository"

  - ❖ choose a name for your repo

  - ❖ click "create repository"

- ❖ In the terminal window:

git remote add origin your-repo-address

- ❖ where your-repo-address is on your new github page, e.g. https://github.com/bodacea/codingfordevhackathons.git

git push -u origin master

- ❖ Refresh your screen

Updating your repo

❖ Edit your files, add new ones, delete others etc.

❖ Then from the terminal window, type

git add . -A

git commit -m "your message here"

git push

❖ This moves a copy of your local files up to github

Getting set up for Heroku

❖ 1) Edit Gemfile: find the line "**gem 'sqlite3'**" and replace it with

group :development do

  gem 'sqlite3'

end

group :production do

  gem 'pg'

  gem 'rails_12factor'

end

❖ NB Gemfile is *really* fussy about """ - you might want to cut and paste from somewhere else on the page

❖ 2) from now on, if you want to add a gem:

   ❖ add its name to the Gemfile (e.g. gem 'yourgemname')

   ❖ then run "bundle install --without production" to install it

❖ And remember those apostrophes!

Push to Heroku

❖ Once you've written something, get it online!

❖ In the terminal, cd into your application folder, and:

heroku login

heroku create --http-git

❖ (NB that's two '-' symbols side-by-side there)

git push heroku master

heroku run rake db:migrate

heroku apps:rename yournameforthecode

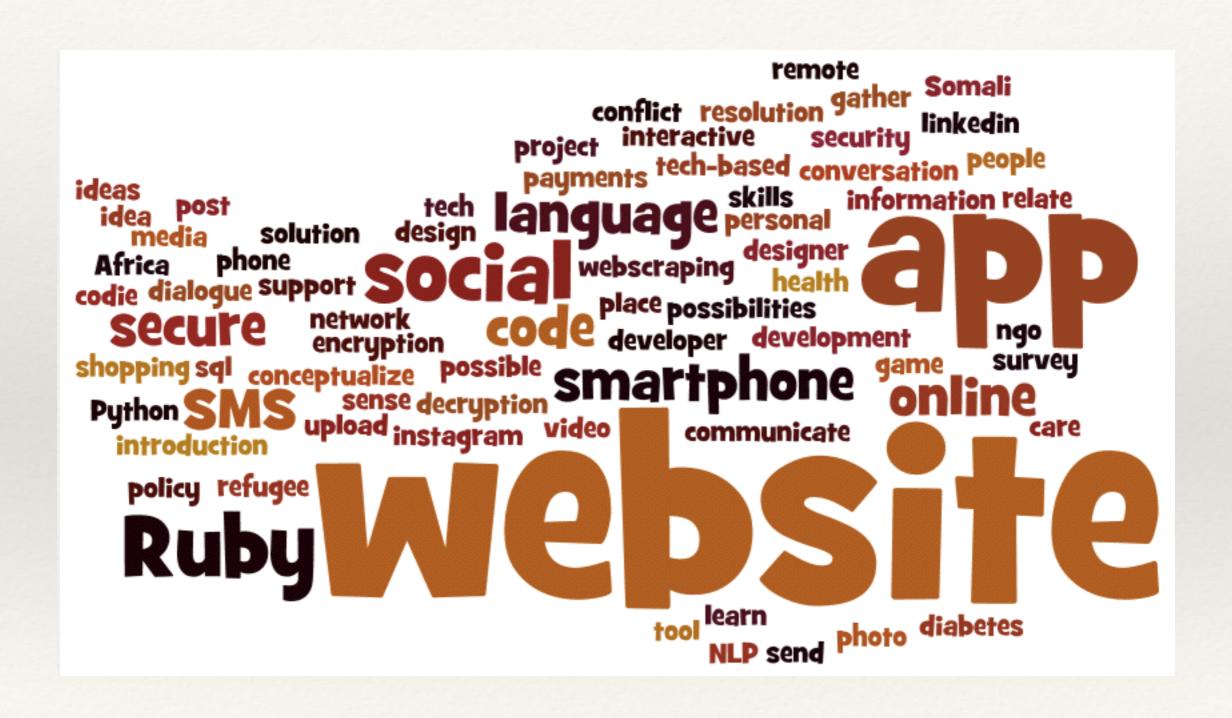❖ go to http://yournameforthecode.herokuapp.com/

Heroku: Beware!

- ❖ Heroku is ephemeral: every time you update your repo, all the data on Heroku will disappear (maybe).

- ❖ You can see (and back up) your databases at https:// postgres.heroku.com/

- ❖ help: https://help.heroku.com/search/example? q=Choosing+a+Postgres+plan

Repos: being social

❖ Go into the github repo you want to contribute to. Find the network graph: click "Graphs" then "Network", to see who's contributed already.

❖ Look at the "issues" page (rhs button on repo's main page). NB "Issues" might not exist (it's optional - see settings).

❖ Go to the repository's main page. Click on "fork". Watch as github creates a copy of the repo on your own github pages.

❖ Terminal window:

❖ **git clone address-of-your-new-copy**

❖ **git remote add --track master upstream git://github.com/originalownername/projectname.git**

❖ **git fetch upstream**

❖ **git merge upstream/master**

❖ **git branch nameofyournewbranch**

❖ **git checkout nameofyournewbranch**

❖ do lots of edits.

❖ **git add .**

❖ **git commit -m "you message"**

❖ **git push origin nameofyournewbranch**

❖ Go to github: change to the new branch. Click on "pull request". Write a note to the repo owner. Click "send pull request"

❖ Now, the repo owner sees your pull request, and clicks on "merge".

https://gun.io/blog/how-to-github-fork-branch-and-pull-request/ and https://guides.github.com/activities/forking/

When we started this course, you said...

Inspiration: Popular Rails sites

* AirBNB

* Slideshare

* Hulu

* Github

* Groupon

* Bloomberg

* IndieGoGo

* Square

* Twitter (started on Rails; had to change languages to scale)

Inspiration: open source Rails apps

❖ Spot.us: crowdfunding/ stories

  ❖ http://www.spot.us/

  ❖ http://github.com/spot-us/spot-us

❖ FatfreeCRM: customer relationship management

  ❖ http://fatfreecrm.com/

  ❖ http://github.com/michaeldv/ fat_free_crm

❖ Spree: shopping

  ❖ http://spreecommerce.com/

  ❖ http://github.com/railsdog/spree

❖ Ruby/Rails Social network libraries:

  ❖ https://www.ruby-toolbox.com/ categories/ social_networking

More at http://jetpackweb.com/blog/2009/10/14/high-quality-ruby-on-rails-example-applications/

SMS Connections

- Twilio SMS with Ruby:

  - https://www.twilio.com/blog/2014/02/twilio-on-rails-integrating-twilio-with-your-rails-4-app.html

  - http://www.sitepoint.com/adding-sms-capabilities-to-your-rails-app/

Using External APIs

- ❖ Use the httparty gem:

  - ❖ http://blog.teamtreehouse.com/its-time-to-httparty

- ❖ (Plus for most big sites, there's an API gem already)

Web Scraping

- http://readysteadycode.com/howto-scrape-websites-with-ruby-and-mechanize

- https://www.ruby-toolbox.com/categories/Web_Content_Scrapers

- http://ruby.bastardsbook.com/chapters/web-scraping/

Security

- http://guides.rubyonrails.org/security.html

- https://www.ruby-toolbox.com/categories/encryption

- https://www.youtube.com/watch?v=e13irYP6WJA

Adding Maps

❖ Use Leaflet or OpenLayers (javascript plugins)

  ❖ http://leafletjs.com/

  ❖ http://openlayers.org/

❖ Use Googlemaps or OpenStreetMap directly:

  ❖ http://www.sitepoint.com/use-google-maps-rails/

  ❖ http://www.rubydoc.info/gems/openstreetmap/0.2.1/frames

Natural Language Processing

- https://www.ruby-toolbox.com/projects/treat

- https://www.youtube.com/watch?v=0Fmy_QBQ5DU

- http://www.confreaks.com/videos/2440-railsconf2013-natural-language-processing-with-ruby

Games

- http://rubygame.org/

- https://www.ruby-toolbox.com/categories/game_libraries

- Scratch: http://scratch.mit.edu/