

Project #2 - Ruby on Rails application

Rationale

A full stack developer needs to be able to demonstrate they can build a complete application from design through to deployment, using appropriate tools and methodologies.

This project covers off many Diploma units of competency required for accreditation.

Due date

10am on Monday 24th April, 2017

Description

You are to design, build, deploy and present a Ruby on Rails application.

The project is to be completed individually.

Choices of projects:

Your application must impress one person/group from this list:

1. Barack Obama (politics)
2. Rupert Murdoch (journalism)
3. Bill & Melinda Gates (social causes/global development)

Each person/group was chosen to represent a particular industry as well as certain expectations and standards.

Submission

Submit your project by sending it via email to jamie.cerexhe@coderfactoryacademy.edu.au.

The email is to include:

- Repository Link (Github)
- Heroku link

Deliverables

Design Documentation

Demonstrate your ability to break down the problem and design a solution.

1. One page summary of your application including problem definition, solution.
2. A workflow diagram of the user journey/s.
3. Wireframes for at least 5 screens.
4. User stories for the whole application.
5. Entity Relationship Diagram (ERD).
6. Project plan and estimation.

Tools and methodologies

1. Trello or similar project management tool to be used to track progress of build.
2. Code review. Demonstrate that you have had your code reviewed by other students and that you have provided a code review for others.
3. Github. Demonstrate use of frequent commits, pull requests, documentation.
4. Use Agile development methodologies.
5. Provide evidence you have used code quality tools (eg. Traceroute, Bullet, Brakeman, Rails Best Practices tool, RuboCop, RubyCritic, CodeClimate).

Rails application code

Demonstrate Ruby on Rails development skills.

* = optional

1. Create your application using Ruby on Rails.
2. Demonstrate knowledge of Rails conventions.
3. Use postgresql database in development.
4. Use an API (eg. Omniauth, Geocoding, Maps, other..).
5. Use appropriate gems.
6. Use environmental variables to protect API keys etc.
7. Implement a payment system for your product *
8. Your app must send transactional emails (eg. using Mailgun).
9. Your app should have an internal user messaging system.
10. Your app will have some type of searching, sorting and or filtering capability.
11. Your app will have some type of file uploading capability (eg. images).
12. Your app will have authentication (eg. Devise, must have full functionality in place).

13. Your app will have authorisation (users have restrictions on what they can see and edit).
14. Your app will have an admin dashboard for the admin user to administrate the site.
15. Document your application with a README that explains how to setup, configure and use your application.
16. The core functionality of your application needs to be tested with Rspec.

Deployed application

1. Your application is to be deployed to Heroku.
2. Your deployed application must have data present to show functionality.

Presentation

You are to deliver a 7 minute presentation to the class.

The presentation should include:

1. A Walk-through of your design decisions and documents
2. A review of your build process - challenges, favourite parts
3. A walk-through of your live app and pointing out its features
4. Answer any questions from students or teachers.

Use this presentation as an opportunity to pitch your ideas to 'investors'.

Marking Guide

Deliverable	Mark
Design documentation	20%
Tools & methodologies	15%
Rails application code	40%
Deployed application	15%
Presentation	10%
TOTAL	100%