Overview:

It seems like everyone has the next billion dollar idea these days. But whether it’s an iPhone app or a piece of machinery, it’s pretty clear that it needs a web application to accompany it. In the past, the high upfront cost of learning web application development limited entrepreneur’s options, forcing them to contract out their idea to someone skilled in development. But the advent of expressive languages like Ruby on Rails and the extensive and helpful online open-source community surrounding it have opened web development to even those with completely non-technical backgrounds. By learning Ruby on Rails and then designing and developing a fitness progress tracking application using the language and framework, I will learn a modern and useful programming language while exploring the benefits of Ruby on Rails for the aspiring app developer. I aim to expose the advantages of Ruby on Rails’ code-based data model, open-source community, and rapid development model and how these attributes let non-technical entrepreneurs launch their own web apps with relative ease.

Objectives:

1. Demonstrate that Ruby on Rails is ideal for beginner application development by learning the language and actually developing an app.
2. Explore techniques of learning, designing, and developing application development.
3. Demonstrate that entrepreneurial application development is feasible without prior knowledge of the language or framework.

Proposal:

I plan to learn Ruby on Rails to the point where I can develop a useful web application to track fitness progress across a variety of exercises. To accomplish this, I will combine elements of product management, database development, and web development, as well as heavy utilization of Ruby on Rails’ open-source community.

This project will be focused on learning and researching; the goal is not necessarily to develop the best fitness tracking application, but rather to demonstrate that one can learn the language and develop a rudimentary application without prior knowledge, thus showcasing the low entry barrier for today’s aspiring entrepreneurs. To help achieve this, I plan to post blogs reflecting my progress in both learning and development; what challenges I faced, what resources I used to help overcome said challenges, and techniques that I found particularly helpful, documenting my own entry into application development.

The application itself will allow users to enter their workout data and track progress over time. The current market for fitness apps (including apps like the very popular My Fitness Pal, part of Under Armour’s application family) do a great job of tracking things like weight loss and distance running, but fail at allowing users to easily enter their weight-lifting workouts and track their progress. My application will allow users to enter what workouts they did as well as their repetitions (number of times an exercise is done without a break), sets (the number of times that number repetitions is completed), and weight (the weight at which the repetitions, or reps, are completed), and finally, easily check their progress over time.
Summary of Deliverables:

1. Ruby on Rails code for the application itself, most likely as a git repository.
2. Blog posts describing the learning and development process.
3. Final Report summarizing the learning and development process, evaluation of Ruby on Rails as a beginner’s language and framework for application development, and conclusions on the project as whole.

Project Timeline

Stage 1 – Learning and Research – by October 20th

- Take online courses and conduct research on Ruby on Rails and general application development.
- Explore RoR IDEs and other support software.
- Begin Application development.

Stage 2 – Application Development – by November 20th

- Have prototype application code and baseline utility.
- Tentatively add more analytical and tracking features.

Stage 3 – Finalization – by December 11th

- Continue to iterate over application.
- Produce final report and blog posts.