

18

RUBY ON RAILS PROJECT IDEAS

FOR BEGINNERS

The purpose of this list of project ideas is to help you go through some of the most common use cases that you will see a framework like Ruby on Rails being used.

These are all projects I've built at some point or another, and you're very likely to work on a variation of them.

They go from easy and using the core features of Rails, to more complex and using the cutting edge features.

1. Stringerrr

Yeah I know, the name could be better :)

Try to build a simple application that takes in a string, and allows you to convert it to something else.

Conversion options:

- Title case
- Capitalize
- Uppercase
- Lowercase
- Hyphen case (words-separated-by-dashes)
- Snake case (words_separated_by_underscores)

2. Blog

This is your bread and butter. It's the "hello world" of the Ruby on Rails framework.

Rails makes it easy to build blogs because of its scaffolding capabilities.

If you want to make it a touch more challenging, try to also add nested comments on blog posts and upvotes/downvotes like you see on HackerNews.

3. User Authentication

Authentication is all about knowing who the user of the application is, and serving different content for different users.

The first example was about building a blog post, but it didn't require the user to sign up.

Try to add in authentication to your blog project and display the author of the post, and the names of the users who comment on each post.

4. User Authorization

As mentioned before, authentication is about knowing who the user is.

Authorization is about what the user is allowed to do inside your application.

Authorization could be role based (admin, moderator, etc.) where each role defines a set of permissions, or it could be just permissions without roles.

Add in authorization to your blog project, and only allow the user who has created the blog post to edit it.

5. A wiki

If you don't know what a wiki is, just hop over to Wikipedia (the biggest wiki there is). It's nothing more than a bunch of pages linked together.

If you need inspiration, Wikipedia is the best place to find it. Try to copy as many of the features you feel comfortable implementing.

6. To Do List

The TODO list is another very common application that you can build. And there are plenty examples of well made TODO applications out there.

There's even a place where you can see it implemented in a lot of different programming languages. Check it out at: <http://todomvc.com>.

If you want to take it up a notch, you could sprinkle some javascript to make it feel more responsive.

7. Marketplace

A marketplace is defined as an application that facilitates an exchange between two types of users (sellers, and buyers).

An example marketplace would be [Airbnb](#) where the sellers rent their homes to tourists (buyers).

Try to make a clone of Airbnb to expose yourself to the challenges that you will encounter when you build a marketplace application.

8. E-Commerce Platform

Another form of marketplace is an e-commerce platform. This is one of those types of projects you have to know how to build because they are everywhere.

Good examples of e-commerce platforms are Shopify, Magento, WooCommerce, etc.

Obviously you don't have to build a competitor to those applications mainly because it would take too long. But a bare-bones version should get you started on the right path.

9. User-Messaging Application

Messaging applications present some interesting challenges like nested structures, and message threads.

Not to mention the fact that most applications these days have some kind of internal messaging going on.

Bonus points for having the conversation update for both users without needing a page reload.

Extra bonus points for using web sockets / ActionCable.

10. Users Map

APIs are everywhere these days so knowing how to use (and build) them is a must.

From authenticating via a 3rd party identity provider to supporting various Single Page Applications or mobile apps, APIs are the backbone of the internet.

Using the Google Maps API is really fun, and you can build something that looks good quickly.

For this one, you would build a map with a pin for every user that signs up.

11. Lemonade Store + Payment

To further explore APIs and to gain some experience using payment processors, you can create a basic website that sells lemonade and accepts payment via Stripe and/or Paypal.

Integrating with a payment processor is so common these days that you're very likely to encounter tasks around this topic in your day job.

12. Timer / Time Tracker

At some point you'll have to use javascript in your application.

This one tends to be a touch heavier on the javascript side because it needs a timer to be shown to the user.

These kinds of applications are useful if you need to track the amount of time you spend on various projects.

For example, a freelancer might need a report showing the amount of time spent on client tasks.

13. Scheduler / Reminder App

Another very useful type of application that needs to deal with time calculations is a scheduler or reminder app.

The challenges here are timezones (different users live in different timezones and each one needs to see the same event in his own timezone), and date/time calculations.

You could integrate it with a 3rd party API like Twillio for sending SMS alerts and Google Calendar to post updates for every user.

14. Resistor Colors

For someone that is into electronics this could be a very useful application. One could decode the color codes found on resistors and see the values.

You can read more about the color codes here: https://en.wikipedia.org/wiki/Electronic_color_code

15. Color Palette Generator

Since we're talking about colors, a color palette generator could be handy for any web designer out there. Here are a few example websites you can use for inspiration:

<https://coolors.co>

<http://colormind.io>

<https://mycolor.space>

16. IBAN Generator

Generating IBAN numbers should be pretty easy. All you need is a country name, and you should be able to generate a bunch of random IBANs for each country.

17. VAT Number Validator

This is very similar to the IBAN generator. The purpose here is to validate a given VAT number.

Here is a list of format rules for each country: https://en.wikipedia.org/wiki/VAT_identification_number

18. Deploy An Application To Heroku

Pick any of the apps you've built and try to deploy it using Heroku. Heroku makes deployment as easy as it gets, and it's already used by a lot of companies to host their Ruby on Rails applications.

So the chances of you having to use it in the future are pretty high.

Other popular options are Docker, which you might want to know how to use as well (but you don't have to), Amazon Web Services (AWS) and a bare bones VPS (Virtual Private Server).

By playing with these technologies, you'll learn a lot about database migrations, gems, storage, etc.