SSDEV PROJECT

RUBY 3rd PARTY GEMS

1. Active Record - Active Record is the default ORM for Ruby on Rails

* Pagination -  [Kaminari](https://github.com/amatsuda/kaminari" \t "_blank)
* Categorization - [ActsAsTaggableOn](https://github.com/mbleigh/acts-as-taggable-on)
* Versioning - [PaperTrail](https://papertrailapp.com/)
* Internationalization - [Globalize](https://github.com/jquery/globalize)

1. Testing - If you’re going to write automated tests for your applications (which is integral to building RoR apps)

* We write our unit tests with RSpec – a testing framework mainly used in BDD and TDD environments
* [Database\_cleaner](https://github.com/DatabaseCleaner/database_cleaner)
* Capybara, an acceptance testing framework, which effectively automates a user’s interactions in a browser
* shoulda-matchers, lets us easily test typical Rails functionality such as validations and associations by writing compact one-line tests compatible with RSpec

1. Coding Style - Coding style is important. In order to write quality code, skillful Rubyists follow best practices found in The Ruby Style Guide

* RuboCop – assures that your code conforms to the Ruby Style Guide.
* RubyCritic gem helps provide reports on code quality. RubyCritic leaves no chances for Ruby code smells by generating HTML reports with names of files, their smells and ratings

1. Debugging - Errors happen

* binding\_of\_caller gem, however, offers a more helpful error page screen and lets you inspect variables inside your application when it crashes.

1. Authentication and Authorization - login functionality, which means you need to provide authentication and authorization.

* Devise gem. This monstrous gem, based on the Rails MVC stack, adds OmniAuth support to verify users, resetting passwords, if necessary, and storing passwords in the database to simplify authentication. Moreover, Devise tracks metrics including IP addresses and timestamps, expires user sessions after a specified period of time, and locks accounts in case of multiple failed login attempts. Devise can do even more for you – check their GitHub page for more details
* social logins in Rails applications are powered by the OmniAuth gem, which creates authentication providers (for social networks including Facebook, Google, and even GitHub) which are integrated into a Rails application
* Rolify, which allows you to establish and manage user roles – definitions of what users can do while using an application
* CanCanCan and Devise to extend their capabilities of user management. CanCanCan allows you to define abilities of specific users in a single location, which our RubyGarage team finds quite convenient.

1. APIs - You can log in to online stores with your Facebook account thanks to APIs, or look for nearby restaurants on Foursquare via Google Maps – also thanks to APIs

* ActiveModelSerializers, which builds a JSON response from a server depending on a passed record or collection
* Apipie-rails – a DSL for documenting RESTful APIs. Apipie literally describes the code with the Ruby syntax, which is convenient for rubyists

1. Security - When developing applications that store users’ personal information or financial details, it’s important to ensure data security.

* Bundler
* bundler-audit, which runs on the top of Bundler. With bundler-audit you can sleep tight and save plenty of time not checking every single gem in your Rails application since the bundler-audit reviews your gemfile.lock for vulnerable gem versions and prevents unreliable gem fetching.
* Secure Headers takes care about applying security-related HTTP headers to Rails application’s responses

1. Payments - fast, secure, and convenient payment options

* Money-Rails gem solves these tasks in your Rails application by integrating with the Money gem
* Active Merchant is a library from the creators of Shopify that provides a centralized API to integrate with many popular payment gateways. This open source library is well maintained by the Shopify team and currently supports 145 payment gateways available all around the globe
* Braintree Ruby and Stripe Ruby Bindings in order to provide lightweight solutions for our applications. Since Active Merchant is a large library, which might slow down an application’s performance, it’s more effective to integrate several payment gateways and not to overload the app.

1. Deployment - Puma and Unicorn are popular HTTP web servers commonly used for deploying Rails applications

* [Puma](https://github.com/puma/puma) and [unicorn-rails](https://github.com/samuelkadolph/unicorn-rails) Ruby gems
* A web application goes through a number of steps before being deployed, including copying files, migrating databases, and compiling assets. These tedious tasks can be completed with the automated deployment tool – Capistrano

1. Uploading Files

* Finally, you might want to upload and store your files on external servers like Amazon’s S3 or Google’s Cloud Storage. In this case, we use the Fog gem, which works with a variety of cloud services including AWS, Rackspace Servers, and Brightbo

1. Scheduled and Recurring Jobs - Background jobs in Ruby applications are processed outside the normal request/response flow and are literally operations in a queue, executed one after another.

* [Sidekiq](https://github.com/mperham/sidekiq" \t "_blank)
* [Resque](https://github.com/resque/resque" \t "_blank)
* [Sucker Punch](https://github.com/brandonhilkert/sucker_punch)

1. Search

* By leveraging Elasticsearch, you’re able to implement search on a website, index catalogs of goods (if you’re running an ecommerce store), enable automatic insertion of data, develop a solution for price notifications by indexing prices, implement reverse search, store transactions and actions, and analyze and retrieve data to get comprehensive statistics
* Ransack is appreciated by Ruby developers because it helps them create smart and simple, yet advanced, search forms
* Finally, to enable full text search in a PostgreSQL database, we use the PgSearch gem.

1. Environment Variables - Storing application configurations in environment variables is a widely used practice derived from the principle of a twelve-factor application; by doing so, you’re able to keep sensitive data like passwords or API keys outside the code repository, but the data is still available during execution

* Dotenv gem loads environment variables from a dotfile, which can be located outside the root of your project. Therefore, you’re able to keep your application’s secrets secure.

1. Admin Panel

* Active Admin and RailsAdmin provide their users with out-of-the-box features including data export to CSV, JSON and XML, custom search and filtering by types, as well as custom authentication and authorization to differentiate user roles.

1. View Helper - View Helpers are modules which contain methods to help you write DRY (Don’t Repeat Yourself), clean, and maintainable code

* Draper is a gem-decorator that adds an object-oriented presentation to your web application. If you find the logic in your templates and helpers overly complex, then this gem might be what you need – Draper helps you clean things up with a more object-oriented approach by adding, replacing, or extending an object’s behaviour
* Simple Form is a gem that does what its name suggests: it helps you create forms for your Rails applications
* MetaTags, which helps you create SEO-friendly Rails applications by adding View Helpers for meta tags