

AGENDA

- YELLOW means "Planned"
- GREEN means "Recorded"

🔒 Practical Ruby on Rails For Beginners

🔒 Introduction

- Hotwire by default

🔒 Set up your development environment

- Install ruby (with rbenv)
- Install ruby (with rvm)
- Install ruby (with asdf)
- Set up your text editor
- Installing rbenv on Windows

● A simple Rails application

🔒 The anatomy of a Ruby on Rails application

🔒 Application structure

- app/
- bin/
- config/
- db/
- lib/
- log/
- public/
- storage/
- test/ (or spec)
- tmp/
- vendor/
- Gemfile
- Rakefile

🔒 The request/response cycle

- Request
- Routes
- Controllers

🔒 Views

- Layouts
- Helpers
- Models

🔒 Keeping application state

- Sometimes you don't need state
- Database

🔒 Alternate solutions

- In-memory
- Files
- Redis

● Scaffolding

● Example: Application without a DB for storing state (Tip calculator)

🔒 The database

- Why do we need a database
- Intro to how databases work
- Intro to SQLite3
- Tables
- Migrations
- SQL console
- Rails console
- The schema file
- Seed data
- Naming conventions
- Indexes

🔒 Relationships

- Keys
- one-to-one
- one-to-many
- many-to-many
- Normalization

● Example: Tip calculator storing state in DB

🔒 Introduction to CRUD

- What is it
- How data looks like in a table

🔒 How the app works with the data

- Adding records
- Updating records
- Deleting records

🔒 MVC

🔒 Models

🔒 Validations

- Built-in validation helpers
 - Presence
 - Confirmation
 - Format & length
 - Scoped validations
- Errors

🔒 Associations

- belongs_to
- has_one
 - has_many
 - has_and_belongs_to_many
- through
- polymorphic

🔒 Queries

- find
- where
- scope
- join
 - filter on join tables
- includes
- grouping
- Lifecycle methods

🔒 Views

- templates
- layouts
- partials
- helpers

🔒 forms

- nested forms

🔒 Controllers

- actions
- base controllers

🔒 params

- strong params

🔒 sessions

- flash

- request / response
- render / redirect

🔒 filters

- auth tokens

● Example: User authentication

🔒 Hotwire

- Turbo Drive
- Turbo Frames
- Turbo Streams
- Stimulus JS

● Example: Instagram clone with Hotwire

🔒 Projects we're going to build

● Tip calculator

🔒 Build an authentication system from scratch

- Login
- Registration
- Forgot password
- Sessions

🔒 A blog

- Authentication with Devise

🔒 Authorization

- Admin
- Guest
- Member
- CSV Import/Export

🔒 Weather app

- Talking to 3rd party APIs
- Updating the view in real time

🔒 Tic Tac Toe Game

- Hotwire
- Stimulus
- ActionCable / WebSockets

🔒 Instagram clone

- Follow/unfollow users
- Accept/deny follow requests
- Like posts
- Comment on posts
- Reply to comments
- Comment threads

🔒 Hashtags

- Follow a tag
- Search posts by tags
- Store images on CDN (Amazon S3)

● Hotwire forms (with MMY dropdown)

🔒 Ecomm store

- Stripe integration
- Twitter post scheduler

🔒 Basics of Git

🔒 Github

- Create an account
- Generate SSH keys

🔒 Rails API

- Using Rails as an API
- Pairing a Rails API with an SPA framework

● Exceptions

🔒 Deployment

● Pre-compiling assets

🔒 Heroku

- Switch DB to postgres

● Custom VPS

● Fly.io

🔒 Testing

- Feature tests
- Request tests
- Unit tests

● Translations (i18n)

● Action cable & Websockets

🔒 Storage

- Disk storage
- Attachments

🔒 Background jobs

- Creating jobs
- Handling exceptions
- Execution backends
- Delayed Job
- Sidekiq

🔒 Debugging

- Printing values
- Call stack
- Source location
- Opening a gem
- Pry
- Step debugger
- Debugging Rails applications

🔒 Mailers

- How to send an email
- Email helpers
- Previewing emails
- Sending attachments
- SMTP server config

● Example: Blog + TailwindCSS

🔒 Assets

🔒 The Asset Pipeline

- What is it?

🔒 Features

- Concatenation
- Minification
- Pre-compilation
- Fingerprinting
- Caching
- Organization

● Sprockets

● Imortmaps

● TailwindCSS

● Manifest files