

Handling User Stories with Rails Scaffold, Custom Migrations, and ActiveStorage

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1. Introduction

This guide provides a step-by-step explanation for implementing user stories using Rails scaffold, custom migrations, and ActiveStorage. It is tailored to help developers set up and modify a Rails project to manage student profiles with specific features like email validation, profile picture uploads, and ActiveStorage integration.

2. Generating a Rails Scaffold for User Story 1: Creating a Student

- Scaffold Command
- Database Schema Generation
- Next Steps: Customizing Validations

3. Custom Migration for Email Validation

- Generating a Migration
- Modifying Migration File
- Running the Migration

4. Model Validations for User Stories 1 and 2

- Validating Fields: First Name, Last Name, Major, School Email, Graduation Date
- Uniqueness and Format of School Email

5. Setting Up ActiveStorage for Profile Pictures (User Story 3)

- Installing ActiveStorage
- Migrating the Database

6. Displaying the Profile Picture (User Story 3)

- Show View Logic: Displaying Uploaded or Default Image
- Image Variants and Resizing

7. Modifying StudentsController to Permit Profile Picture Uploads

- Strong Parameters for Profile Picture

8. Adding File Upload Field to Form for Profile Picture

- Updating Form for Profile Picture Input

9. Adding a Default Profile Picture

- Setting Default Image in Assets

10. Testing (TDD) for Student Model and Features

- Test Setup: Student Fixtures
- Key Tests for Validation, Uniqueness, and Saving

11. References

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