Course Outline:

Day 1 Introduction to Ruby on Rails Ruby programming Basics Strings, Numbers, Classes and Objects Arrays and Hashes

Day 2 Loops and Iterators, Ruby Methods Blocks, Procs and Lambdas Agile Web Development with Rails MVC concepts

Day 3 Installing Rails on Ubuntu Creating a new Application Architecture of Rails Applications Day 4 Understanding Controllers, Routing CRUD operations for a resource Understanding Rails model Object-Relational Mapping, Active Record Ruby gems / plugins

Day 5 User model and database User authentication using Devise Signup, Login, Email confirmation Reset Passwords, Track User

Day 6 Layouts & Templates Views Using Partial Views Action mailer basics, Email SMTP settings Email Layouts & Templates

Day 7 Responsive Design Basic Bootstrap Integration & Usages jQuery, jQuery-UI Basic Other Tools for Front-End

Day 8 Writing database migrations Active record life cycle Active model validation and callbacks Active Record associations Active Record query interface

Day 9 Github Repository & Usages MySQL vs PostgreSQL Deploy Application to heroku server Day 10 CanCan Integration (Access Permission) Abilities & Authorization Image/File Upload Simple Image Processing

Day 11 Form helpers Using nested attributes Unobtrusive JavaScript Implementing Ajax with rails Day 12 JSON Processing Add multiple languages (Internationalization) Revision of Previous Classes

Day 13 Test Driven Development (TDD) Introduction to Rspec Testing Writing unit tests for models

Day 14 Writing functional tests for controllers Writing integration tests

Day 15 Individual Project Assignment Revision and Discussion

Day 16 Project Development & Discussion

Day 17 Project Development & Discussion

Day 18 Project Evaluation