

# ENTR-925 Startup Programming

---

Spring Quarter, 2013

---

## Final Project Requirements

Every student is required to turn in a Ruby on Rails web application and an accompanying essay. Web apps can be built in teams, with up to three students per team.

- Projects are worth **70%** of the project grade.
- Essays are worth **30%** of the project grade.

**All project code and essays are due by Thursday, June 13, 11:59pm.**  
**Late work cannot be accepted.**

Code must be submitted as a link to a Github project, and essays should be provided as a link to a Google Document, Dropbox file, etc. or as a PDF attached to an email and sent to [j-cohen@kellogg.northwestern.edu](mailto:j-cohen@kellogg.northwestern.edu).

## Project Templates

You can choose from one of these idea templates. You may also suggest your own project, but your project idea must be approved no later than Week 7.

The three templates are:

1. **Social Sharing Site.** Something like Pinterest. Users can sign up for accounts, submit content, content is categorized or tagged, they "follow" other users, and can comment on other user's submissions.
2. **Content Management System.** Like Tumblr, or a newspaper publication service. Users sign up for an account as a publisher or reader. A publisher can post articles of various media types: text, images, videos, and maps, and are organized into sections based on a category, tag, publish date, or some other criteria. Readers can post comments anonymously or under their account.
3. **Event Organizer.** Like Evite or Meetup.com. A way to invite groups of people to events at various locations.

---

## Web App Grading Criteria

(60 pts) Projects must demonstrate mastery over these core elements (60 pts)

1. 15 pts) Demonstrate best-practice use of Rails MVC architecture

2. 10 pts) Use all four HTTP methods at least once
3. 10 pts) Contain at least one many-to-many association
4. 10 pts) Use at least three validation rules
5. 5 pts) Allow users to sign up, sign in, and sign out
6. 5 pts) Maintain HTTP session state (e.g. user authentication)
7. 5 pts) Populate the database via seed data

(10 pts) The remaining 10 points are subjective, based on:

1. Creativity in execution of application idea
2. Code readability and organization
3. Use of standard, idiomatic Ruby patterns

---

## Essay Grading Criteria

(30 pts) Each individual student must write a 3-page essay covering the following:

1. A description of their role on their team: what they contributed, and how.
2. An analysis of how the software construction process requires similar or different project management techniques as compared to non-software endeavors.
3. Reflection on one of the following three aspects of software management:
  - a. Considerations for hiring developers, including the hire vs. contract decision
  - b. Strategies for building an agile team, describing the value system and organizational structure
  - c. Theories of how to approach building a new product and bringing it to a test market
4. A reflection upon how immersion into web development as changed your view upon the endeavor of building a company or product that is based on a software solution.