

## Model Specifications

### Teams should:

1. Have all proper relationships specified.
2. Have a name and description.
3. Have values that are the proper data type.
4. Only be deleted if it has no users associated with it; otherwise, it should be archived.
5. Only be edited/deleted by admins.
6. Have a method to calculate the number of total points accrued.
7. Have a method to find the top-X scorers within the team.

### Users should:

1. Have all proper relationships specified.
2. Have a first\_name, last\_name, username, password, and email.
3. Have a required connection to team.
4. Have values that are the proper data type; role can be 'admin', 'regular', or blank.
5. Have a callback that automatically sets role to 'regular' if not set.
6. Validate that email is unique.
7. Never be deleted, only archived by the user that created it.
8. Have a method to calculate the number of total points accrued.
9. Have a method to list all challenges completed.
10. Have make\_active and make\_inactive methods.
11. Have the following scopes:
  - a. 'for\_team' – returns all users on a particular team (Parameter: team)
  - b. 'for\_challenge' – returns all users that have a submission associated with a particular Challenge (Parameter: challenge)
  - c. 'for\_role' – returns all users that have a particular role (Parameter: role)
  - d. 'by\_last\_name' – orders users alphabetically by last name
  - e. 'by\_first\_name' – orders users alphabetically by first name
  - f. 'active' – returns all active users
  - g. 'inactive' – returns all inactive users

### Challenges should:

1. Have all proper relationships specified.
2. Have a name and num\_points.
3. Have values that are the proper data type, and positive integer point values.
4. Only be deleted if it has no submissions associated with it.
5. Only be edited/deleted by admins.
6. Have the following scopes:
  - a. 'alphabetical' – orders challenges in alphabetical order
  - b. 'for\_user' – returns all challenges that have a submission associated with a particular user
  - c. 'for\_category' – returns all challenges that are part of a particular category (Parameter: category)

### Submissions should:

1. Have all proper relationships specified.
2. Have a required connection to both challenge and user.

3. Have values that are the proper data type.
4. Only be edited/deleted by the user that submitted it.
5. Have a callback that automatically sets date\_completed to the current date.

#### Photos should:

1. Have all proper relationships specified.
2. Have a required connection to submission.
3. Have values that are the proper data type.
4. Only be edited/deleted by the user that submitted it.
5. Have the following scopes:
  - a. 'chronological' – orders photos by submission date (most recent first)
  - b. 'for\_team' – returns all photos submitted by a particular team  
(parameter: team)
  - c. 'for\_user' – returns all photos submitted by a particular user  
(parameter: user)
  - d. 'for\_date' – returns all photos submitted on a particular date  
(parameter: date)
  - e. 'for\_challenge' – returns all photos submitted for a particular challenge
  - f. 'for\_past\_days' – returns all photos submitted in the past X days  
(parameter: X)