313-Recitation 3: Measuring Software Characteristics

Goal: During this recitation, the students will explore the space of characteristics pertaining to a software project and how those characteristics can be evaluated and measured.

Setup: For your company, you need to deploy a software framework that will help your developers build out their new social media site. The project lead has decided that you want to pick either a Ruby or Python-based framework that has proven industrial adoption: this narrows the choices down to either Django or Ruby on Rails.

Django:

Project webpage: https://www.djangoproject.com/
Source code: git clone https://github.com/django/django
Source code on GitHub: https://github.com/django/django

Ruby on Rails:

Project webpage: https://rubyonrails.org/
Source code: git clone https://github.com/rails/rails
Source code on GitHub: https://github.com/rails/rails

Your team's goal is to come up with criteria for comparing the two frameworks. Focus your comparison on the software, its documentation, and any other factors you can use to compare the quality of the two databases. Avoid using characteristics that do not provide insight into the quality differences of the two databases (example: Bob is on the team and Bob knows Django, thus we should use Django) or outside recommendations (example: Dr. Cathy says that Ruby on Rails is better for this application, so we should use Ruby on Rails). In summary, your team should answer the following question:

How would your team decide on a framework?

ACTIVITIES:

1. Form groups of four.
2. Discuss how you would answer the question.
3. Come up with the three (3) most important software characteristics that can be evaluated or measured to help answer the question.
4. Write your responses down in the provided form (one per group).
5. Report one (1) software characteristic that your group came up with to the class.
6. Turn in the filled in form (one per group).