

Welcome to Software Engineering for Software as a Service!

This course, which begins on **Monday**, is an opinionated path through the bewildering array of methodologies, languages, tools, and artifact types that collectively make up software engineering. The goal is to instill good software habits: “testability, software architecture, modularity, and reusability” while providing the gratification of building a working deployed artifact in the cloud in just 6 weeks. We teach Agile Development in the context of building and deploying a Software-as-a-Service application implemented using Ruby on Rails.

Videos:

The lectures are recorded live on campus at the University of California, Berkeley and then broken into several short segments for the online version of the course. At the end of most of the segments, there is a multiple-choice question to the audience; in the beginning of the next segment, the answer choices are discussed. The total is about 2 to 2.5 hours of video a week.

There are three important differences between the online course and the course given on-site at UC Berkeley. First, the UC Berkeley students are required to do a long-term programming project. Second, for the questions asked during the lecture by the professor, the Berkeley students use colored cards to vote on the correct answer. You will be given the opportunity to answer the questions on your own and check your answers before seeing the discussion. Finally, the on-site course is a 10-week course which has been divided into two shorter courses for the online version. You may hear an occasional reference to projects or cards, even though most have been removed.

Homework:

There are 4 homework assignments; all involve a substantial amount of programming. We will also give three 45-minute quizzes. You can only take each quiz once, but you can submit homework as many times as you want. Each time you submit, you will receive feedback from the automatic grader.

Grading Breakdown:

Each of the 4 homework assignments will be worth 10% of your final grade.

Quiz 0 and Quiz 3 will be worth 10% each.

Quiz 1 and Quiz 2 will be worth 20% each.

Assignments turned in between one minute and one week late will receive a penalty of 25%, e.g. an assignment that would have scored 100 points would only receive 75 points if it was late.

Assignments turned in more than a week late will receive no credit, but will still receive feedback from the auto-grader.

Workload:

In terms of workload, 50% of the students in a previous course spent less than 6 hours a week on the course, 40% spent 6 to 12 hours a week, and 10% spent more than 12 hours a week.

Required software:

To do homework 1, you will need to run a virtual machine image on either a local or cloud virtual machine.

- To run the virtual machine on your own computer, you will need to use VirtualBox ([instructions here](#)). Please randomly pick a download site; if you run into problems, try a different download site.
- To work from the cloud, you will need to use Amazon Web Services Free Tier for Elastic Cloud Computing (EC2) and Simple Storage Service (S3) ([instructions here](#)).

In your homework assignments, you will create and modify a SaaS application called "RottenPotatoes". In the setup screencast for the Virtual Machine the instructor uses the contents of the directory "/Documents/rottenpotatoes". The current version of the Machine Image does not contain this directory, so the commands run in the video will not work. This difference will not prevent you from doing any of the projects for the course. We are working to find a new method to distribute this directory, and will post an update on the course info page when it is available.

Feel free to browse the [course website](#) now!

We hope that you enjoy the class! At the end of the course we'll send a survey to collect your feedback on the material.

Good luck!

Armando & Dave