— Ruby Bootcamp —
Coursework Checklist
Version 1.1 as of 08/12/2014

- *Course Curriculum* *status: v1.0, under review, subject to revision*

  This component will state the overall goals and objectives, including training outcomes, for each level of the Bootcamp (Newbie, Foundational, Essentials and (Meta)-Mastery), together with guidelines for student prerequisites and the general overview of how the Bootcamp will be conducted (class mechanics).

- *Course Syllabus* *status: done*

  This component specifies the actual training material, and justifies how it will be used to support the classroom learning goals.

  The industry-standard teaching and reference textbook for the Bootcamp is ***Ruby Programming 1.9 & 2.0*** by Dave Thomas (with Chad Fowler and Andy Hunt), Pragmatic Bookshelf, 2013, ISBN 978-1-93778-549-9. Although not ideally suited for a modular classroom presentation, this volume is comprehensive as both a tutorial and as a reference manual, and, more so than any other book on the topic, is essential for learning Ruby.

  This text is available in both bound (hardcopy) and ebook (PDF) formats, and likely both formats will be useful throughout the Bootcamp.

- *Course Schedule* *status: v0.9, under review, subject to revision*
  week-by-week, day-by-day

  This component specifies the expected week-by-week and day-by-day presentation of topic material in sufficient detail such that the Instructor can gauge and pace the presentation rate.

- *Topic Presentation Material* *status: TBD*
  (slides, displays, handouts, etc.)

  (in progress)

- *Class Exercises* *status: v0.3, in progress, subject to revision*

  In the Bootcamp, “exercises” are referred to as “scales and études,” which better evokes their purpose and goal as small(er) scale preparatory and practice work. For a variety of pertinent pedagogical reasons, emphasis will be on pair programming (duets) rather than individual effort (solo). Several hours each week are devoted to scales and études at each Bootcamp level.

- *Class Projects* *status: v0.3, in progress, subject to revision*

  In the Bootcamp, “projects” are referred to as “concerti,” specifically large(r) scale team (ensemble) endeavors which should result in durable and useful products, not only for students’ use, but for evolution and serial contribution over several generations of Bootcamp classes, mimicking the genesis and evolution of actual open source software projects. Significant time (hours) in each Bootcamp level are devoted to team projects.

- *Computers* *status: done*

  Laptops and/or Workstations (per student)

  The Bootcamp will *not* rely on classroom-provided workstations; these would be inadequate. Instead, students will be required to provide and bring their own laptop computers to each class session (they would anyway). Modern team and open source development scenarios expect, encourage and even *require* developers to have their own, personal laptop, as this serves as the basis for the acquisition and development of a software development toolkit which is portable and personalized to each individual's needs and styles.

  The Bootcamp will, in part, be an opportunity to address, evaluate and enhance the student's laptop environment and software toolkit.

  Each laptop's operating system should be one of: Linux, which is recommended and preferred (nearly any mainstream distro, including Ubuntu, Fedora, OpenSuSE, etc.); or Mac (Mac OSX). Use of Microsoft Windows (any version) is discouraged and deprecated, unless used *only* to support/run a Virtual Machine for Linux or Mac. Dual-boot configurations (e.g., Linux and Windows) are acceptable, with the provision that the Windows installation will be ignored in class.

- *Software Tools* *status: done*

  The Bootcamp will emphasize the use of open source and industry standard Ruby software development tools, including (but not limited to):

  - Sublime Text (text editor)
  - Ruby enVironment Manager (RVM)
  - Ruby Gems, including Rake, IRB and Pry
  - others (TBD)

- *Guest Speaker and Topic (optional)* *status: TBD*

  On an as-available and on-topical basis, Instructor may arrange to invite an outside, industry Ruby practitioner to both make a presentation (informal) and to interact with students either through Q&A and/or in an after-class setting such as a no-host dinner or a Ruby community meeting (*e.g.*, Denver.rb Meetup group). When available, such contact brings a level of independent expertise and a taste of the "real world" of software development, team interaction and business best-practices as an initial exposure for the students.

  At this writing, a guest speaker is scheduled for a Thursday afternoon/evening for each Bootcamp class level (Newbie, Foundational, Essentials and (Meta)Mastery).

  Furthermore, this interaction gives the guest speaker, who oftentimes has some level of hiring influence, an opportunity to meet and informally assess Bootcamp students, both for immediate or near-term hire or for recommendation to other peers in the business community.

  This also builds a positive professional relationship between guest presenters, their employers and PARSEC, solidifying our role as a contributing community member and a potential, ongoing resource for qualified software development candidates.