

Agile Processes

CS 2720

Agile software development methods were “introduced” in the [Agile manifesto \(2001\)](#) as a response to the high cost incurred by change in the plan-based approaches of the past.

It is worth reading the [four values](#) and [twelve principles](#).

There are several different software development processes (or “frameworks”) which follow the agile principles, including:

- Extreme programming (XP)
- Kanban
- Scrum

Extreme Programming

Extreme programming (XP) is one of the first, and one of the most “stereotypical”, agile processes. In *Extreme Programming Explained: Embrace Change* (1st edition) by Beck, twelve *primary practices* are given:

- Planning Game
- Small Releases
- Metaphor
- Simple Design
- Testing
- Refactoring
- Pair Programming
- Collective Ownership
- Continuous Integration
- 40-Hour Week
- On-Site Customer
- Coding Standards

Another agile process, one that focuses chiefly on management and not on development, is *scrum*. Scrum provides an easy-to-integrate starting point for agile methods. You should review Scrum in the textbook and on the [Scrum Wikipedia page](#).

As far as use goes, Mike Cohn's recommendation is to "...start with Scrum and then invent your own version of XP." ([Blog post from April 6, 2007](#)).