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).