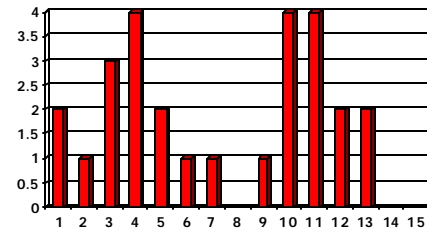# CSE 403
Lecture 10

Motivation

Random number generation

Project

- Wednesday, October 30
  - Functional Design Specification
- Thursday, November 14
  - Dev milestone
- Friday, November 15
  - Dev milestone presentations
- Wednesday, November 27 (Day before thxgiving)
  - Code complete
- Friday, December 6
  - Code Freeze
- Friday, December 13
  - Release to Manufacturing

Management evaluation of projects

- Quality of released program
  - Functionality
  - User experience
  - Robustness
- Team process
- Code quality
- Design documents and artifacts

Motivation

- Motivation is undoubtedly the single greatest influence on how well people perform. Most productivity studies have found that motivation has a stronger influence on productivity than any other factor. (Boehm 1981)

Question

- What are the three strongest motivating factors for you as a software developer

What motivates developers?

Programmer Analysts	Managers of Programmers	General Population
Achievement	Responsibility	Achievement
Possibility for growth	Achievement	Recognition
Work itself	Work itself	Work itself
Personal life	Recognition	Responsibility
Technical supervision	Possibility for growth	Advancement
Advancement	Interpersonal relations, subordinates	Salary
Interpersonal relations, peers	Interpersonal relations, peers	Possibility for growth

Rest of the table (Boehm 1981)

Programmer Analysts	Managers of Programmers	General Population
Recognition	Advancement	Interpersonal relations, subordinates
Salary	Salary	Status
Responsibility	Interpersonal relations, superiors	Interpersonal relations, superiors
Interpersonal relations, superiors	Company policies and administration	Interpersonal relations, peers
Job security	Job security	Technical supervision
Interpersonal relations, subordinate	Technical supervision	Company policies and administration
Company policies and administration	Status	Working conditions
Working conditions	Personal life	Personal life
Status	Working conditions	Job security

Top five motivation factors

- Achievement
  - Ownership
  - Goal setting
- Possibility for Growth
- Work itself
  - Skill variety
  - Task identity
  - Task significance
  - Autonomy
  - Job feedback

Top five motivation factors

- Opportunity to focus on the work itself
  - Reduce administration
  - Remove obstacles
- Personal life
- Technical-supervision opportunity
  - Assign each developer to be technical lead for some particular product area

How not to manage: Morale killers (McConnell)

- Management manipulation
- Excessive scheduling pressure
- Lack of appreciation for team member's efforts
- Inappropriate involvement of technically inept management
- Not involving team members in decisions that affect them
- Productivity barriers
- Low quality
- Heavy handed motivation campaigns
- Frequent changes in direction