

# Software Development Project Management

## Time Estimation

### 1. Define Project Complexity:

Use Cyrelin complexity categories [Known, Knowable, Complex]

### 2. Rough Estimate:

Derive from previous experience with similar projects or industry benchmarks

### 3. Milestone Estimates:

Use Work Breakdown Structure for this (WBS).

Create estimate sheets for every milestone.

Milestones := 1 – 6 of Software Development Lifecycle Diagram

### 4. Buffer:

Add 30% buffer to each milestone estimate

### 5. Safety Buffer:

Add 20% for meetings, documentation and textual communication

## Project Estimate Formulae:

$$\text{duration}(P) = \text{sum}(\text{TE}) + 0.3 * \text{sum}(\text{TE}) + 0.2 * \text{sum}(\text{TE})$$

\*TE := Task Estimates

Project Estimate Example:

$$\text{duration}(\text{website redesign}) = 12\text{h} + 0.3 * 12\text{h} + 0.2 * 12\text{h} = 18\text{h}$$