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CSC505 – Critical Thinking Assignment 2

Cunningham Model

**Overview**

A diagram of a process

Description automatically generated

(Adapted from Pressman & Maxim pg. 25 and Popat)

**A few pages of a document

Description automatically generated with medium confidenceImplementation**

**Communication and Requirements:**

* Strengths:
  + Clearly states the overall goal
  + Spells out the deliverables at the beginning (Popat, 2025)
  + Understanding of the needs and expectations
* Weaknesses:
  + Might need to be revised later in the process as new requirements are discovered

**Design and Planning:**

* Strengths:
  + Because I combined design and planning into one step, this leaves a lot of space for brainstorming to create a blueprint for the implementation phase (Propart)
  + Detailed planning (Roadmunk)
* Weaknesses:
  + Can get too specific here on implementation and testing, leading to redundancy

**Implementation**

* Strengths
  + Details out specific steps to meet all of the goals
* Weaknesses:
  + Too much detail can hinder the overall progress and obfuscate major milestones.
  + Feedback loop can be difficult to integrate without repetition (Roadmunk)

**Testing**

* Strengths:
  + Provides some opportunity for a feedback loop if properly implemented in a time-critical way.
  + Helps ensure that the timelines are being met (Propart)
* Weaknesses:
  + Could be either to complex or too shallow, leading to oversight.

**Deployment**

* Strengths:
  + Further emphasizes meeting specific goals
* Weaknesses:
  + Life is never “complete” and we should always keep looking towards what is next.

**References**:

Pressman, R. S., & Maxim, B. R. (n.d.). Software Engineering: A Practitioner’s Approach. Retrieved from <https://platform.virdocs.com/read/1490446/59/#/4/4>

Popat, M. (2025, January 1). *The waterfall model in software development: A classic approach to structured project management*. Medium. https://mihirpopat.medium.com/the-waterfall-model-in-software-development-a-classic-approach-to-structured-project-management-bebc579d6f66

Roadmunk. (n.d.). *Waterfall: Definition, examples, and benefits*. Waterfall. https://roadmunk.com/glossary/waterfall/#:~:text=One%20example%20of%20the%20waterfall,blueprints%20and%20plans%20are%20created.