

ENPM808X - Week 3

Tanuj Thakkar

Master of Engineering in Robotics
University of Maryland - College Park
tanuj@umd.edu

1. Software Engineering 5.1

How are software changes classified by their purpose? What is the most common purpose of the change?

Software changes are categorized according to their goals:

- Perfective changes: Modifications that add new features and raise the value of software.
- Adaptive changes: Modifications that allow software to adjust to new situations in which the software functions.
- Corrective changes: Modifications that fix software flaws and errors.
- Protective changes: Modifications that protect the software while remaining undetectable to the user.

The perfective change is the most frequent type of modification.

2. Software Engineering 5.3

When is it permissible to do quick-fix changes?

When an emergency arises during the evolution stage, meaning a person's life is in danger or anything of significant worth is at stake, quick fixes must be made. In situations like these, immediate repairs are required, and urgency takes priority over all other factors.

3. Software Engineering 5.5

What is a product backlog?

A product backlog is a prioritized list of work for the development team that is derived from the roadmap and its requirements. The most important items are shown at the top of the product backlog so the team knows what to deliver first. The development team doesn't work through the backlog at the product owner's pace and the product owner isn't pushing work to the development team. Instead, the development team pulls work from the product backlog as there is capacity for it.

4. Software Engineering 6.6

Describe a situation when a grep search fails. What would you do if this happened to you?

Grep fails when trying to find implicit concepts because there is no code, identifier, or remark that would indicate the concept extension is there. We must rely on other concept location strategies when a grep search fails.