ENPM808X: Software Development for Robotics Srinidhi Sreenath UID:117506075

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1. Software Engineering 5.1

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

There are 4 types of software software changes:

- **Corrective Changes:**Corrective software maintenance is what one would typically associate with the maintenance of any kind.
- **Adaptive Changes:** Adaptive software maintenance becomes important when the environment of your software changes.
- **Perfective Changes:** Perfective software maintenance focuses on the evolution of requirements and features that existing in your system.
- **Preventive Changes:**Preventative Software Maintenance helps to make changes and adaptations to your software so that it can work for a longer period of time.

The most common purpose of the change is the perfective change as they contain a lot of changes that may be as high as two-thirds of the changes.

2. Software Engineering 5.3

When is it permissible to do quick-fix changes?

Quick fixes are to be done when there is a situation of emergency when there are lives at stake: where urgency outweighs everything else.

3. Software Engineering 5.5

What is a product backlog?

It is the set of requirements that the programmers manage that are provided to them by the users. It is also known as a requirement database. It is the list of desired properties and features of the software product.

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 the query does not return a value or result. If a grep search fails we should look for other techniques to search.