Homework Lesson 9

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**Level 1**

Make a comparison of static and dynamic testing techniques. Give the advantages and possible limitations when using each of them.

|  | **Static testing technique** | **Dynamic testing technique** |
| --- | --- | --- |
| **Description** | does not require running a program or application and allows to find the most obvious errors at the early stages of product creation. It includes review (checking work products such as documentation, user stories, diagrams, instructions, and other documents used during software development) and static analysis (automated testing of code and documentation to find obvious errors and bugs). | is a type of testing that involves running the program code. That is, the behavior of the program is analyzed during its operation. To perform dynamic testing, the program code must be written, compiled, and run. In this case, the external parameters of the program (its performance) can be checked: CPU load, memory usage, response time, etc. |
| **Advantage 1** | You can find defects on early stages in requirements | Dynamic Testing is an area where the most amount of user defects will be found |
| **Advantage 2** | It doesn’t require complex test environments | Tests the product like an end user |
| **Advantage 3** | It can be done by non technical people | Allows detailed analysis of performance |
| **Limitation 1** | It won’t find runtime defects | Should be performed by technical savvy people |
| **Limitation 2** | Static analyze tools can report a huge number of potential defects which needs to be analyzed | Can take quite a long time |
| **Limitation 3** | Even with a review requirements can be defective | If requirements are missing or not clear it can delay testing |
| **Conclusion** | Static Testing is a useful tool in the overall testing methodology as it allows non technical people to perform it | It is an essential part of the testing life cycle and it simulates end user use |

**Level 2**

2. D

3. B

4. B

**Level 3**

<https://miro.com/app/board/uXjVMdDlm4s=/?share_link_id=72905219204>

4 test cases