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# Instructions

In software development, a security framework is an integral part of the software’s life cycle. It is important to ensure that security requirements are well defined and well implemented, and that integrity is preserved throughout the various stages.

Provide one example of how security is involved in each phase of the SDLC.

# SDLC Phases

1. Project initiation and planning

Planning is the most important thing to focus on when it comes to security, if you plan properly you will run to far fewer security problems down the line.

1. Functional requirements and definition

Here a potential security problem is that the software or hardware that is chosen may have a known security vulnerability, as such you should do your research when picking requirements.

1. System design specifications

Similar to the overall planning stage, the designing needs to be done with security in mind.

1. Development and implementation

As this is where the coding of the software actually takes place, this is where most vulnerabilities can appear. Make sure to test regularly to ensure that nothing is overlooked.

1. Documentation and common program controls

Taking proper documentation can stop you or others from making the same security mistakes that were made.

1. User acceptance

Ensuring that user acceptance is legally sound and up to date will ensure you avoid potential legal issues.

1. Testing and evaluation control

This phase will catch anything that was missing in previous stages.

1. Production implementation

If anything was missed, this is where the security vulnerabilities will affect the users and systems the software is used in.