Jonathan Daermann

5/25/23

Assignment 2 – Defining process models

1. Waterfall Model: The Waterfall Model is a traditional sequential software development process that follows a linear and sequential approach. It consists of distinct phases that flow downwards like a waterfall, where each phase depends on the completion of the previous one.

Description:

* Planning: In this phase, project goals, scope, and requirements are identified, along with the allocation of necessary resources.
* Requirements: The requirements are gathered and analyzed to define the project's functional and non-functional specifications.
* Design: The system architecture, database design, and user interface are planned and documented.
* Implementation: The development team starts coding and implementing the software based on the design specifications.
* Verification: The completed software is thoroughly tested to ensure it meets the requirements and quality standards.
* Maintenance: Once the software is deployed, ongoing maintenance and bug fixes are performed as needed.

1. Incremental Development Model: The Incremental Development Model breaks down the development process into smaller increments or iterations. Each iteration encompasses the entire software development life cycle, including planning, requirements, design, implementation, and testing. However, each iteration delivers a working subset of the final product.

Description:

* Requirements: Initial requirements are gathered and analyzed to determine the functionality for the first iteration.
* Design: Design decisions and architecture are made for the functionality targeted in the current iteration.
* Implementation: The development team implements the functionality specified in the iteration.
* Testing: The implemented functionality is tested to ensure it meets the requirements and works as intended.
* Iteration: Each iteration adds new features or enhances existing functionality based on feedback from the previous iterations.
* The process continues until the final product is complete.

1. Integrate and Configure Model: The Integrate and Configure Model focuses on integrating and configuring existing off-the-shelf components or software to create a customized solution. It involves selecting appropriate components and configuring them to fit the specific requirements of the project.

Description:

* Planning: The project goals and requirements are identified, along with the identification of suitable off-the-shelf components.
* Component Selection: The appropriate off-the-shelf components are chosen based on the project's requirements and compatibility.
* Configuration: The selected components are configured or customized to align with the project's specific needs.
* Integration: The configured components are integrated into the existing infrastructure or system, ensuring compatibility and proper functioning.
* Testing: The integrated system is thoroughly tested to validate its functionality and ensure it meets the desired outcomes.