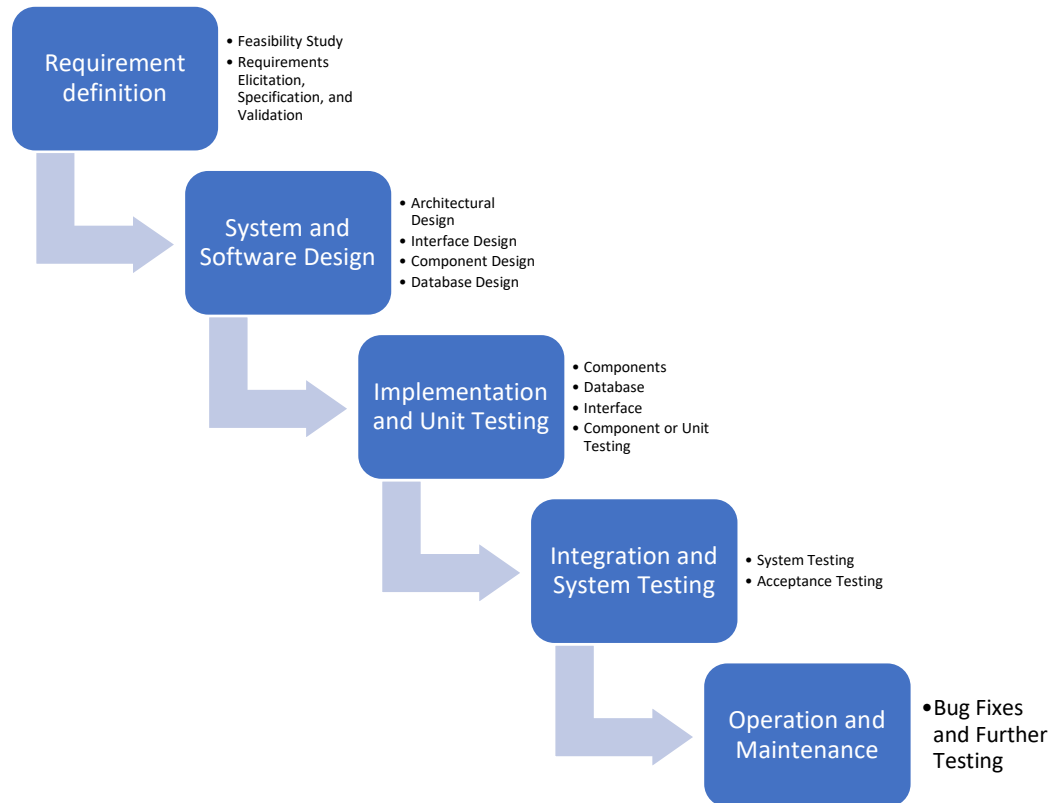Gabriel Melara-Paz

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Applied Programming Concepts

Waterfall Model

Requirements Definition: The scheduling system is designed to support three types of users: students, instructors, and an admin. It will allow users to manage courses, view and print schedules, and perform other academic functions. The system database is built to hold 100 students, 10 instructors, and 1 admin.

System and Software Design: This system will include a user-friendly web interface tailored for each user role. Use case diagrams and flowcharts were developed to outline key system functions and ensure logical interaction between components.

Implementation and Unit Testing: Individual models were implemented and tested for functionality. Verifying students can log in and manage their course, instructors can access class rosters and schedules, and the admin can oversee all system operations.

Integration and System Testing: All modules were integrated into a unified system. Testing was conducted to ensure that the components interact correctly.

Operation and Maintenance: Once deployed, the system is monitored for performance and usability. User feedback is collected to identify bugs and improve areas. Maintenance ensures that the system remains functional and secure.