# CS 255 Model Application Short Paper

Oumar Kenneh

Oumar.kenneh@snhu.edu

Southern New Hampshire University

## Process Model Application

Process modeling defines the major workflows of student registration, lesson scheduling, progress tracking, and payment collection as step-by-step procedures. Each user operation is mapped as a linear process and documented for business transparency.

**Advantages**: Simple documentation, clear user guidance, and good for routine operations.

**Disadvantages**: Poor scalability, less adaptable to changing business rules or complex relationships.

## Object Model Application

## Object modeling structures the system into entities Student, Lesson, Test, Car, Driver, Payment, and Role—each with unique properties and methods. Interactions (for example, matching lessons to drivers/cars) are mapped into relationships, making the architecture highly modular.

## Advantages: Easily extensible, supports complex data interactions, well-suited for growing or changing systems.

## Disadvantages: More abstract, harder for non-technical users to grasp, and initially requires more technical effort.

## Process and Object Model Comparison

For systems that have static, unchanging workflows, process modeling is a great fit. Object modeling performs well for flexible and expandable systems, particularly when dealing with complex data and relations. For DriverPass, you would want to use object modeling because of the necessary flexibility of features, future proof-ness, and strong data management.

## References

Kendall, K. E., & Kendall, J. E. (2019). Systems Analysis and Design (10th ed.). Pearson.