

TidBIT

Remember that modeling is an iterative process:

In most cases it takes many attempts to produce a “good” model. The first things written down when developing a model merely act as somewhere to start. As the model is built up the analyst's knowledge of the system increases and they may realise that some details have been omitted or that the original structure is unsuitable or unfeasible. Analysts must be prepared to insert new details, re-draw existing parts of the diagram and even, on occasion, throw away the current model and begin anew. (University of Cape Town, 2011)

Creating models is important because they require you to think about a system and how you will meet the different requirements. It is *equally* important to be flexible and able to adapt your designs based on new information.

Reference




University of Cape Town, Computer Science Department. (2011). An introduction to analysis and design. In *The main models of traditional analysis and design*. Retrieved from https://www.cs.uct.ac.za/mit_notes/software/htmls/ch04s05.html



Required Resources

Reading: *Systems Analysis and Design with UML*

Read the following sections:

- Chapter 4  (https://go.oreilly.com/SNHU/library/view/systems-analysis-and/9781118037423/09_chapter004.html), beginning of chapter through “Creating Use Case Descriptions” section
- Chapter 5  (https://go.oreilly.com/SNHU/library/view/systems-analysis-and/9781118037423/10_chapter005.html), beginning of chapter through “Patterns” section
- Chapter 6  (https://go.oreilly.com/SNHU/library/view/systems-analysis-and/9781118037423/11_chapter006.html), beginning of chapter through “Creating Behavioral State Machines” section

This reading describes three different types of system models: functional, structural, and behavioral. You will learn about the definitions for each model as well as techniques for creating the different types of diagrams for each model. Though you will not be asked to create functional, structural, and behavioral models for the DriverPass project, you will notice that these different views of the system use similar diagrams to those you have seen in your readings on process and object models. As you read, consider the following questions:

- What are the key features of each type of model?
- What types of UML diagrams are associated with each model?
- What are helpful techniques for creating the different models?