

FIGURE 1-2
Systems development life cycle

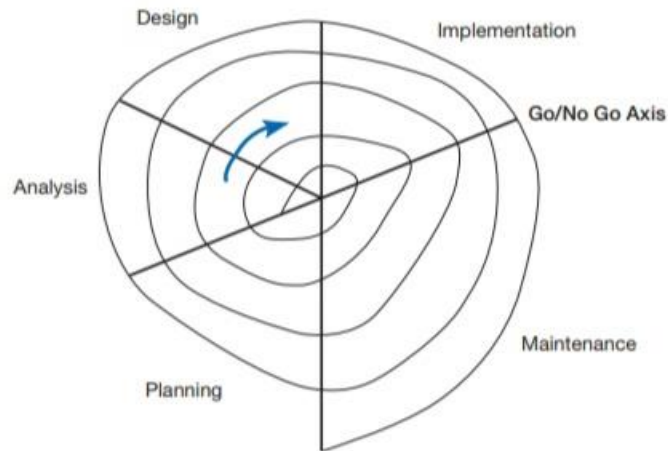
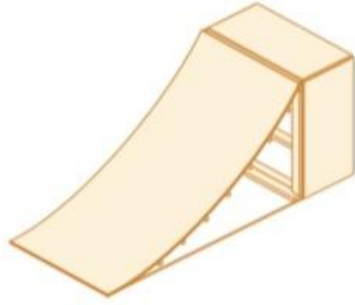


FIGURE 1-3
Evolutionary model



(b) A skateboard ramp (physical design)

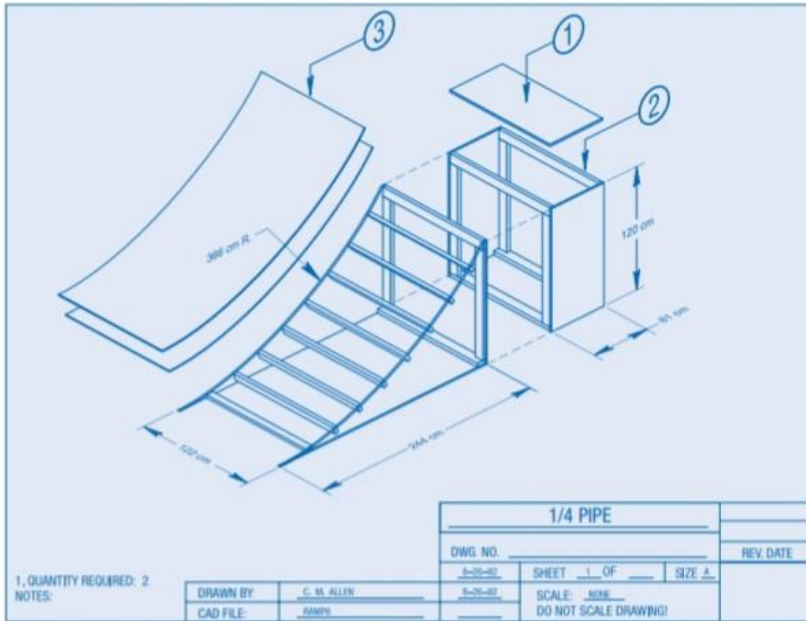


FIGURE 1-6
Difference between logical design and physical design
(a) A skateboard ramp blueprint (logical design)

(Sources: www.tumyeto.com/tydu/skatebrd/organizations/plans/14pipe.jpg; www.tumyeto.com/tydu/skatebrd/organizations/plans/iusblue.html. Accessed September 16, 1999. Reprinted by permission of the International Association of Skateboard Companies.)

FIGURE 1-8
Analysis–design–code–test loop

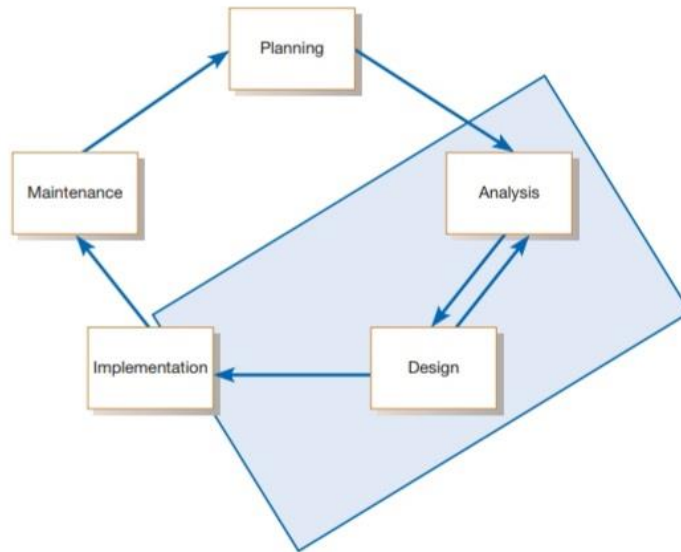
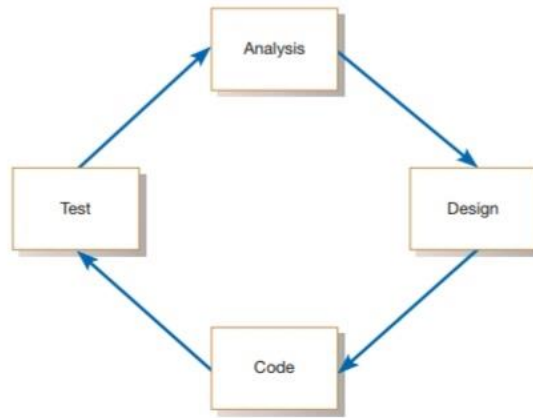


FIGURE 1-9
Heart of systems development

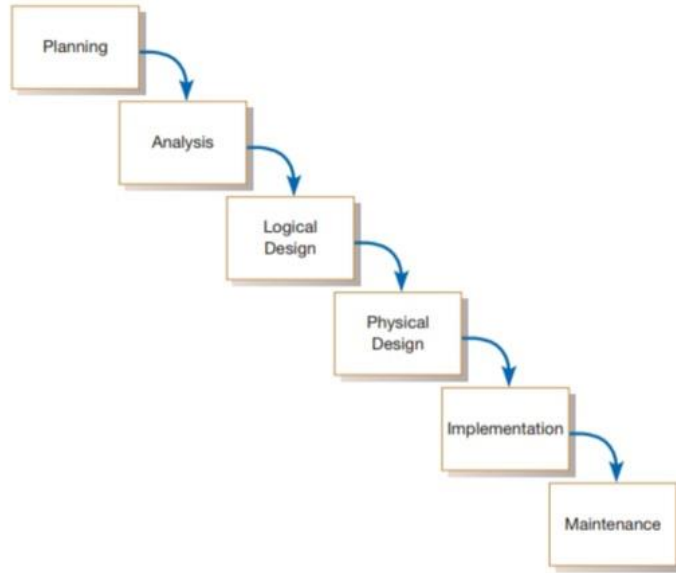


FIGURE 1-10
Traditional waterfall SDLC

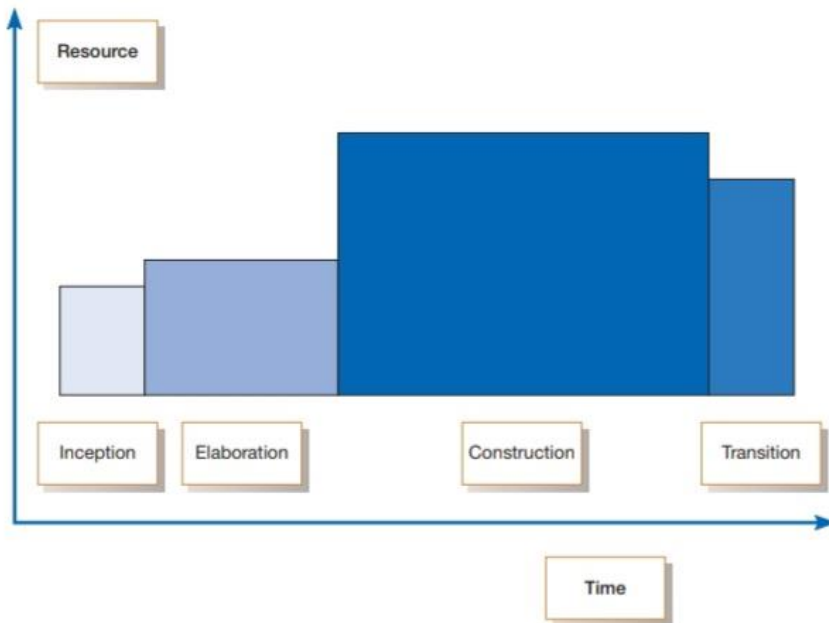


FIGURE 1-11
Phases of OOAD-based development



FIGURE 3-4
A project manager juggles numerous activities
Source: ra2 studio/Fotolia



FIGURE 3-8
Level of project planning detail should be high in the short term, with less detail as time goes on

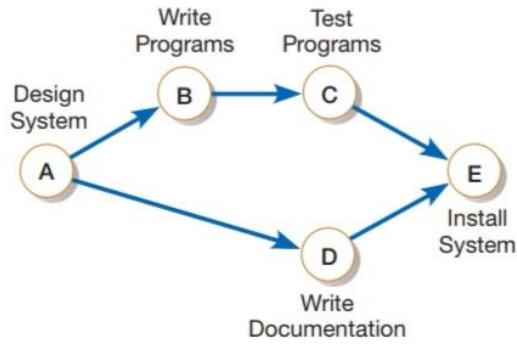


FIGURE 3-20

A network diagram showing activities (represented by circles) and sequence of those activities (represented by arrows)

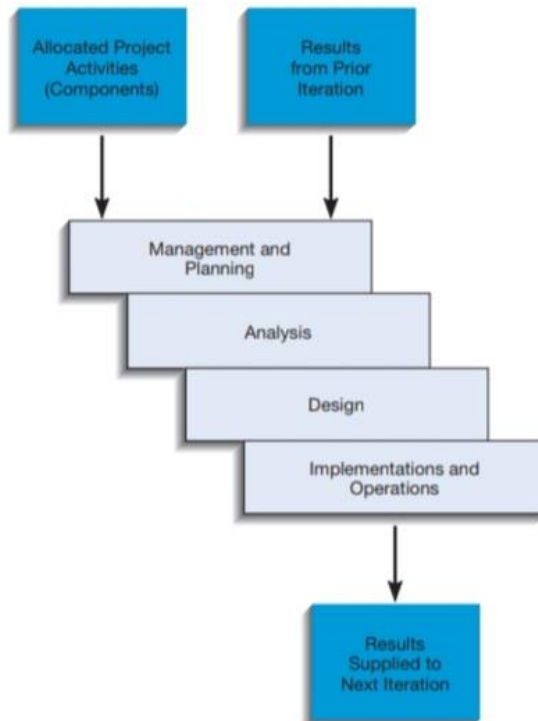


FIGURE 3-34

The workflow of an iteration (Source: Based on Royce, 1998; George et al., 2007.)

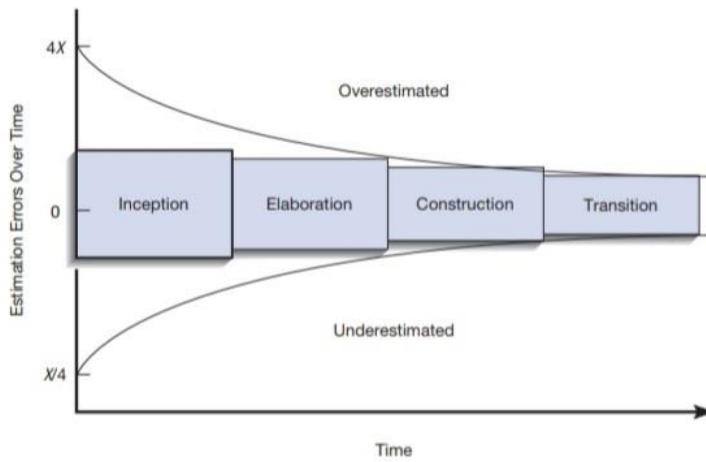


FIGURE 3-35
 Planning estimation improves over time
 (Source: Based on Royce, 1998; George et al., 2007.)

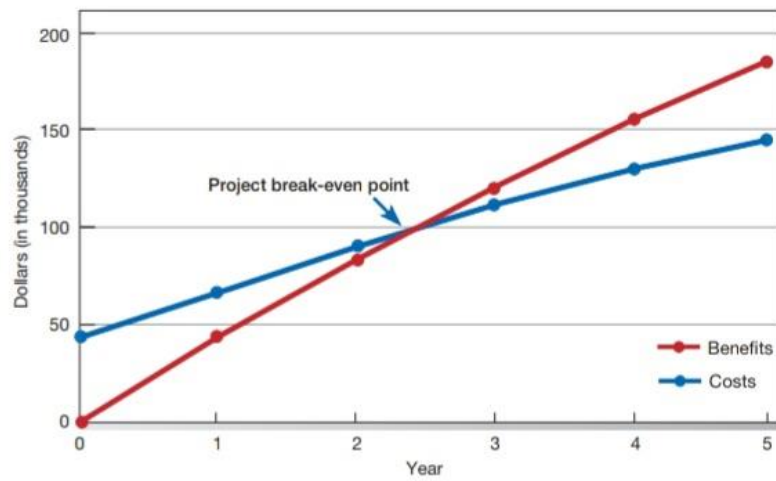


FIGURE 5-7
 Break-even analysis for Customer Tracking System (Pine Valley Furniture)

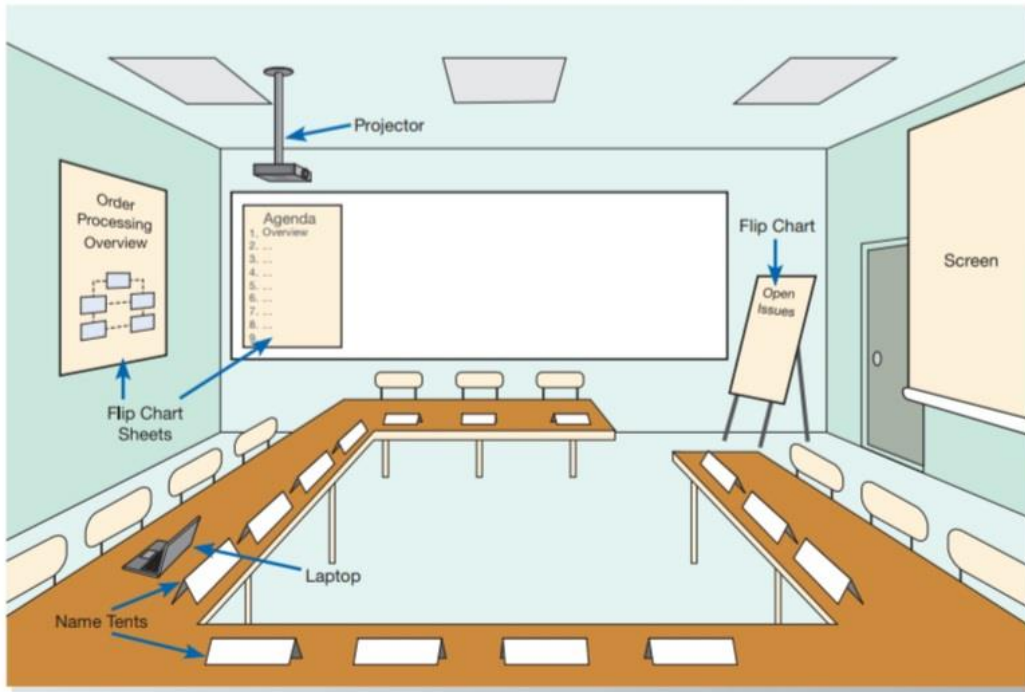


FIGURE 6-6
 Illustration of the typical room layout for a JAD
 (Source: Based on Wood and Silver, 1997)

JAD sessions are usually held in special-purpose rooms where participants sit around horseshoe-shaped tables, as shown in Figure 6-6. These rooms are typically equipped

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FIGURE 7-26
 A use case diagram for a university registration system

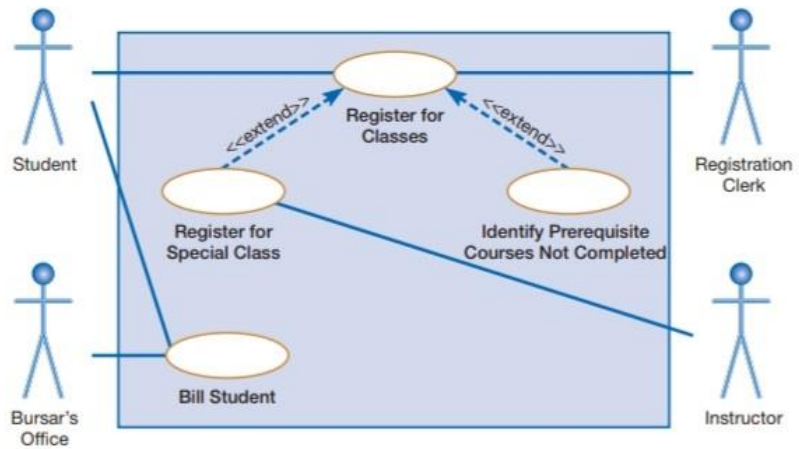


FIGURE 7-27

A use case diagram featuring an include relationship

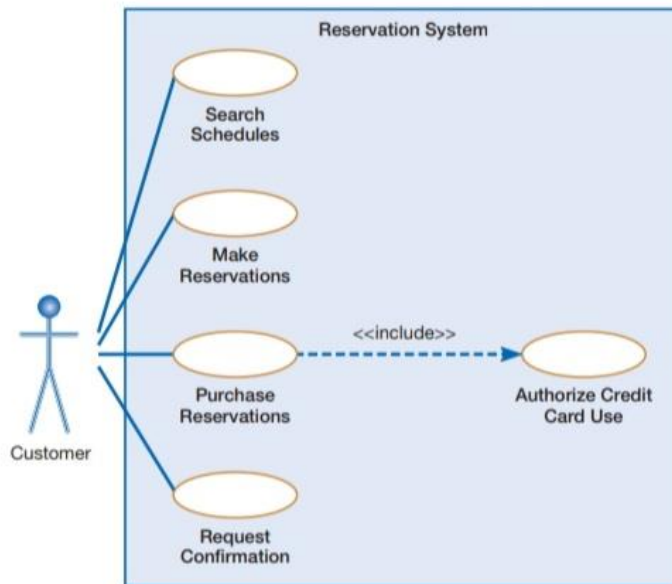
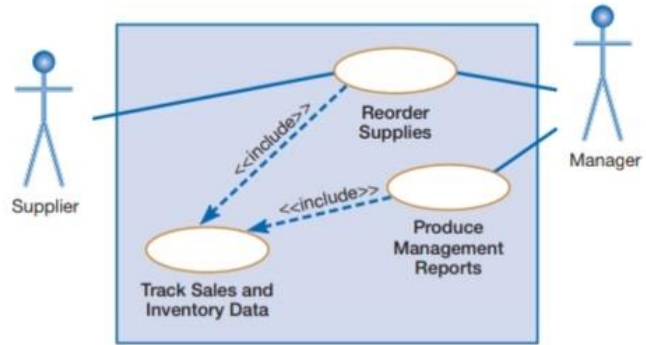


FIGURE 7-31

A use case diagram for a reservation system

(Source: George, Joey F.; Batra, Dinesh; Valacich, Joseph S.; Hoffer, Jeffrey A., *Object-Oriented Systems Analysis and Design*, 2nd Ed., ©2007, pp. 174, 168, 175, 172, 176, 177. Reprinted and Electronically reproduced by permission of Pearson Education, Inc., New York, NY

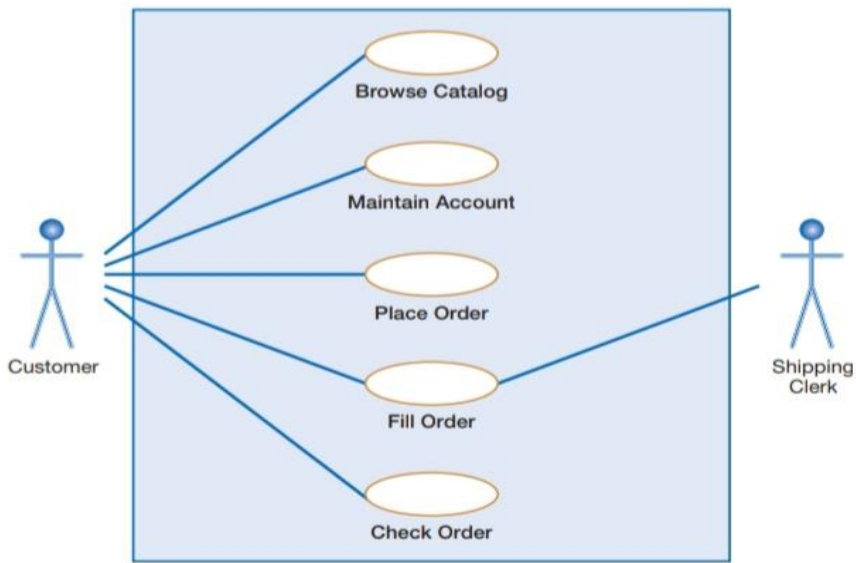


FIGURE 7-33
 WebStore use case diagram
 Source: George, Joey F.; Batra, Dinesh; Valacich, Joseph S.; Hoffer, Jeffrey A., *Object-Oriented Systems Analysis and Design*, 2nd Ed., ©2007, pp. 174, 168, 175, 172, 176, 177. Reprinted and Electronically reproduced by permission of Pearson Education, Inc., New York, NY

FIGURE 7-45
 A process featuring an AND gateway and an XOR gateway.

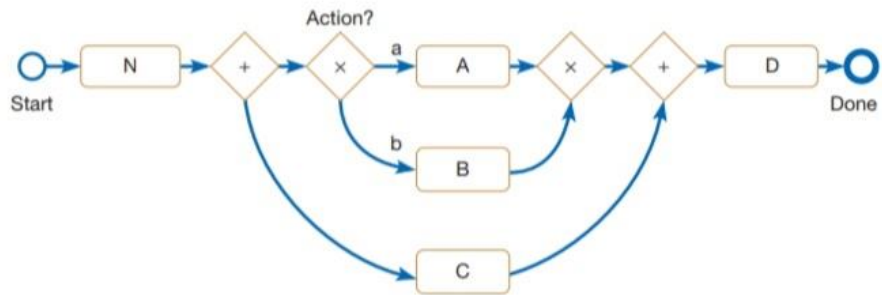


FIGURE 7-44
An XOR gateway.

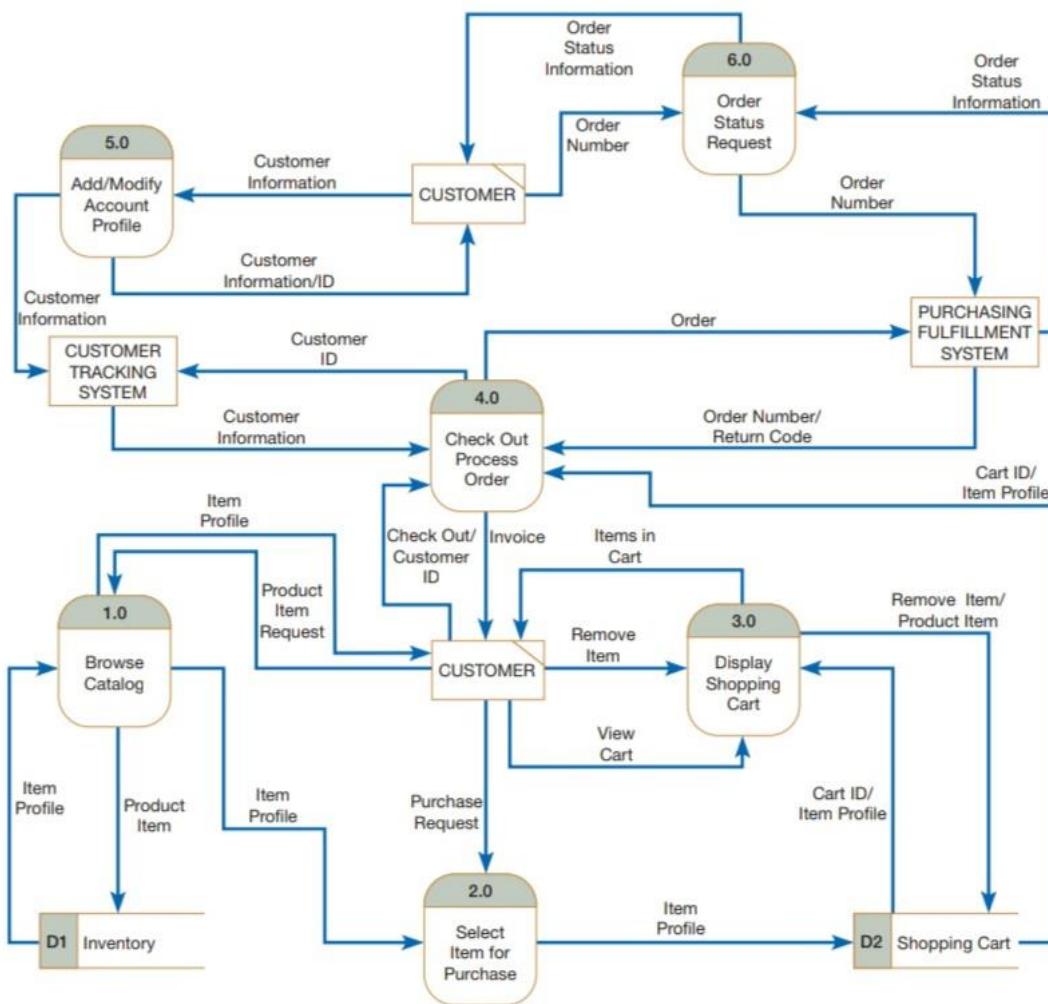
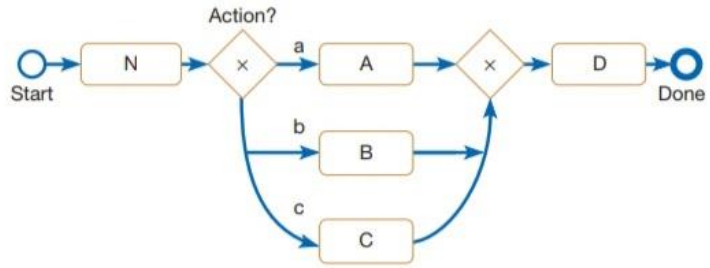
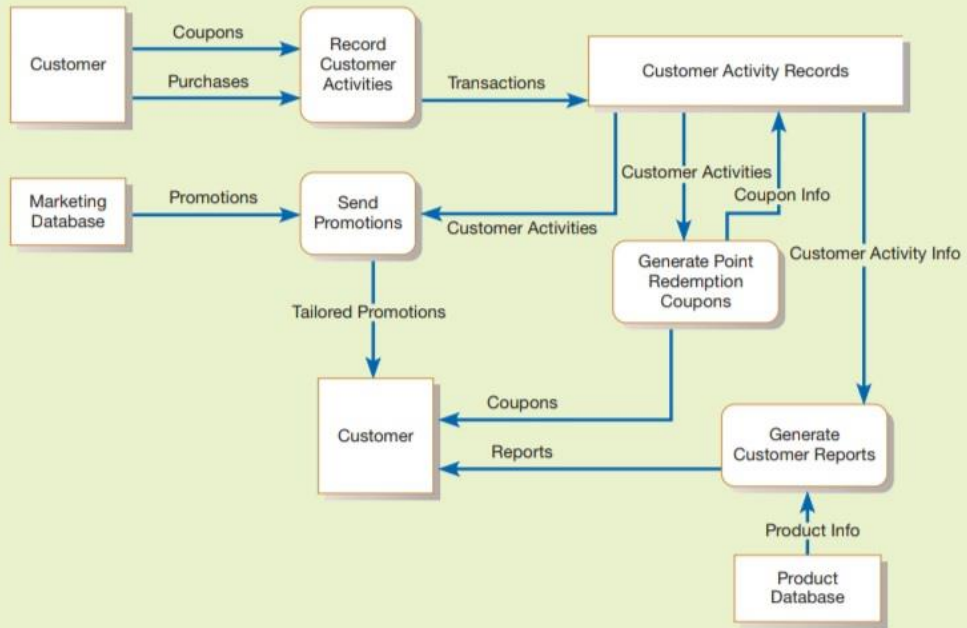
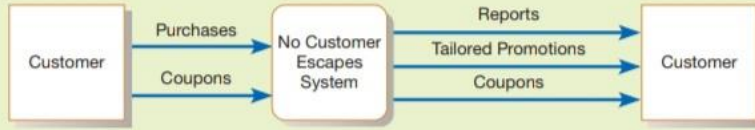


FIGURE 8-21
Level-0 DFD for the WebStore

PE FIGURE 7-1
Context diagram



PE FIGURE 7-2
Level-1 DFD

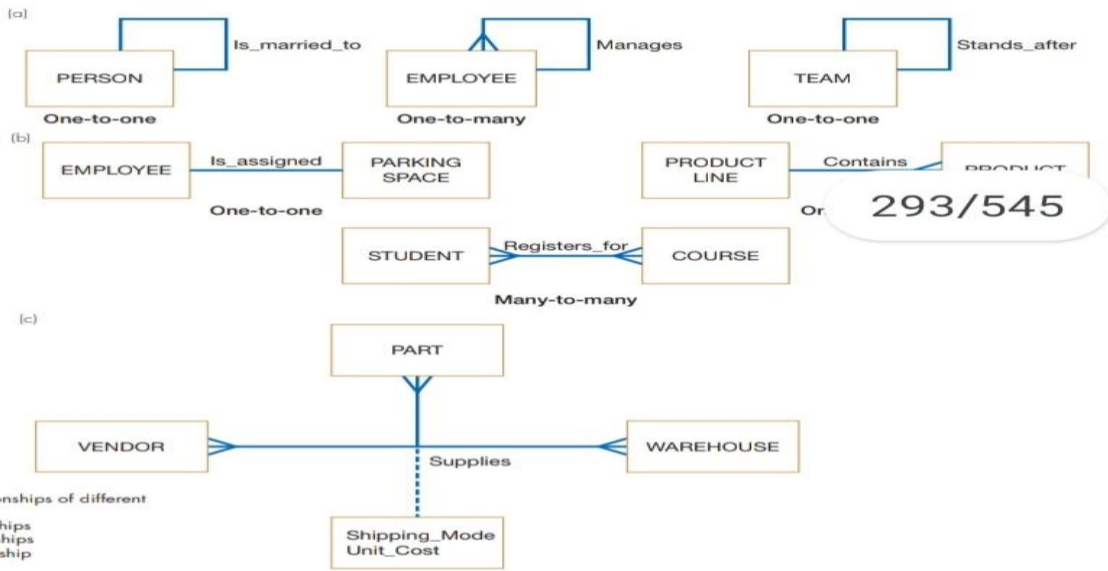


FIGURE 8-11
Examples of relationships of different degrees
(a) Unary relationships
(b) Binary relationships
(c) Ternary relationship

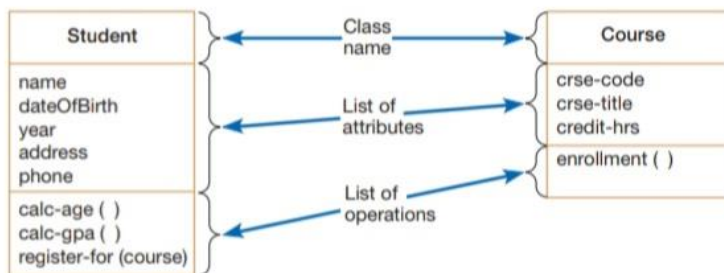
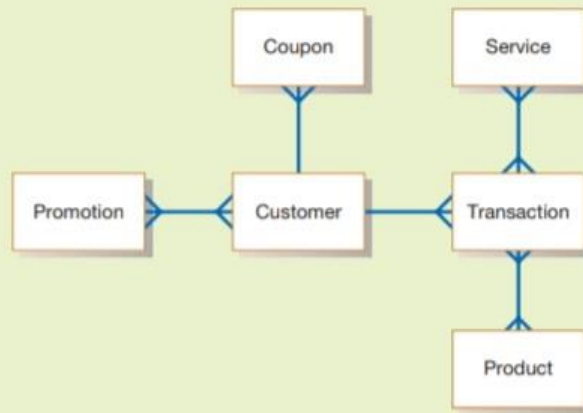


FIGURE 8-26
UML class diagram showing two classes



PE FIGURE 8-1
Initial E-R diagram for Petrie's customer loyalty program

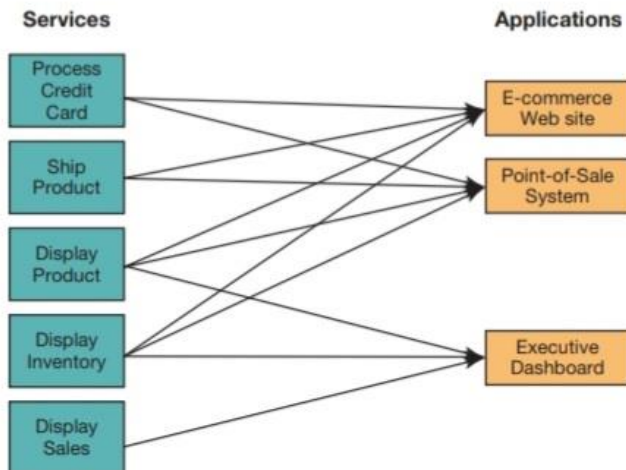


FIGURE 12-13
Using SOA, multiple applications can invoke multiple services.
(Source: Valacich, Joseph, and Schneider, Christoph, *Information Systems Today: Managing in the Digital World*, 7th ed., ©2016, pp. 112, 113, 114, 115, 116, 118. Reprinted and electronically reproduced by permission of Pearson Education, Inc., New York, NY.)

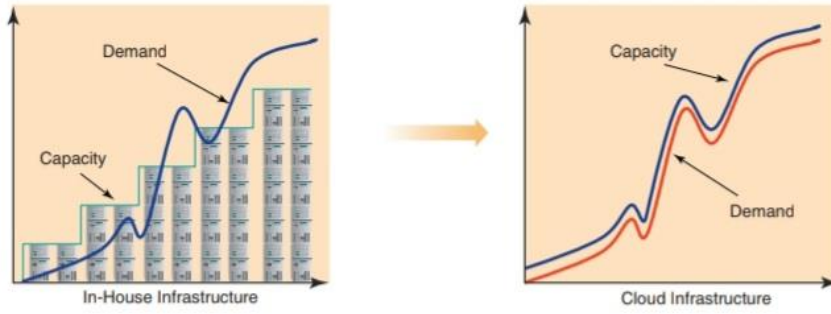


FIGURE 12-9
 It is difficult to match demand using an in-house infrastructure; with a cloud infrastructure, resources can be added incrementally, on an as-needed basis.
 (Source: Valacich, Joseph, and Schneider, Christoph, *Information Systems Today: Managing in the Digital World*, 7th ed., ©2016, pp. 112, 113, 114, 115, 116, 118. Reprinted and electronically reproduced by permission of Pearson Education, Inc., New York, NY.)

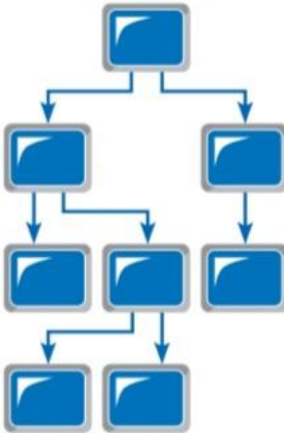
Single Menu



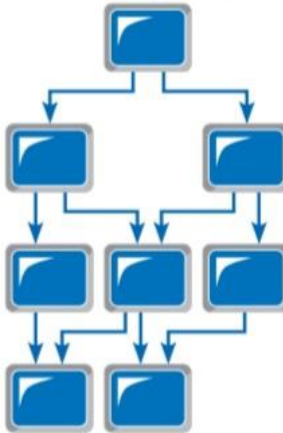
Linear Sequence Menu



Multilevel Tree Menu



Multilevel Tree Menu with Multiple Parents



Multilevel Tree Menu with Multiple Parents and Multilevel Traversal

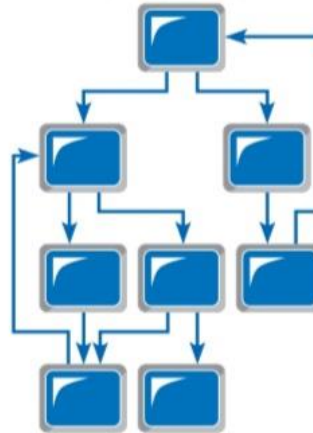
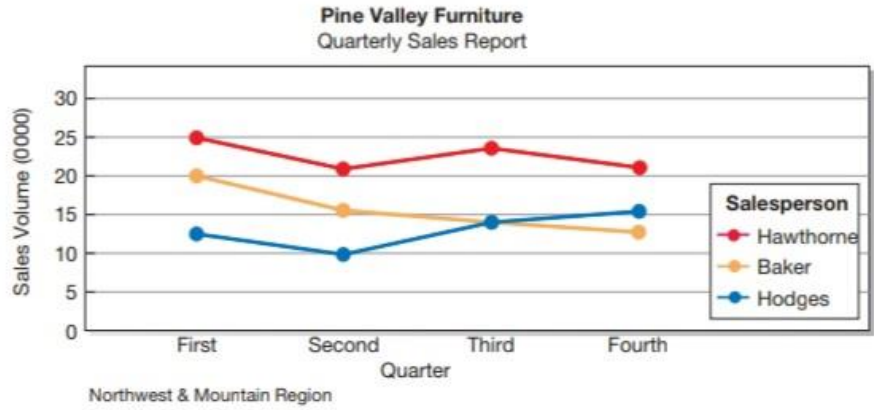


FIGURE 11-5
 Various types of menu configurations
 (Source: Based on Shneiderman et al., 2009.)

FIGURE 10-10
 Graphs for comparison
 (a) Line graph



CHAPTER 10 DESIGNING FORMS AND REPORTS

FIGURE 10-10 (continued)
 (b) Bar graph

