

# Case Studies

Each chapter includes a Chapter Case, a Continuing Case, a Capstone Case, and an Online Case Simulation. You can learn more about the Online Case Simulation in the MIS CourseMate Features section.

## Chapter Case: Tools 4 U

Tools 4 U is a tool rental company that reaches out to people with little or no experience. The firm has a staff of technicians to help customers select the right tools, show them how to use the tools, and provide 24/7 support.

## Background

The company is working on an online system to manage its growing business. The company asked you to help design the user interface.

## Tasks

1. Design a data entry screen for entering new members.
2. Design an online tool rental screen. You can use your imagination, but be sure to apply the principles discussed in this chapter.
3. Suggest at least three data validation rules that might help reduce input errors for the system.
4. Design a screen for managers, with weekly and monthly data on rentals, new customers, late charges, and anything else you think a store manager might want to review. Be sure to include numeric activity and dollar totals.

## Continuing Case: Personal Trainer, Inc.

Personal Trainer, Inc. owns and operates fitness centers in a dozen Midwestern cities. The centers have done well, and the company is planning an international expansion by opening a new “supercenter” in the Toronto area. Personal Trainer’s president, Cassia Umi, hired an IT consultant, Susan Park, to help develop an information system for the new facility. During the project, Susan will work closely with Gray Lewis, who will manage the new operation.

## Background

Following the decision to use an in-house team to develop a design prototype, Susan began to work on the physical design for Personal Trainer’s new information system. At this stage, she is ready to begin working with Gray on the output and user interface design. Together, Susan and Gray will seek to develop a user-centered design that is easy to learn and use. Personal Trainer users will include managers, fitness instructors, support staff, and members themselves.

## Tasks

1. For the prototype user interface, design a switchboard that leads from main sections to subsections of related system tasks. The main sections may include member information, registration, payments, fitness instructors, and any other top-level sections necessary for Personal Trainer’s system. Subsections may include account information, class registration, schedules, and class rosters. Prepare storyboards that show the proposed screens, including at least two sublevel tasks for each action.
2. Members need to be able to register for classes online. Follow the guidelines and suggestions in this chapter, and design an online class registration screen form.
3. In addition to being available online, members can register for fitness classes through the mail or by dropping off a mail-in form. Follow the guidelines and suggestions in this chapter, and design a paper source document.
4. Personal Trainer is very concerned about the security and protection of the information they collect in the new information system. Prepare a memo to Gray and Personal Trainer’s staff that explains the input and output security controls that will be built into the new systems and the policies that will enforce these controls.

## Capstone Case: New Century Wellness Group

New Century Wellness Group offers a holistic approach to healthcare with an emphasis on preventive medicine as well as traditional medical care. In your role as an IT consultant, you will help New Century develop a new information system.

### Background

Based on your presentation to New Century's partners, they decided to move forward with in-house development of a new business support system.

They liked the idea of a vertical software package, but they want to be able to customize the user interface because New Century's business functions are more varied. However, it is very important that the new system allow future integration with vertical packages such as electronic health records, computerized provider order entry, and a clinical decision support system.

Using the information you gained in the systems planning and analysis phases of the SDLC, you sit down to begin designing the user interface of the New Century's business support system. Before you begin, you decide to review the case studies, DFDs, and object-oriented diagrams you prepared in Chapters 5 and 6.

### Tasks

1. Using the guidelines and suggestions in this chapter, design a user interface. Draw storyboards, then use Microsoft Access or another form-designing application to create the screens.
2. Determine the data required for a new patient. Design an input source document that will be used to capture the patient's data and a data entry screen to enter the information into the system.
3. What control features will you use in the input screens to aid in data entry? Give a specific example of how you will use at least eight different control features in the design of the user interface.
4. In addition to printed reports, what other output technologies could be used by New Century?