

Module Three

Learning Objective

By the end of this module, you will meet this learning objective:



Identify techniques for utilizing processing and memory management in software applications related to various operating platforms

Module Overview

Project One is the first step in the process of designing and building a software application. By now, you should realize that being a software developer is much more than writing code and following the syntax rules of a programming language. First, you must consider the requirements of the "customer," whether that be a consulting client or a department manager in your own company.

In order to be successful when working with other organizations or even departments within your own organization, you will be required to communicate to different stakeholders, such as business leaders, partners, and customers, what is being built in a way that is understandable. Keep in mind that the audience many not be fellow Java programmers, but rather end-user department managers. They understand the business processes and problem better than you do. Communicate the key facts, decision points, and high-level design constraints that influence your approach.

There will also be design constraints imposed upon the application, such as the context in which it will be deployed and executed. For example, if the application is required to be web-based and accessible over the public internet, then you would not choose to design a Windows-only desktop client application. If the company is exclusively a Windows shop, then the .NET Framework and SQL Server database are likely constraints affecting the development aspect of the project.

By gathering, analyzing, and evaluating the customer requirements and constraints, the application starts to take shape. Taking input from the existing IT infrastructure that is in place, along with what the customer may wish for, helps you to choose an operating platform to use. At this point, an approach should begin to surface and technologies and frameworks can be considered. You may be wondering why we haven't discussed writing a single line of code. That's because, as you'll soon learn, software development involves a lot more than coding.

Module at a Glance

This is the recommended plan for completing the reading assignments and activities within the module. Additional information can be found in the module Resources section and on the module table of contents page.

- **1** Submit Project One.
- **2** Review the Module Three resources.