#### **Methodology and Design Guidelines**

#### Introduction

This document describes a sample of the expected outcomes for methodology and design assignments. You must include your name and a description within each deliverable. The written work is as important as the coding sections and must be handled appropriately. In the following sections of this document, a discussion on the expectations of each deliverable is presented.

Your documentation must clearly and concisely depict the solution to the assigned problem. This would include a discussion of why your solution incorporated certain features and functions. Each problem has particular issues that require a combination of discussion and implementation to solve.

## Methodology

The objective of the methodology is to discuss the approach that was used to implement a solution to a given problem. In this deliverable it is necessary to use prose not just simple narratives. Your work should establish any assumptions for the assignment and explain your direction. In this section you should discuss the details of your study.

In essence, a methodology covers the steps taken to produce the resulting design document. This portion of the assignment provides the background on the solution.

#### **Design**

The design portion of the assignment must provide a detailed discussion of the components used in the system. Information contained in the design document is explicitly detailed. Once again, this document must contain sufficient detail such that a programmer can implement your design, but does not include the actual code that resulted from your design. It is necessary to include a title page and a table of contents with your design.

The following outline is potential subject matter that may be included in your design document.

#### Scope/Overview

The scope/overview should have introduced the problem and the design. Information contained in this section should give an overview of what is to follow, as well as stating any limitations, etc.

### Data Design

In this section, the design should have discussed each of the data items that are used in the system.

# Architectural Design

This section will discuss, in detail, each of the system components.

## Class and Object Design/Modules

This section provides the details of the classes and objects used in the modules that were designed for the system. It is not acceptable to extract portions of the actual code and include them in this section.

### Interface Design

Include any human-computer interaction, external interfaces, or internal interfaces in this section.

#### **Test Provisions**

This section would include your testing and verification designs.