

## Software Design

Build Content Assessments Tools Partner Content

Discover Content



### Introduction and Procedures

Enabled: Statistics Tracking

This topic area will demonstrate competency in software principles and practices of software develop through the areas of critical thinking, problem solving, essential programming logic, structured design, object-oriented design, and modern software design tools.

A student must achieve a minimum of 80% of the total points allowed for this competency. That equates to 232 points out of 290 points.

Completion of the following tasks are required:

1. **Software Design Competency Assessment Tasks** (This is a folder containing several programming tasks and quizzes. The student gets two attempts to achieve the required score on each task or quiz..)
2. **Software Design Competency Comprehensive Exam Assessment** (This assessment contains the specifics for a software design project)

Furthermore, in order to assist the student, Digital resources are provided as learning tools to enhance the student's knowledge as preparation for accomplishing any of these tasks.



### Required Competencies to Achieve

Enabled: Statistics Tracking

- Demonstrate the techniques of defensive programming and secure coding.
- Use a programming or a scripting language to solve a problem.
- Use communication, negotiation, and collaboration skills as a member of a diverse team.
- Use documentation or a knowledge base to resolve a technical challenge in an identified computing scenario.



### Digital Learning Resources

Enabled: Statistics Tracking

These learning resources will help you learn the competencies for Software Design

This folder contains digital learning resources that cover the competency areas.

- It is recommended that the learner review this information prior to taking the two assessments.
- If a score of at least 80% is not earned on both assessments and the addressing assignment, the learner should review this material before attempting the assessment again



### Software Design Competency Assessment Tasks

Enabled: Statistics Tracking

Folder contains various quizzes and activities to perform.



### Software Design Comprehensive Exam Assessment

Enabled: Statistics Tracking

Attached Files: Programming project.pdf (429.645 KB)

Programming Project You may use Alice attached but you must install it. Look under Digital resources for Alice software, installation instructions, and some training. You can research the Internet to find out how ti use Alice. I do not furnish VB here since it is license. You may use your own license or look for a computer that has that software. Max 100 points (80% is 80 points.)

#### K2W Information Systems Technology AAS Template (LF298.InfoSystemsTech.Template.K2W)

Program Information

K2W Support Team

IT Professions

Web Page Design

Database Fundamentals

Network Concepts

Principles of IS

Microcomputer OS

Software Design

Systems Analysis

Weekly Interaction

Competency Progress

K2W Website

LFCC Help & Support

Library Help

#### Course Management

##### Control Panel

My Files

Course Tools

Evaluation

Grade Center

Users and Groups

Customization

Packages and Utilities

Help

Quick Unenroll

**Lord Fairfax Community College (LFCC)**

173 Skirmisher Lane

Middletown, VA 22645-1745

[LFCC.edu](http://LFCC.edu)



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

This work was funded in part by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. This work was created by Lord Fairfax Community College (LFCC) and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.