

# Graphical User Interfaces

**Due Date:** 11:59 p.m. EST, Friday of Unit 7

**Points:** 100

## Overview:

In this assignment, you will be analyzing principles of event-driven programming, developing an event-driven application, and how to create animation.

## Instructions:

Answer the following questions:

1. Draw a student registration input screen. What information should be captured? In what order should the fields appear? Keep in mind that programmers would need to know database structure for their screens to be useful.
2. Research threads and multithreading and describe what each is. Explain what the terms deadlock and starvation mean and give an example of each.

## Requirements:

- Show your work in a Word document.
  - Include all your work for each question.
  - You can include screenshots of work done on paper.
- For all justification exercises, remember to use the definitions and principles that we have learned thus far.
- You must prepare a written work where you respond to the programming exercises. The work must comply with APA academic writing standards. You must support your answer using appropriate sources that are properly cited.
- Minimum three pages in length, excluding the Title and Reference page.
- APA format, including an in-text citation for referenced works.
- At least three resources.

Be sure to read the criteria by which your work will be evaluated before you write and again after you write.

Evaluation Rubric for *Graphical User Interfaces* Assignment

| CRITERIA   | Deficient  | Needs Improvement  | Proficient  | Exemplary   |
|--|--|--|---|---|
|  | (0-41 Points)  | (42-55 Points)   | (56-69 Points)  | (70 Points)   |
| <b>Content</b>                                       | Does not cover the assigned topic; assertions are not supported by evidence; paper is seriously lacking in content and detail. | Does not do an adequate job of covering the assigned topic; assertions are weakly supported by evidence. | Sufficient coverage of the topics; most assertions are supported by evidence. | Provides in-depth coverage of the topics, assertions are clearly supported by evidence. |
|  | (0-5 points)   | (6-7 points)   | (8-9 points)  | (10 points)   |
| <b>Resources</b>                                     | Less than 2 resources or no resources included.  | Includes at least 2 resources.   | Includes at least 3 resources.  | Includes more than 3 resources.   |
| <b>Paper Length</b>                                  | Less than one page. Does not meet page requirements.   | Does not meet the minimum page requirements.   | Meets the minimum requirements.   | Exceeds the minimum requirements.   |
| <b>Clear and Professional Writing and APA Format</b> | Errors impede professional presentation; guidelines not followed.  | Significant errors that do not impede professional presentation.   | Few errors that do not impede professional presentation.                      | Writing and format are clear, professional, APA compliant, and error free.              |