

- A. Write a comprehensive summary that addresses the following requirements:
- the business problem or opportunity you are solving for, including a description of the customers and why this application will fulfill their needs
 - existing gaps in the software application you are replacing or modifying (if applicable)
 - the software development life cycle methodology you use to guide and support software development activities
 - deliverables associated with the applied software development life cycle methodology
 - the plan for implementation of your software solution, including the anticipated outcomes from this development
 - the methods for validating and verifying that the developed software application meets the requirements and subsequently the needs of the customers
 - the programming environments and any related costs, as well as the human resources that are necessary to execute each task in the development of the software application
 - a projected timeline including milestones, start and end dates, duration for each milestone, dependencies, and resources assigned to each task
- B. Design and develop a fully functional software application that addresses your identified business problem or organizational need. Include each of the following attributes as they are the *minimum required elements* for the application:
- **one** of the following application types: mobile, web, or stand-alone application
 - code including **inheritance, polymorphism, and encapsulation**
 - **search functionality with multiple row results and displays**
 - a database component with the functionality to securely add, modify, and delete the data
 - ability to **generate reports with multiple columns, multiple rows, date-time stamp, and title**
 - exception controls
 - validation functionality
 - industry appropriate **security features**
 - design elements that make the application scalable
 - a user-friendly, functional GUI
- C. Create *each* of the following forms of documentation for the application you have developed:
- a design document including a class diagram and design diagram
 - a test plan for a unit test, including screenshots
 - the results of the unit test based on the provided test plan, including screenshots
 - source code and executable file
 - link to where web app is hosted with HTML code (if applicable)
 - user guide for setting up and running the application for maintenance purposes
 - user guide for running the application from a user perspective
- D. Acknowledge sources, using in-text citations and references, for content that is quoted, paraphrased, or summarized.
- E. Demonstrate professional communication in the content and presentation of your submission.

File Restrictions

File name may contain only letters, numbers, spaces, and these symbols: ! - _ . * ' ()

File size limit: 200 MB