AEN1 — AEN1 TASK 2: QUALITY ASSURANCE

SOFTWARE DESIGN AND QUALITY ASSURANCE — D480

PRFA — AEN1

COMPETENCIES

4023.2.1 : Determines Impact on Business Requirements

The learner determines the impact of business requirements on software design patterns and software systems.

4023.2.2 : Identifies Goals and Roadblocks

The learner identifies goals and potential roadblocks as part of software development plans.

4023.2.3 : Defines Plans for Development Tasks and Environments

The learner defines plans for development tasks and environments based on desired quality outcomes.

4023.2.4 : Recommends Tools and Services

The learner recommends tools and services to address functional and non-functional testing outcomes.

INTRODUCTION

Throughout your career in quality assurance (QA), you will be asked to plan the testing approach to meet business requirements. You will need to determine testing objectives in alignment with a software design plan, identify both in-scope and out-of-scope requirements, and outline a testing process including the sequence of testing, necessary tools, and key contributors.

In this task, you will be given a software design and quality assurance scenario and a ticket artifact. You will be asked to create a quality assurance test plan to address the information in the ticket artifact regarding the functionality of a web app. Your quality assurance test plan should be a continuation of the software design plan completed in Task 1. You will need to use the attached "Quality Assurance Test Plan" template to create your submission.

SCENARIO

Refer to the scenario in the attached "Background Information" document.

REQUIREMENTS

Your submission must represent your original work and understanding of the course material. Most performance assessment submissions are automatically scanned through the WGU similarity checker. Students are strongly encouraged to wait for the similarity report to generate after uploading their work and then review it to ensure Academic Authenticity guidelines are met before submitting the file for evaluation. See Understanding Similarity Reports for more information.

Grammarly Note:
Professional Communication will be automatically assessed through Grammarly for Education in most performance assessments before a student submits work for evaluation. Students are strongly encouraged to review the Grammarly for Education feedback prior to submitting work for evaluation, as the overall submission will not pass without this aspect passing. See Use Grammarly for Education Effectively for more information.

Microsoft Files Note:
Write your paper in Microsoft Word (.doc or .docx) unless another Microsoft product, or pdf, is specified in the task directions. Tasks may not be submitted as cloud links, such as links to Google Docs, Google Slides, OneDrive, etc. All supporting documentation, such as screenshots and proof of experience, should be collected in a pdf file and submitted separately from the main file. For more information, please see Computer System and Technology Requirements.

You must use the rubric to direct the creation of your submission because it provides detailed criteria that will be used to evaluate your work. Each requirement below may be evaluated by more than one rubric aspect. The rubric aspect titles may contain hyperlinks to relevant portions of the course.

A. Using the "Quality Assurance Test Plan" supporting document, provide an overview by doing the following:
   1. Summarize the proposed software design plan from Task 1, including identification of the problem statement being addressed from the attached "Background Information" (i.e., scenario, ticket).
   2. Identify the overall objective of the functional requirements to be tested during the quality assurance process, aligning the objective with the summarized software design plan in part A1.
      a. Summarize the quality metrics associated with the overall objective of the functional requirements, including an explanation of why the identified metrics are relevant to the software design solution.
   3. Identify the overall objective of the non-functional requirements to be tested during the quality assurance process, aligning the objective with the summarized software design plan in part A1.
      a. Summarize the quality metrics associated with the overall objective of the non-functional requirements, including an explanation of why the identified metrics are relevant to the software design solution.

B. Using the "Quality Assurance Test Plan" supporting document, identify the project scope by doing the following:
   1. Identify **two** in-scope requirements to be tested within the quality assurance process that are aligned with the overall objective of the functional requirements identified in part A2.
   2. Identify **two** in-scope requirements to be tested within the quality assurance process that are aligned with the overall objective of the non-functional requirements identified in part A3.
   3. Identify **two** out-of-scope functionalities that will not be tested within the quality assurance process.
      a. For *each* identified functionality, explain the following points:
      - how the functionality aligns with the business requirement identified in part A1

- why the functionality should be labeled as out of scope

C. Using the "Quality Assurance Test Plan" supporting document, outline the testing strategy by doing the following:
   1. Provide an overview of the testing process for *each* in-scope requirement identified in parts B1 and B2 by filling out the "Test Case Table" with the following information:
      - Test Type: categorize by test type (e.g., unit, integration, system, end-to-end)
      - Description of Test: summarize the testing technique(s) used to validate the in-scope requirement, including sample inputs and expected results
      - Objective: restate the associated overall objective, identified in part A2 or A3, met by the in-scope requirement
      - Test Owner: identify which stakeholder role will perform the test
      - Environment: identify the testing environment or tools required for the test
   2. Define a logical sequence of testing for the testing process for *each* in-scope requirement provided in part C1, including the justification of the planned sequence of testing.

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
File types allowed: doc, docx, rtf, xls, xlsx, ppt, pptx, odt, pdf, csv, txt, qt, mov, mpg, avi, mp3, wav, mp4, wma, flv, asf, mpeg, wmv, m4v, svg, tif, tiff, jpeg, jpg, gif, png, zip, rar, tar, 7z

RUBRIC

A1:SOFTWARE DESIGN PLAN SUMMARY

NOT EVIDENT	APPROACHING COMPETENCE	COMPETENT
The submission does not summarize the candidate's proposed software design plan from Task 1 and does not identify the relevant business requirement being addressed. Or the "Quality Assurance Test Plan" was not used.	The submission uses the "Quality Assurance Test Plan" to summarizes the candidate's proposed software design plan from Task 1 or identify the relevant problem statement being addressed but not both.	The submission uses the "Quality Assurance Test Plan" to summarize the candidate's proposed software design plan from Task 1 and identify the relevant problem statement being addressed.

A2:FUNCTIONAL REQUIREMENT OBJECTIVE

NOT EVIDENT	APPROACHING COMPETENCE	COMPETENT