COMPETENCIES

**4123.1.1** : **Capstone**

The learner integrates and synthesizes competencies from across the degree program, thereby demonstrating the ability to participate in and contribute value to the chosen professional field.

INTRODUCTION

Before starting this task, ensure that Tasks 1 and 2 have a passing score. If Task 1 or 2 has not yet passed, your Task 3 submission will be returned without evaluation.  
  
In this task, you will complete your capstone by writing a report that summarizes your data analytics project, including an overview of the project, a discussion of how the execution of your project differed from your plan, a discussion of your project methodology, and an evaluation of your project results. You will also submit a recorded summary of your project.

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](https://cm.wgu.edu/t5/Frequently-Asked-Questions/Understanding-Similarity-Reports/ta-p/252) 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](https://cm.wgu.edu/t5/Academic-Coaching-Center/Use-Grammarly-for-Education-Effectively/ta-p/52276) 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.](https://cm.wgu.edu/t5/WGU-Student-Policy-Handbook/Computer-System-and-Technology-Requirements/ta-p/78)    
 *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.*

Write a report summarizing your completed data analytics capstone project by doing the following:

**Project Overview**

A.  Summarize the following elements of your capstone project:

•  the research question or organizational need that your capstone addressed

•  the scope of your project

•  an overview of your solution, including any tools and methodologies used

**Project Execution**

B.  Summarize the execution of your project, including how the execution of the following elements differed from the plan developed in part B of Task 2:

•  project plan

•  project planning methodology

•  project timeline and milestones

**Methodology**

C.  Discuss your data selection and collection process in detail, including *each* of the following elements:

•  how your actual data selection and collection process differed from your plan

•  how you handled any obstacles you encountered while collecting your data

•  how you handled any unplanned data governance issues

1.  Discuss the advantages and limitations of the dataset you used.

D.  Explain your data extraction and data preparation processes, including the tools and techniques you used, and why these processes were appropriate for your data.

E.  Report on your data analysis process by doing the following:

1.  Describe the methods you used to analyze the data.

2.  Discuss the advantages and limitations of the tools and techniques you used to analyze the data.

3.  Provide a step-by-step explanation of how you applied the analytical methods in part E1 to the data, including how you verified that the data satisfied the assumptions or requirements for any analytical methods you used.

**Results**

F.  Evaluate the success of your data analytics project by doing the following:

1.  Evaluate the output of your data analytics solution or model, including calculations or metrics for accuracy.

2.  Evaluate the practical significance of your data analytics solution, including specific examples.

3.  Evaluate the overall success and effectiveness of the project.

G.  Summarize the key takeaways of your analysis by doing the following:

1.  Summarize the conclusions drawn from your analysis.

2.  Explain why your chosen tools and graphical representations for visually communicating findings support effective storytelling.

3.  Recommend **two** courses of action based on your findings.

H.  Provide a link to a Panopto recording in which you present a summary of your capstone project and findings from the analysis for an audience of data analytics peers. Your summary should include the following elements:

•  a summary of your research question or organizational need

•  a demonstration of the functionality of any code you used for your data analytics solution

•  an outline of the findings and implications of your analysis

*Note: Please submit a single recording that covers all elements. The suggested length of your video should be approximately 15–20 minutes.*

*Note: For instructions on how to access and use Panopto, use the "Panopto How-To Videos" web link. To access Panopto's website, navigate to the web link titled "Panopto Access," and then choose to log in using the "WGU" option. If prompted, log in using your WGU student portal credentials, which should forward you to Panopto’s website.*

*Note: To submit your recording, upload it to the Panopto drop box titled "BSDA Capstone – BHN1 | D502." Once the recording has been uploaded and processed in Panopto's system, retrieve the URL of the recording from Panopto and copy and paste it into the "Links" option. Upload the remaining task requirements using the "Attachments" option.*

**Appendices**

I.  Provide evidence of project completion by submitting *any* of the following elements that are relevant to your project:

•  the code you used to support your project

•  a copy of or link to *all* data you used for the data analytics solution

•  web sources that were used to acquire the data or segments of third-party code to support the application

•  other relevant project deliverables

J.  Acknowledge sources, using in-text citations and references, for content that is quoted, paraphrased, or summarized.

K.  Demonstrate professional communication in the content and presentation of your submission.