

# EBN2 — EBN2 TASK 1: PROPOSING A DATA ANALYTICS APPROACH TO A PROBLEM

DATA SCIENCE CAPSTONE — D606

PRFA — EBN2

Preparation

**Task Overview**

Submissions

Evaluation Report

## COMPETENCIES

### 4166.1.1: Proposes a Data Analytics Approach

The learner proposes a data analytics approach to solve a business problem.

## INTRODUCTION

For your capstone, you will identify a real-data research question and propose a project to address it. Your research question should focus on the analysis techniques that you used in the Data Science specialization courses you completed in your program, such as machine learning, artificial intelligence, and optimization. In later tasks, you will be asked to gather, analyze, and present data related to your research question.

Your capstone proposal serves the purpose of organizing your ideas for the project so you can complete the project as efficiently as possible. In order to start the capstone project, you must first discuss your project ideas and potential research question with an instructor. After an agreement is reached, you must fill out the top portion of the attached "Data Science Capstone Topic Approval Form" and send it to the instructor, who must digitally sign it and lock it to prevent further changes in the document. The completed form, signed by the instructor, must be uploaded together with the other documents required for this task.

*Note: You may choose a dataset from one of the given datasets located here [D606 Datasets](#), or you may choose or create your own dataset.*

It is the policy of Western Governors University (WGU) that student capstone projects should not be based on or include any proprietary or classified information or material belonging to your employer or any other organization unless you obtain the owner's permission to use it. Such material belongs to this third party and is referred to as "restricted information." You must declare with a digital signature whether your capstone project is based upon or includes restricted information by submitting the attached "Data Science Capstone Release Form." This completed attachment also documents that you have permission from the third party to use the restricted information.

Projects involving human subjects or the use of protected data will require IRB approval. Work directly with your instructor if your project includes research that involves human subjects to determine whether it requires review by WGU's Institutional Review Board (IRB).

*Note: Any information that would be considered confidential, proprietary, or personal in nature should not be included in the actual task submission to WGU. Do not include the actual names of people, suppliers, or companies, or other identifiable information. Fictional names should be used where necessary. Company-specific data, including financial information, should not be included but should be addressed in a general fashion as appropriate.*

## 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. Complete the attached "Data Science Capstone Topic Approval Form," including a signature and date from your instructor to indicate that this form has been approved. The project proposal must employ approaches learned in one of the three data science specialization courses.
- B. Complete the attached "Data Science Capstone Release Form" and digitally sign it where applicable after choosing the option that applies to your capstone project.

*Note: More than one signature is required.*

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