WGU

CAPSTONE

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A. CREATE A LETTER OF TRANSMITTAL AND A PROJECT PROPOSAL TO CONVINCE SENIOR, NON-TECHNICAL MANAGERS AND EXECUTIVES TO IMPLEMENT THE DATA PRODUCT YOU HAVE DESIGNED. THE PROPOSAL SHOULD INCLUDE *EACH* OF THE FOLLOWING

March 16, 2021
Johnny Quest, Owner & Operator
X-Factor Enterprise Security Solutions
10101 Technology Way
Portland, OR 98665

Dear Mr. Quest,

This past year, X-Factor Enterprise Security Solutions has become the de facto platform for small and medium size business that require focus on secure data transmission. While secure data transmission is critical to most companies, it doesn't account for the type of security breaches found in small business. Over the last decade, the growth of Big Data has caused a large spike in the data discovery field. While this field has many different purposes that prove useful, it also can open the door for malicious behavior. Because of this, many companies exchange data without realizing the security risk and potential exposure of their customers personal information. Unfortunately, the large amounts of microtransactions involving customer information allow duplicate datasets to be captured by unauthorized users. These users are then able to compare other related datasets to find new things about the exposed customer, thus violating their privacy.

- 1. SUMMARY OF THE PROBLEM
- 2. A DESCRIPTION OF HOW THE DATA PRODUCT BENEFITS THE CUSTOMER AND SUPPORTS THE DECISION-MAKING PROCESS
- 3. AN OUTLINE OF THE DATA PRODUCT
- 4. A DESCRIPTION OF THE DATA THAT WILL BE USED TO CONSTRUCT THE DATA PRODUCT
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7. FUNDING REQUIREMENTS 8. THE IMPACT OF THE SOLUTION TO STAKEHOLDERS 9. ETHICAL AND LEGAL CONSIDERATIONS AND PRECAUTIONS THAT WILL BE USED WHEN WORKING WITH AND COMMUNICATING ABOUT SENSITIVE DATA 10. YOUR EXPERTISE RELEVANT TO THE SOLUTION YOU PROPOSE B. WRITE AN EXECUTIVE SUMMARY DIRECTED TO IT PROFESSIONALS THAT ADDRESSES EACH OF THE FOLLOWING REQUIREMENTS: 1. THE DECISION-SUPPORT PROBLEM OR OPPORTUNITY YOU ARE SOLVING FOR 2. A DESCRIPTION OF THE CUSTOMERS AND WHY THIS PRODUCT WILL FULFILL THEIR NEEDS 3. EXISTING GAPS IN THE DATA PRODUCTS YOU ARE REPLACING OR MODIFYING (IF APPLICABLE) 4. THE DATA AVAILABLE OR THE DATA THAT NEEDS TO BE COLLECTED TO SUPPORT THE DATA PRODUCT LIFECYCLE 5. THE METHODOLOGY YOU USE TO GUIDE AND SUPPORT THE DATA PRODUCT DESIGN AND DEVELOPMENT 6. DELIVERABLES ASSOCIATED WITH THE DESIGN AND DEVELOPMENT OF THE DATA PRODUCT 7. THE PLAN FOR IMPLEMENTATION OF YOUR DATA PRODUCT, INCLUDING THE

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- 8. THE METHODS FOR VALIDATING AND VERIFYING THAT THE DEVELOPED DATA PRODUCT MEETS THE REQUIREMENTS AND SUBSEQUENTLY THE NEEDS OF THE CUSTOMERS
- 9. THE PROGRAMMING ENVIRONMENTS AND ANY RELATED COSTS, AS WELL AS THE HUMAN RESOURCES THAT ARE NECESSARY TO EXECUTE EACH PHASE IN THE DEVELOPMENT OF THE DATA PRODUCT
- C. DESIGN AND DEVELOP A FULLY FUNCTIONAL DATA PRODUCT THAT ADDRESSES YOUR IDENTIFIED BUSINESS PROBLEM OR ORGANIZATIONAL NEED. INCLUDE EACH OF THE FOLLOWING ATTRIBUTES AS THEY ARE THE MINIMUM REQUIRED ELEMENTS FOR THE PRODUCT:
- 1. **ONE** DESCRIPTIVE METHOD AND **ONE** NON-DESCRIPTIVE (PREDICTIVE OR PRESCRIPTIVE) METHOD
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- 4. ABILITY TO SUPPORT FEATURIZING, PARSING, CLEANING, AND WRANGLING DATASETS
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- 6. DATA VISUALIZATION FUNCTIONALITIES FOR DATA EXPLORATION AND INSPECTION
- 7. IMPLEMENTATION OF INTERACTIVE QUERIES
- 8. IMPLEMENTATION OF MACHINE-LEARNING METHODS AND AGLORITHMS
- 9. FUNCTIONALITIES TO EVALUATE THE ACCURACY OF THE DATA PRODUCT
- 10. INDUSTRY-APPROPRIATE SECURITY FEATURES
- 11. TOOLS TO MONITOR AND MAINTAIN THE PRODUCT

- 12. A USER-FRIENDLY, FUNCTIONAL DASHBOARD THAT INCLUDES AT *LEAST* **THREE** VISUALIZATION TYPES
- D. CREATE *EACH* OF THE FOLLOWING FORMS OF DOCUMENTATION FOR THE PRODUCT YOU HAVE DEVELOPED:
- 1. A BUSINESS VISION OR BUSINESS REQUIREMENTS DOCUMENT
- 2. RAW AND CLEANED DATA SETS WITH THE CODE AND EXECUTABLE FILES USED TO SCRAPE AND CLEAN DATA (IF APPLICABLE)
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- E. ACKNOWLEDGE SOURCES, USING IN-TEXT CITATIONS AND REFERENCES, FOR CONTENT THAT IS QUOTED, PARAPHRASED, OR SUMMARIZED.