Data Engineer
Project Title and Scope
AM1 Project evaluation report, presentation and questions

Apprentice's name:	
Apprentice's email:	
Employer:	
Training provider:	

This document is not assessed but must be approved before you start work on your project evaluation report and presentation. Full guidance is available in the Data Engineer Resource Pack.

Project Title

Please write below the title of your project.

Scope

Write a summary of the work-based project you have completed. You must outline how the project has addressed the following themes and their associated KSBs: • Data product design • Data product deployment and evaluation • Collaborative working (*Maximum 500 words)*

Review and complete project mapping document and sign the declaration below. This is to ensure the project evaluation report allows you to meet the grading assessment criteria mapped to this assessment method.

The mapping document contains the grading assessment criteria for this assessment method. Review the 1st for EPA Resource Pack on epaPRO or the EPA Plan to help you complete it.

Apprentice signature:	
Date:	

An electronic signature is acceptable.

Once complete, submit this document to your training provider. They will upload it to the EPA portal, and you'll receive feedback within 7 days of uploading.

AM1 Project Evaluation Title & Scope Mapping Document		
The purpose of this mapping document is to ensure that the relevant grading assessment criteria has been taken into consideration when identifying and completing the project. This is important to ensure the grading assessment criteria have been reviewed and considered, when completing the project and can be covered when completing the project evaluation report and presentation.		
KSBs	**Data product design - Pass Criteria**	**Sufficient Scope**
K6 K7 K9 K12 K13 K14 S1 S2 S3 S4 S5 S27 B1	Demonstrates how they have collated, evaluated and refined user requirements to design and build a scalable data product that serves multiple needs and complies with regulatory requirements. (K9, S1, S3)	**Yes/No**
	Explains how they collated, evaluated and refined business requirements, to design, build and maintain a system whilst ensuring that organisational strategies for sustainable, net-zero technologies are considered. (K12 & S2)	**Yes/No**
	Explains how they selected sustainable solutions in relation to data products and environmental social governance to ensure the use of less carbon across the various stages of product and service delivery. (K7, S27)	**Yes/No**
	Demonstrates how they used security, scalability and governance when automating data pipelines using programming languages and data integration platforms with graphical user interfaces. (K13, S4)	**Yes/No**
	Demonstrates how they have taken accountability produced and maintained technical documentation for a data product in order to meet organisational user requirements, whilst adapting to changing work priorities to ensure that deadlines are met. (S5, B1)	**Yes/No**
	Explains how debugging, version control and testing have an impact on software development and the principles for data products. (K6)	**Yes/No**
	Outlines the uses of different on-demand cloud computing platforms. (K14)	**Yes/No**
	Data product design - Distinction Criteria	
	Justifies how the data product created met the requirements and served multiple needs. (S1, S3)	**Yes/No**
KSBs	**Data product deployment and evaluation - Pass Criteria**	
K2 K4 K8 K15 K17 K19 K20 K24 K25 K26 S6 S9 S16 S24 S26	Explains the deployment approaches processes for new data pipelines and automated processes. (K8)	**Yes/No**
	Explains techniques such as star schemas, data lakes and data marts and the impact they have on data warehousing principles. (K15)	**Yes/No**
	Demonstrate how to systematically clean, validate and describe data at all stages of extract, transform and load, showing how combining disparate data sources and taking different approaches to data integration delivers value to an organisation. (K17, S6)	**Yes/No**
	Describes the types and uses of data engineering tools in their own organisation and how they apply them. (K20)	**Yes/No**
	Evaluates the strengths and weaknesses of prototype data products to integrate within an organisation's overarching data structure, taking into consideration the lifecycle of implementing data solutions in a business. (K24, K25, S24)	**Yes/No**
	Describes the approved organisational architectures and the relevant data development frameworks. (K26)	**Yes/No**
	Identifies data quality metrics and their frameworks and tracks them to ensure quality, accuracy and reliability of the data product. (K4, S26)	**Yes/No**
	Demonstrates the use of tools and programming to query and manipulate data and implement automated validation checks, showing the methodologies used for moving data from one system to another for storage and handling. (K2, S9)	**Yes/No**

	Explains how they have worked with structured, semi-structured and unstructured data, developing algorithms to extract from sources. (K19, S16)	**Yes/No**
	Data product deployment and evaluation - Distinction Criteria	
	Evaluates the success of the algorithm developed. (S16)	**Yes/No**
KSBs	**Collaborative working – Pass Criteria**	
K30 S22 S23 B2	Outlines the methods and techniques used to communicate messages about the data product that meet the needs of the audience. (K30, S23)	**Yes/No**
	Explains how they worked collaboratively with different technical and non-technical stakeholders, using adaptive business methodology to support an inclusive culture and develop and maintain strong working relationships in order to achieve common goals. (S22, B2)	**Yes/No**
	Collaborative working – Distinction Criteria	
	Evaluate the impact of the methods and techniques used to communicate messages about the data product to the audience. (K30, S23)	**Yes/No**

