

BA Team Recruitment – Technical Task

There are total of **five** questions to be answered in this technical task, split into two areas.

Please add your responses in the gaps provided after each question.

1. Discovery – analysis approach and outputs

Note: Cambridge University Press & Assessment use 'Discovery' to describe the phase also known as 'Feasibility' or 'pre-Business Case'.

Background:

A project has been prioritised by the Operations Director to deliver a management tool to handle an increasing number of suspected malpractice cases that are being raised for investigation. These are currently tracked and managed on a spreadsheet, but this is becoming unsustainable as the volume increases.

In the past five years since a new suite of exam products and supporting processes were introduced, there has been a 10% increase in reported cases relating to examinations, and a 30% increase in reported cases for coursework.

Negative feedback has been received from exams officers and teachers about the new supporting processes that they are expected to follow, including that it is time-consuming and too complicated.

Budget has been approved for a Discovery phase to identify the high-level requirements, and the Operations Director would like to initiate work as quickly as possible so that a solution to the problem can be delivered before next year's major exam window.

The project team are looking to the Business Analyst to propose the correct approach and outputs.

For this task, please provide a brief summary of the analysis approach to be taken for the Discovery phase, including a list of suitable BA outputs and what you would use them for.

Approach Summary:

BA Outputs:

2. Delivery – analysis techniques and deliverables

Please read the following scenario and answer the below questions:

An exam may be run over multiple sessions, and for each session, an attendance register must be completed for the candidates who have been entered on it. Our new digital attendance register service will allow centre staff, namely the Examinations Officer and invigilators to securely record candidate attendance in the exam room via an app on their school's own technical device of choice. This can include capture of a candidate's photo ID if appropriate for that type of exam. With thousands of examination centres in the UK and around the world, this will be a high demand service.

Centre staff using the service will be able to see the latest candidate entry information on their device (including entries submitted that day) and record the attendance status (and photo ID if applicable) for candidates prior to submitting it to Cambridge as part of the exam record. Processing status updates by Cambridge will be displayed to the centre user via the attendance application within minutes of being submitted to provide reassurance to the Exams Officer that the data has been received.

The data will be available to Cambridge Administrators in back-office processing systems as soon as it has been submitted by the centre to allow them to monitor submission of data.

a) To Be service

Using the information in the above scenario, please draw a diagram/model of your choice of the proposed attendance register service. If you need to draw on paper, please take a picture and upload the image file at the end of the test.

b) Conceptual data model and Logical data model

Using the information in the above scenario, please draw the associated conceptual and logical data models:

Conceptual Data Model:

Logical Data Model:

c) Non-functional requirements

Using the information in the above scenario, please identify and define four distinct NFR categories, and write one example non-functional requirement in a format of your choice for one of those categories:

NFR Category 1:

NFR Category 2:

NFR Category 3:

NFR Category 4:

Detailed NFR (in a format of your choice):

d) User story

Using the information in the above scenario, please write a functional user story, including at least one acceptance criteria in Given-When-Then format, for the Examinations Officer:

User Story:

Acceptance Criteria:

