

# Assessment event 2 of 2: Project

## Student assessment document

Unit code and name

ICTAII401 | Identify opportunities to apply artificial intelligence, machine learning and deep learning

Qualification or course code and name

Select your qualification or course code and name from the dropdown.

Code | Course name

## Student details

Student name

Student name and number

Version: 20241104

Date created: 04 November 2024

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RTO Provider Number 90003 | CRICOS Provider Code: 00591E

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## Assessment information

Table 1: Assessment instructions

|  |  |
| --- | --- |
| Condition | Description |
| **Due date** |  |
| **Time allowed** | 3.5 hours (indicative only) |
| **Unit assessment guide** | Refer to the unit assessment guide (UAG) before attempting this assessment event. The UAG contains information including assessment requirements and how to achieve a satisfactory result. |
| **Submission instructions** | When you complete this assessment:   * read the Marking Criteria in the assessment to make sure you have met all criteria tom the best of your ability * keep a copy of all the electronic and hardcopy assessments you submit to TAFE NSW * make sure you check have completed all parts and their tasks by using the Submission Checklist before you submit. |

## Instructions

The criteria outlined in the following tasks will be used to determine if a satisfactory outcome for each part and task have been achieved for this assessment.

Read all instructions carefully and complete all requirements for each part. In addition, refer to the Submission Checklist and Marking Criteria to assist you in completing your assessment.

If you are submitting any demonstrations or presentations as video evidence, use the following [Video recording instruction (pdf)](https://share.tafensw.edu.au/share/items/744af7d4-a241-45e2-adb0-0e13f2fe4950/0/?attachment.uuid=01c3c87a-4599-48c2-91f0-68a00b5bbb4c). These instructions include useful tips, links to resources, and a demonstration video.

### Scenario

You are employed in the ICT Department of [Gelos Enterprises](https://share.tafensw.edu.au/share/items/d0b458dc-3922-409d-b1fe-9a2f785f4a38/0/?attachment.uuid=5f1677bf-8296-4137-ae33-8b9e30bad1ab) (Gelos). Gelos has been contracted by [Azure Beach Surf & Skate](https://share.tafensw.edu.au/share/items/1c89b5bb-2698-4ced-91d8-29a58efbaab2/0/?attachment.uuid=74f8070a-c4c0-4c14-a007-aedc47689889) to investigate opportunities for implementing artificial intelligence (AI), machine learning (ML) and deep learning (DL) in their organisation.

#### Work brief

Azure Beach Surf & Skate is a retail outlet with several stores, including online. It is looking at further expansion and needs to consider ways to maintain or increase its competitive advantage.

The organisation recently tried Atlassian Jira and Confluence, using them to plan for new products and collaborate across different teams within the company. The trial of Atlassian products went well and staff members found the AI tools very useful and efficient.

Considering the successful trial, the organisation is considering implementing AI technologies to automate relevant work tasks across its sales and marketing department. While the company was quite happy with the Atlassian products, it is also open to other suggestions.

Your supervisor at Gelos, Morgan Garcia, has asked you to investigate suitable AI, ML and DL technology options for automating work tasks in the sales and marketing department of Azure Beach Surf & Skate. Azure Beach Surf & Skate has provided access to its policies and procedures via its [staff intranet](https://share.tafensw.edu.au/share/items/1c89b5bb-2698-4ced-91d8-29a58efbaab2/0/?attachment.uuid=619dbebb-d353-4953-8e7a-775c44521322), to assist you.

Morgan needs recommendations for 3 different options, including feature comparisons, advantages, disadvantages and implementation risks. They have provided some example technology options that you may want to investigate however you are not restricted to these:

**Email campaigns:**

* [Campaigner](https://www.campaigner.com/)
* [Omnisend](https://www.omnisend.com/)
* [EmailOctopus](https://emailoctopus.com/).

**Conversation automation AI tools:**

* [Google Dialogflow](https://cloud.google.com/dialogflow)
* [IBM watsonx Assistant](https://www.ibm.com/products/watsonx-assistant)
* [Jasper](https://www.jasper.ai/chat).

**Trend analysis:**

* [Tableau](https://www.tableau.com/)
* [IBM Cloud Pak for Data](https://www.ibm.com/products/cloud-pak-for-data)
* [Google Cloud AI data analytics](https://cloud.google.com/use-cases/ai-data-analytics).

**Employee and customer support:**

* [Zendesk AI](https://www.zendesk.com/au/service/ai/)
* [Atlassian Intelligence](https://www.atlassian.com/platform/artificial-intelligence).

## Part 1: Research AI opportunities

To complete this part of the assessment, you need to research and report on AI, ML and DL technologies to meet the client brief.

Read all instructions carefully and complete all requirements. In addition, refer to the marking criteria that will be used by the assessor to mark your performance for this assessment.

Your answers should follow the suggested word count where stated.

### Task 1: Confirm the requirements

Before starting work on your research, Gelos policy requires you to confirm the brief in writing with relevant personnel.

Review the scenario. Draft an email to Morgan Garcia summarising the work brief, including:

* Azure Beach Surf & Skate’s goals for automation and productivity
* the tasks that you need to complete.

(100-150 words)

### Task 2: Prepare draft recommendations

Prepare a research report on opportunities for Azure Beach Surf & Skate to implement AI, ML and DL technologies. Review the Gelos [Company Style Guide (pdf)](https://share.tafensw.edu.au/share/items/5f1cec7b-1d03-446a-85b7-edb42692c34e/0/?attachment.uuid=7f4fb7d3-3c6e-4e89-ad1b-2443d7e7b2fe) to identify:

* the protocols you must follow
* a suitable template to use for the report.

Document your report using the following headings:

#### Introduction

Write an introduction to your report, outlining the background and purpose of the report. (50-100 words)

#### Existing organisational AI technologies and processes

Identify any AI, ML and DL technologies and processes that the organisation already uses, summarising how they are used. (25-50 words)

#### Research

Research industry-recognised AI, ML and DL technologies that could be applied within the sales and marketing department of Azure Beach Surf & Skate. Use your research to address the following:

1. Identify 3 suitable options that could be implemented to automate the work tasks. Note that at least one option must use DL and at least one option must use ML.
   1. Identify the type of technology for each option, that is, AI, ML or DL.
   2. Confirm that each option will meet the brief by outlining how it can be applied in this situation. (75-125 words)
2. Copy the following comparison table into your report and list the option names in the column headings. Compare the 3 technologies using the listed criteria as well as 2 features specific to each option. Write a short description for each item in the relevant table cell. (100-150 words)

|  |  |  |  |
| --- | --- | --- | --- |
| Criteria | Option 1: | Option 2: | Option 3: |
| Costs |  |  |  |
| Integration with other systems |  |  |  |
| Knowledge or skills needed to set up and use |  |  |  |
| Security and privacy |  |  |  |
| Option-specific feature 1 |  |  |  |
| Option-specific feature 2 |  |  |  |

#### Advantages and disadvantages

Outline an advantage and disadvantage of each technology in meeting the work brief. (75-125 words)

#### Risks

Identify and outline a key implementation risk for each of the recommended technologies (use a different risk for each technology). (50-100 words)

#### References

Provide references of your sources, using either the APA or Harvard reference style. TAFE NSW Libraries [Researching and Referencing: Referencing Skills](https://tafensw.libguides.com/research/referencing) provides APA and Harvard guides, checklists and resources.

## Part 2: Prepare final report

To complete this part of the assessment, you need to participate in a meeting to obtain feedback and finalise your report.

Read all instructions carefully and complete all requirements. In addition, refer to the marking criteria that will be used by the assessor to mark your performance for this assessment.

### Task 1: Discuss recommendations

You are required to participate in a meeting with the help of a colleague or peer to demonstrate your ability to complete skills-based tasks to industry standards.

#### The scenario

You need to meet with your Gelos supervisor, Morgan Garcia, to discuss your draft recommendations.

#### Role of the student being assessed

During your meeting you must:

* consult with Morgan on the implementation risks
* ask for feedback on your recommendations
* use appropriate language
* respond clearly to questions.

#### Role of the person in supporting roles

Ask a colleague or peer to act in the supporting role of your Gelos supervisor, Morgan Garcia. **You must provide this person with these instructions and a copy of your report.**

The supporting person will ask you 2 questions relating to your report or resulting from the discussion. Some examples of questions they may ask include:

* Could you explain the [specific technology] in simpler terms (or more detail)?
* Could you elaborate on the risks of the [specific technology]?
* How do you think we can avoid or mitigate these risks?
* Which option do you think would be the easiest to implement?
* How did you ensure that you used the correct Gelos document template for this report?

The supporting person will also provide feedback, if requested. Some examples of feedback that can be provided include:

* Check that the document formatting is correct.
* You need to include more detail on [specific section].
* You have included too much information in [specific section].
* Check that you have included all the requested information.

#### Time allowed

Your meeting should take approximately 10 minutes to complete, including any recording.

### Task 2: Finalise recommendations

Finalise your report based on the feedback you received in the meeting from your supervisor.

Draft an email to Morgan Garcia to submit your final recommendations (by referring to an attachment to the email). Include a summary of the feedback that you have addressed. (25-50 words)

## Submission checklist

Submit the following for marking:

This completed Assessment event 2 of 2: Project

Draft recommendations report (Part 1 Task 2)

Video recording (if used) (Part 2 Task 1)

Final recommendations report (Part 2 Task 2)

## Marking criteria

The assessor will use the following marking criteria to assess your responses or performance for each part and tasks of this assessment. You must meet all the criteria to be successful at this assessment.

Note that S = Satisfactory and U/S = Unsatisfactory.

Table 2: Marking criteria

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Task | Did the student do the following? | S | U/S | Assessor comments Describe the student’s ability in demonstrating the required skills and knowledge. Record your observations in enough detail to demonstrate your judgement of the student’s performance against the criteria required. |
| **Part 1** |  |  |  |  |
|  | (T1) Confirmed the work brief with required personnel, following organisational policies and procedures, including the:   * goals for automating work tasks and improving productivity * tasks to be completed |  |  | **Date:**  **Comments:** |
|  | (T2) Prepared documentation following the organisation’s requirements and protocols, including an introduction and relevant, formatted references |  |  | **Date:**  **Comments:** |
|  | (T2) Completed each section of the draft recommendations research report, as listed |  |  | **Date:**  **Comments:** |
| **Part 2** |  |  |  |  |
|  | (T1) Discussed draft recommendations with supervisor, using appropriate language and responding clearly to questions, including:   * consulting on implementation risks * asking for feedback |  |  | **Date:**  **Comments:** |
|  | (T2) Records feedback and submits final recommendations (updated according to feedback) |  |  | **Date:**  **Comments:** |

## Additional questions

Assessors may ask ad hoc questions as part of the assessment to:

* clarify your understanding (for example, ‘Why did you select that particular piece of equipment?’)
* capture contingencies that may form part of the demonstration (for example, dealing with faults or unexpected events)
* prevent a work, health and safety incident.

The assessor will record the question and your response (as required) in the following section.

1. **Assessor question:**

[Record additional questions]

**Student response:**

[Record the student response/s]

1. **Assessor question:**

[Record additional questions]

**Student response:**

[Record the student response/s]

## External resources – links and URLs

Long URLs and permalinks are provided for access to content when the assessment is not used digitally, for example, not clickable.

Table 3: URLs

|  |  |
| --- | --- |
| Link title | URL |
| Atlassian Intelligence | https://www.atlassian.com/platform/artificial-intelligence |
| Azure Beach Surf & Skate | https://share.tafensw.edu.au/share/items/1c89b5bb-2698-4ced-91d8-29a58efbaab2/0/?attachment.uuid=74f8070a-c4c0-4c14-a007-aedc47689889 |
| Campaigner | https://www.campaigner.com/ |
| Company Style Guide (pdf) | https://share.tafensw.edu.au/share/items/5f1cec7b-1d03-446a-85b7-edb42692c34e/0/?attachment.uuid=7f4fb7d3-3c6e-4e89-ad1b-2443d7e7b2fe |
| EmailOctopus | https://emailoctopus.com/ |
| Gelos Enterprises | https://share.tafensw.edu.au/share/items/d0b458dc-3922-409d-b1fe-9a2f785f4a38/0/?attachment.uuid=5f1677bf-8296-4137-ae33-8b9e30bad1ab |
| Google Cloud AI data analytics | https://cloud.google.com/use-cases/ai-data-analytics |
| Google Dialogflow | https://cloud.google.com/dialogflow |
| IBM Cloud Pak for Data | https://www.ibm.com/products/cloud-pak-for-data |
| IBM watsonx Assistant | https://www.ibm.com/products/watsonx-assistant |
| Jasper | https://www.jasper.ai/chat |
| Omnisend | https://www.omnisend.com/ |
| Researching and Referencing: Referencing Skills | https://tafensw.libguides.com/research/referencing |
| Staff intranet | https://share.tafensw.edu.au/share/items/1c89b5bb-2698-4ced-91d8-29a58efbaab2/0/?attachment.uuid=619dbebb-d353-4953-8e7a-775c44521322 |
| Tableau | https://www.tableau.com/ |
| Video recording instruction (pdf) | https://share.tafensw.edu.au/share/items/744af7d4-a241-45e2-adb0-0e13f2fe4950/0/?attachment.uuid=01c3c87a-4599-48c2-91f0-68a00b5bbb4c |
| Zendesk AI | https://www.zendesk.com/au/service/ai/ |

This page is not required for online assessment submissions.

## Student assessment declaration

This assessment is my original work and has not been:

* copied from any source without proper referencing
* written for me by any other person except where such collaboration has been approved by a teacher or assessor.

**Student signature and date**

### ****Reasonable adjustment****

Reasonable adjustment was in place for this assessment event.

If so, please provide details of any reasonable adjustment strategies that were implemented:

[Insert reasonable adjustment strategies]

### Assessment outcome

Satisfactory  Unsatisfactory

**Comments**

[Insert comments]

**Assessor name, signature and date**

**Student acknowledgement of assessment outcome**

[Would you like to make any comments about this assessment?]

**Student name, signature and date**