**Second Iteration**

In the first round of translating UML class diagrams, both literal and model translations were clear and easy to read but had significant problems with accurately showing the relationships and structures in the diagrams. These issues made it harder for visually impaired students to fully understand the diagrams through text descriptions. The second round of translations will focus on fixing these problems by improving the accuracy of the translations, especially in representing the connections between classes. This will help ensure that the translations are more useful and provide a better understanding of the diagrams for educational purposes. The same diagrams used for evaluation in the first iteration will be used again in this iteration to see if there is improvements in translation.

**Literal translation**

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| **Literal Translation** | | |
| **Name of Evaluator :** Bessaac Gambe  **Date of Evaluation :**  **Diagram Name :** Bank Management System | | |
| **Evaluation Criteria** | | |
| 1. ***Adequacy***   *Considering the amount of contents carried from the source diagram to translated text* | | ***Tick box below*** |
| 1. Is missing a lot of very important information that can hinder the understanding of the diagram | |  |
| 1. Is missing some very important information that can hinder the understanding of the diagram | |  |
| 1. Is missing some information but the missing information is not necessary to understand the diagram | |  |
| 1. Is missing little information but the missing information is not necessary to understand the diagram | |  |
| 1. Is not missing any information | | ✓ |
| ***Comments****: All the links that were not translated in the first iteration have been all translated* | | |
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| 1. ***Conciseness***   *Considering the amount of unnecessary information (additions) contained in translated text* | | ***Tick box below*** |
| 1. Has a lot of unnecessary information | |  |
| 1. Has more unnecessary information | |  |
| 1. Has some unnecessary information | |  |
| 1. Has little unnecessary information | |  |
| 1. Has no unnecessary information | | ✓ |
| ***Comments****: Unnecessary information found in the 1st iteration have been removed in this translation* | | |
| 1. ***Naturalness***   *Ignoring the diagram, considering the grammaticality and fluency of the translated text.* | ***Tick box below*** | |
| 1. Is very unfluent or has many grammatical errors that can hinder the reading of translated text. |  | |
| 1. Is unfluent or has grammatical errors that can hinder the reading of translated text. |  | |
| 1. Is somewhat fluent and has some grammatical errors that cannot hinder the reading of translated text. |  | |
| 1. Is fluent and has little grammatical errors that cannot hinder the reading of translated text. |  | |
| 1. Has no grammatical error and very fluent | ✓ | |
| ***Comments****:*   1. *The little grammatical error found in the 1st for the translation of Bank Management system have been removed. The word texts has been corrected to text.* 2. *Link descriptions are now based on two boxes, for example, “A straight line with a white triangle head connects rectangles Savings Account and Account”. rather than “A straight line with a white triangle head connects rectangles Savings Account Account”, without any commas to separate the items as in the first iteration.* | | |

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| **Literal Translation** | | |
| **Name of Evaluator :** Bessaac Gambe  **Date of Evaluation :**  **Diagram Name :** Hotel Management System | | |
| **Evaluation Criteria** | | |
| 1. ***Adequacy***   *Considering the amount of contents carried from the source diagram to translated text* | | ***Tick box below*** |
| 1. Is missing a lot of very important information that can hinder the understanding of the diagram | |  |
| 1. Is missing some very important information that can hinder the understanding of the diagram | |  |
| 1. Is missing some information but the missing information is not necessary to understand the diagram | |  |
| 1. Is missing little information but the missing information is not necessary to understand the diagram | |  |
| 1. Is not missing any information | | ✓ |
| ***Comments****: All the connections were translated as compared to the first iteration where there were a lot of missing diagram connections in the translated text* | | |
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| 1. ***Conciseness***   *Considering the amount of unnecessary information (additions) contained in translated text* | | ***Tick box below*** |
| 1. Has a lot of unnecessary information | |  |
| 1. Has more unnecessary information | |  |
| 1. Has some unnecessary information | |  |
| 1. Has little unnecessary information | |  |
| 1. Has no unnecessary information | | ✓ |
| ***Comments****:All unnecessary underlines were removed in this iteration’s translation. In the first iteration, there were some unnecessary underlines in the translated text* | | |
| 1. ***Naturalness***   *Ignoring the diagram, considering the grammaticality and fluency of the translated text.* | ***Tick box below*** | |
| 1. Is very unfluent or has many grammatical errors that can hinder the reading of translated text. |  | |
| 1. Is unfluent or has grammatical errors that can hinder the reading of translated text. |  | |
| 1. Is somewhat fluent and has some grammatical errors that cannot hinder the reading of translated text. |  | |
| 1. Is fluent and has little grammatical errors that cannot hinder the reading of translated text. |  | |
| 1. Has no grammatical error and very fluent | ✓ | |
| ***Comments****: Each node is associated with two rectangles it joins, for example, “A straight line with a white triangle head connects rectangles Person and Receptionist”. Instead of, for example, “A straight line a straight line connects rectangles Person Guest RoomBooking and Receptionist”, eliminating the grammatical error in which a list of rectangles have to be separated by commas.* |  | |

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| **Literal Translation** | |
| **Name of Evaluator :** Bessaac Gambe  **Date of Evaluation :**  **Diagram Name :** Inventory Management System | |
| **Evaluation Criteria** | |
| 1. ***Adequacy***   *Considering the amount of contents carried from the source diagram to translated text* | ***Tick box below*** |
| 1. Is missing a lot of very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some information but the missing information is not necessary to understand the diagram |  |
| 1. Is missing little information but the missing information is not necessary to understand the diagram |  |
| 1. Is not missing any information | ✓ |
| ***Comments****: in this iteration, all the rectangle links have been translated and are correct. As compared to the first iteration whereby a lot translations links were missing and were partially correct.* | |
| 1. ***Conciseness***   *Considering the amount of unnecessary information (additions) contained in translated text* | ***Tick box below*** |
| 1. Has a lot of unnecessary information |  |
| 1. Has more unnecessary information |  |
| 1. Has some unnecessary information |  |
| 1. Has little unnecessary information |  |
| 1. Has no unnecessary information | ✓ |
| ***Comments****: In the second iteration all unnecessary information is eliminated in the translated text, for example, underlines found in the first iteration were removed.* | |
| 1. ***Naturalness***   *Ignoring the diagram, considering the grammaticality and fluency of the translated text.* | ***Tick box below*** |
| 1. Is very unfluent or has many grammatical errors that can hinder the reading of translated text. |  |
| 1. Is unfluent or has grammatical errors that can hinder the reading of translated text. |  |
| 1. Is somewhat fluent and has some grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Is fluent and has little grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Has no grammatical error and very fluent | ✓ |
| ***Comments****: All grammatical errors found in the link translation have been eliminated. Link translation is now performed based on two rectangles connected by the link eliminating grammatical errors found in the first iteration.* | |

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| **Literal Translation** | |
| **Name of Evaluator :** Bessaac Gambe  **Date of Evaluation :**  **Diagram Name :** Library Management System | |
| **Evaluation Criteria** | |
| 1. ***Adequacy***   *Considering the amount of contents carried from the source diagram to translated text* | ***Tick box below*** |
| 1. Is missing a lot of very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some information but the missing information is not necessary to understand the diagram |  |
| 1. Is missing little information but the missing information is not necessary to understand the diagram |  |
| 1. Is not missing any information | ✓ |
| ***Comments****: A lot of translated for the links is missing making difficult to understand the diagram in the first iteration but now all the links are now correctly translated in the second iteration.* | |
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| 1. ***Conciseness***   *Considering the amount of unnecessary information (additions) contained in translated text* | ***Tick box below*** |
| 1. Has a lot of unnecessary information |  |
| 1. Has more unnecessary information |  |
| 1. Has some unnecessary information |  |
| 1. Has little unnecessary information |  |
| 1. Has no unnecessary information | ✓ |
| ***Comments****: All the unnecessary underlines found in the first iteration which are not important in the translated text have been eliminated in this iteration.* | |
| 1. ***Naturalness***   *Ignoring the diagram, considering the grammaticality and fluency of the translated text.* | ***Tick box below*** |
| 1. Is very unfluent or has many grammatical errors that can hinder the reading of translated text. |  |
| 1. Is unfluent or has grammatical errors that can hinder the reading of translated text. |  |
| 1. Is somewhat fluent and has some grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Is fluent and has little grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Has no grammatical error and very fluent |  |
| ***Comments****: All grammatical errors found in the link translation have been eliminated. Link translation is now performed based on two rectangles connected by the link eliminating grammatical errors found in the first iteration.* | |

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| **Literal Translation** | | |
| **Name of Evaluator :** Bessaac Gambe  **Date of Evaluation :**  **Diagram Name :** Passport Automation System | | |
| **Evaluation Criteria** | | |
| 1. ***Adequacy***   *Considering the amount of contents carried from the source diagram to translated text* | ***Tick box below*** | |
| 1. Is missing a lot of very important information that can hinder the understanding of the diagram |  | |
| 1. Is missing some very important information that can hinder the understanding of the diagram |  | |
| 1. Is missing some information but the missing information is not necessary to understand the diagram |  | |
| 1. Is missing little information but the missing information is not necessary to understand the diagram |  | |
| 1. Is not missing any information | ✓ | |
| ***Comments****: In the first iteration translated text was missing very important information hindering the understanding of the diagram in the rectangles. It was showing for example “«Services»” instead of “«Services» Database” as rectangle name. This has been corrected the rectangle name in now translated as “«Services» Database”* | | |
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| 1. ***Conciseness***   *Considering the amount of unnecessary information (additions) contained in translated text* | ***Tick box below*** | |
| 1. Has a lot of unnecessary information |  | |
| 1. Has more unnecessary information |  | |
| 1. Has some unnecessary information |  | |
| 1. Has little unnecessary information |  | |
| 1. Has no unnecessary information | ✓ | |
| ***Comments****: All the unnecessary underlines found in the translated text in the first iteration were eliminated in this translation.* | | |
| 1. ***Naturalness***   *Ignoring the diagram, considering the grammaticality and fluency of the translated text.* | | ***Tick box below*** |
| 1. Is very unfluent or has many grammatical errors that can hinder the reading of translated text. | |  |
| 1. Is unfluent or has grammatical errors that can hinder the reading of translated text. | |  |
| 1. Is somewhat fluent and has some grammatical errors that cannot hinder the reading of translated text. | |  |
| 1. Is fluent and has little grammatical errors that cannot hinder the reading of translated text. | |  |
| 1. Has no grammatical error and very fluent | | ✓ |
| ***Comments****: The little grammatical errors of not separating a list of rectangles with commas found in the first iteration have been eliminated in this iteration.* | | |

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| **Literal Translation** | | |
| **Name of Evaluator :** Bessaac Gambe  **Date of Evaluation :**  **Diagram Name :** Restaurant System | | |
| **Evaluation Criteria** | | |
| 1. ***Adequacy***   *Considering the amount of contents carried from the source diagram to translated text* | ***Tick box below*** | |
| 1. Is missing a lot of very important information that can hinder the understanding of the diagram |  | |
| 1. Is missing some very important information that can hinder the understanding of the diagram |  | |
| 1. Is missing some information but the missing information is not necessary to understand the diagram |  | |
| 1. Is missing little information but the missing information is not necessary to understand the diagram |  | |
| 1. Is not missing any information | ✓ | |
| ***Comments****: Some link translations which were missing in the first iteration of translation have been correctly translated in the second iteration.* | | |
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| 1. ***Conciseness***   *Considering the amount of unnecessary information (additions) contained in translated text* | ***Tick box below*** | |
| 1. Has a lot of unnecessary information |  | |
| 1. Has more unnecessary information |  | |
| 1. Has some unnecessary information |  | |
| 1. Has little unnecessary information |  | |
| 1. Has no unnecessary information | ✓ | |
| ***Comments****: The model translation had little unnecessary information i.e the underlines in the first iteration of translation. Now these underlines have been eliminated.* | | |
| 1. ***Naturalness***   *Ignoring the diagram, considering the grammaticality and fluency of the translated text.* | | ***Tick box below*** |
| 1. Is very unfluent or has many grammatical errors that can hinder the reading of translated text. | |  |
| 1. Is unfluent or has grammatical errors that can hinder the reading of translated text. | |  |
| 1. Is somewhat fluent and has some grammatical errors that cannot hinder the reading of translated text. | |  |
| 1. Is fluent and has little grammatical errors that cannot hinder the reading of translated text. | |  |
| 1. Has no grammatical error and very fluent | | ✓ |
| ***Comments****: Link translated is now done based on two rectangles in is connecting eliminating the need to put commas on a list of rectangles if they share the same type of link, therefore eliminating grammatical errors.* | | |

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| **Literal Translation** | |
| **Name of Evaluator :** Bessaac Gambe  **Date of Evaluation :**  **Diagram Name :** School Management System | |
| **Evaluation Criteria** | |
| 1. ***Adequacy***   *Considering the amount of contents carried from the source diagram to translated text* | ***Tick box below*** |
| 1. Is missing a lot of very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some information but the missing information is not necessary to understand the diagram |  |
| 1. Is missing little information but the missing information is not necessary to understand the diagram |  |
| 1. Is not missing any information | ✓ |
| ***Comments****: in the first iteration the translated text was missing a lot of very important information that could hinder the understanding of the diagram such as node links, but this has been corrected in the second iteration as all node links are properly translated.* | |
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| 1. ***Conciseness***   *Considering the amount of unnecessary information (additions) contained in translated text* | ***Tick box below*** |
| 1. Has a lot of unnecessary information |  |
| 1. Has more unnecessary information |  |
| 1. Has some unnecessary information |  |
| 1. Has little unnecessary information |  |
| 1. Has no unnecessary information | ✓ |
| ***Comments****: All the underlines found in the first iteration have been eliminated.* | |
| 1. ***Naturalness***   *Ignoring the diagram, considering the grammaticality and fluency of the translated text.* | ***Tick box below*** |
| 1. Is very unfluent or has many grammatical errors that can hinder the reading of translated text. |  |
| 1. Is unfluent or has grammatical errors that can hinder the reading of translated text. |  |
| 1. Is somewhat fluent and has some grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Is fluent and has little grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Has no grammatical error and very fluent | ✓ |
| ***Comments****: Link translated is now done based on two rectangles in is connecting eliminating the need to put commas on a list of rectangles if they share the same type of link, therefore eliminating grammatical errors.* | |

**Model Translation**

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| **Model Translation** | | |
| **Name of Evaluator :**  **Date of Evaluation :**  **Diagram Name :** Bank Management System | | |
| **Evaluation Criteria** | | |
| 1. ***Adequacy***   *Considering the amount of contents carried from the source diagram to translated text* | | ***Tick box below*** |
| 1. Is missing a lot of very important information that can hinder the understanding of the diagram | |  |
| 1. Is missing some very important information that can hinder the understanding of the diagram | |  |
| 1. Is missing some information but the missing information is not necessary to understand the diagram | |  |
| 1. Is missing little information but the missing information is not necessary to understand the diagram | |  |
| 1. Is not missing any information | | ✓ |
| ***Comments****: All of the relationships from the diagram were correctly translated.* | | |
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| 1. ***Conciseness***   *Considering the amount of unnecessary information (additions) contained in translated text* | | ***Tick box below*** |
| 1. Has a lot of unnecessary information | |  |
| 1. Has more unnecessary information | |  |
| 1. Has some unnecessary information | |  |
| 1. Has little unnecessary information | |  |
| 1. Has no unnecessary information | | ✓ |
| ***Comments****: The underlines found in the translated summary in the first iterations were eliminated, so there is no unnecessary information in the translated text in the second iteration’s translation.* | | |
| 1. ***Naturalness***   *Ignoring the diagram, considering the grammaticality and fluency of the translated text.* | ***Tick box below*** | |
| * + 1. Is very unfluent or has many grammatical errors that can hinder the reading of translated text. |  | |
| * + 1. Is unfluent or has grammatical errors that can hinder the reading of translated text. |  | |
| * + 1. Is somewhat fluent and has some grammatical errors that cannot hinder the reading of translated text. |  | |
| * + 1. Is fluent and has little grammatical errors that cannot hinder the reading of translated text. |  | |
| * + 1. Has no grammatical error and very fluent | ✓ | |
| ***Comments****: There is fluence and grammatical errors were eliminated in the translated text. There is proper punctuation of sentences.* | | |

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| **Model Translation** | |
| **Name of Evaluator :** Bessaac Gambe  **Date of Evaluation :**  **Diagram Name :** Hotel Management System | |
| **Evaluation Criteria** | |
| 1. ***Adequacy***   *Considering the amount of contents carried from the source diagram to translated text* | ***Tick box below*** |
| 1. Is missing a lot of very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some information but the missing information is not necessary to understand the diagram |  |
| 1. Is missing little information but the missing information is not necessary to understand the diagram |  |
| 1. Is not missing any information | ✓ |
| ***Comments****: There were a lot of missing class relationships in the translated text in the first iteration’s translation. In the second iteration’s translation all the class relationships were correctly translated.* | |
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| 1. ***Conciseness***   *Considering the amount of unnecessary information (additions) contained in translated text* | ***Tick box below*** |
| 1. Has a lot of unnecessary information |  |
| 1. Has more unnecessary information |  |
| 1. Has some unnecessary information |  |
| 1. Has little unnecessary information |  |
| 1. Has no unnecessary information | ✓ |
| ***Comments****: There are some unnecessary underlines in the translated text in the first iteration. Those unnecessary translations were eliminated in the second iteration.* | |
| 1. ***Naturalness***   *Ignoring the diagram, considering the grammaticality and fluency of the translated text.* | ***Tick box below*** |
| 1. Is very unfluent or has many grammatical errors that can hinder the reading of translated text. |  |
| 1. Is unfluent or has grammatical errors that can hinder the reading of translated text. |  |
| 1. Is somewhat fluent and has some grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Is fluent and has little grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Has no grammatical error and very fluent | ✓ |
| ***Comments****: In the first iteration the were no commas to separate a list of items in the connection section e.g. “There is a relationship between Person Notification RoomBooking Guest and Receptionist”. These grammatical errors were eliminated in the second iteration.* | |

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| **Model Translation** | |
| **Name of Evaluator :** Bessaac Gambe  **Date of Evaluation :**  **Diagram Name :** Inventory Management System | |
| **Evaluation Criteria** | |
| 1. ***Adequacy***   *Considering the amount of contents carried from the source diagram to translated text* | ***Tick box below*** |
| 1. Is missing a lot of very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some information but the missing information is not necessary to understand the diagram |  |
| 1. Is missing little information but the missing information is not necessary to understand the diagram |  |
| 1. Is not missing any information | ✓ |
| ***Comments****: A lot translations for the class relationships are missing and also class relationships are partially correct in the first iteration but all the missing class relationships were properly translated in the second iteration.* | |
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| 1. ***Conciseness***   *Considering the amount of unnecessary information (additions) contained in translated text* | ***Tick box below*** |
| 1. Has a lot of unnecessary information |  |
| 1. Has more unnecessary information |  |
| 1. Has some unnecessary information |  |
| 1. Has little unnecessary information |  |
| 1. Has no unnecessary information | ✓ |
| ***Comments****: The additional unnecessary underlines found in the first iteration were removed in the second iteration.* | |
| 1. ***Naturalness***   *Ignoring the diagram, considering the grammaticality and fluency of the translated text.* | ***Tick box below*** |
| 1. Is very unfluent or has many grammatical errors that can hinder the reading of translated text. |  |
| 1. Is unfluent or has grammatical errors that can hinder the reading of translated text. |  |
| 1. Is somewhat fluent and has some grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Is fluent and has little grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Has no grammatical error and very fluent | ✓ |
| ***Comments****: There were missing commas separating items in a list in the first iteration. These grammatical errors were eliminated in the second iteration.* | |

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| **Model Translation** | |
| **Name of Evaluator :** Bessaac Gambe  **Date of Evaluation :**  **Diagram Name :** Library Management System | |
| **Evaluation Criteria** | |
| 1. ***Adequacy***   *Considering the amount of contents carried from the source diagram to translated text* | ***Tick box below*** |
| 1. Is missing a lot of very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some information but the missing information is not necessary to understand the diagram |  |
| 1. Is missing little information but the missing information is not necessary to understand the diagram |  |
| 1. Is not missing any information | ✓ |
| ***Comments****: in the first iteration, many of relationships were missing in translated summary making difficult to understand the diagram. The diagram is now understandable as all the diagram relationships were properly translated in the second iteration.* | |
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| 1. ***Conciseness***   *Considering the amount of unnecessary information (additions) contained in translated text* | ***Tick box below*** |
| 1. Has a lot of unnecessary information |  |
| 1. Has more unnecessary information |  |
| 1. Has some unnecessary information |  |
| 1. Has little unnecessary information |  |
| 1. Has no unnecessary information | ✓ |
| ***Comments****: The translated text had little unnecessary underlines which were not important. The second iteration removed all those unnecessary underlines.* | |
| 1. ***Naturalness***   *Ignoring the diagram, considering the grammaticality and fluency of the translated text.* | ***Tick box below*** |
| 1. Is very unfluent or has many grammatical errors that can hinder the reading of translated text. |  |
| 1. Is unfluent or has grammatical errors that can hinder the reading of translated text. |  |
| 1. Is somewhat fluent and has some grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Is fluent and has little grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Has no grammatical error and very fluent | ✓ |
| ***Comments****: There were little grammatical errors in the translated text of the first iteration, e.g. “There is a relationship between Transaction Bill MemberRecord and Librarian”. There were no commas to separating a list of items in a sentence e.g. “A straight line connects rectangles Transaction Bill MemberRecord and Librarian” should read as “There is a relationship between Transaction, Bil,l MemberRecord, and Librarian”. All those grammatical errors were completely eliminated by the second iteration.* | |

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| **Model Translation** | |
| **Name of Evaluator :**  **Date of Evaluation :**  **Diagram Name :** Passport Automation System | |
| **Evaluation Criteria** | |
| 1. ***Adequacy***   *Considering the amount of contents carried from the source diagram to translated text* | ***Tick box below*** |
| 1. Is missing a lot of very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some information but the missing information is not necessary to understand the diagram |  |
| 1. Is missing little information but the missing information is not necessary to understand the diagram |  |
| 1. Is not missing any information | ✓ |
| ***Comments****: A lot of translation for class relationships were missing and some translated relationships are partially correct in the first iteration. Those missing and partially correct relationships were all correctly translated in the second iteration.* | |
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| 1. ***Conciseness***   *Considering the amount of unnecessary information (additions) contained in translated text* | ***Tick box below*** |
| 1. Has a lot of unnecessary information |  |
| 1. Has more unnecessary information |  |
| 1. Has some unnecessary information |  |
| 1. Has little unnecessary information |  |
| 1. Has no unnecessary information | ✓ |
| ***Comments****: The translated text has some unnecessary information such as underlines. All those unnecessary underlines were removed in the second iteration.* | |
| 1. ***Naturalness***   *Ignoring the diagram, considering the grammaticality and fluency of the translated text.* | ***Tick box below*** |
| 1. Is very unfluent or has many grammatical errors that can hinder the reading of translated text. |  |
| 1. Is unfluent or has grammatical errors that can hinder the reading of translated text. |  |
| 1. Is somewhat fluent and has some grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Is fluent and has little grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Has no grammatical error and very fluent | ✓ |
| ***Comments****: There were little grammatical errors, for example some missing commas when separating items i.e. class names. All the those grammatical errors were addressed by the second iteration.* | |

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| **Model Translation** | |
| **Name of Evaluator :** BessaacGambe  **Date of Evaluation :**  **Diagram Name :** Restaurant System | |
| **Evaluation Criteria** | |
| 1. ***Adequacy***   *Considering the amount of contents carried from the source diagram to translated text* | ***Tick box below*** |
| 1. Is missing a lot of very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some very important information that can hinder the understanding of the diagram |  |
| 1. Is missing some information but the missing information is not necessary to understand the diagram |  |
| 1. Is missing little information but the missing information is not necessary to understand the diagram |  |
| 1. Is not missing any information | ✓ |
| ***Comments****: Some missing and partially correct translations in the first iteration hindered the understanding of the uml class diagrams. These second iteration addressed this by correctly translating all class elements and relationships.* | |
| 1. ***Conciseness***   *Considering the amount of unnecessary information (additions) contained in translated text* | ***Tick box below*** |
| 1. Has a lot of unnecessary information |  |
| 1. Has more unnecessary information |  |
| 1. Has some unnecessary information |  |
| 1. Has little unnecessary information |  |
| 1. Has no unnecessary information | ✓ |
| ***Comments****: Underlines in the translated text were unnecessary in the first iteration. All those underlines were removed in the second iteration.* | |
| 1. ***Naturalness***   *Ignoring the diagram, considering the grammaticality and fluency of the translated text.* | ***Tick box below*** |
| 1. Is very unfluent or has many grammatical errors that can hinder the reading of translated text. |  |
| 1. Is unfluent or has grammatical errors that can hinder the reading of translated text. |  |
| 1. Is somewhat fluent and has some grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Is fluent and has little grammatical errors that cannot hinder the reading of translated text. |  |
| 1. Has no grammatical error and very fluent | ✓ |
| ***Comments****: All grammatical errors found in the first iteration where eliminated in the second iteration.* | |

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| **Model Translation** | | |
| **Name of Evaluator :** Bessaac Gambe  **Date of Evaluation :**  **Diagram Name :** School Management System | | |
| **Evaluation Criteria** | | |
| 1. ***Adequacy***   *Considering the amount of contents carried from the source diagram to translated text* | ***Tick box below*** | |
| 1. Is missing a lot of very important information that can hinder the understanding of the diagram |  | |
| 1. Is missing some very important information that can hinder the understanding of the diagram |  | |
| 1. Is missing some information but the missing information is not necessary to understand the diagram |  | |
| 1. Is missing little information but the missing information is not necessary to understand the diagram |  | |
| 1. Is not missing any information | ✓ | |
| ***Comments****: The translated text by model translation missed a lot of very important information that hindered the understanding of the diagram such as class relationships. This was addressed by the second iteration as all the diagram elements were correctly translated.* | | |
|  |  | |
| 1. ***Conciseness***   *Considering the amount of unnecessary information (additions) contained in translated text* | ***Tick box below*** | |
| 1. Has a lot of unnecessary information |  | |
| 1. Has more unnecessary information |  | |
| 1. Has some unnecessary information |  | |
| 1. Has little unnecessary information |  | |
| 1. Has no unnecessary information | ✓ | |
| ***Comments****: The translations text had little unnecessary information such as underlines in the first iteration. All the underlines were removed in the second iteration as they were not adding value in the translation.* | | |
| 1. ***Naturalness***   *Ignoring the diagram, considering the grammaticality and fluency of the translated text.* | | ***Tick box below*** |
| 1. Is very unfluent or has many grammatical errors that can hinder the reading of translated text. | |  |
| 1. Is unfluent or has grammatical errors that can hinder the reading of translated text. | |  |
| 1. Is somewhat fluent and has some grammatical errors that cannot hinder the reading of translated text. | |  |
| 1. Is fluent and has little grammatical errors that cannot hinder the reading of translated text. | |  |
| 1. Has no grammatical error and very fluent | | ✓ |
| ***Comments****: The translation was fluent and little grammatical errors in the first iteration such has “There is an associative relationship between NoticeBoard Classroom Bus and Student”. All those grammatical errors were eliminated in the second iteration.* | | |

**Summary of literal translation 2nd iteration**

In the first iterations of the literal translations, important or necessary information was often omitted, hindering understanding of the diagrams. However, the second iterations generally corrected these omissions, ensuring that all relevant links and connections between rectangles were included, improving clarity. Initially, the translations also contained unnecessary details, such as underlines and redundant descriptions, which were later removed, resulting in more concise translations. Furthermore, grammatical errors, including issues with fluency and the incorrect use of commas when listing connected rectangles, were present at first. By the second iteration, these errors were corrected, making the translations more natural, with simplified and grammatically accurate descriptions of link connections.

**Summary of literal translation 2nd iteration**

In the second iteration of the model translations, there were clear improvements in adequacy, conciseness, and naturalness. Initially, many class relationships were either incomplete or incorrect, but these issues were fixed, greatly improving the accuracy of the translations. Unnecessary details, such as underlines, were removed, making the text more concise. Additionally, grammatical errors, like missing commas and awkward phrasing, were corrected, resulting in translations that were clearer and more natural to read.

**Overall summary of both literal and model translation : 2nd Iteration**

In the second iterations of both the literal and model translations, significant improvements were made in terms of adequacy, conciseness, and naturalness. Initially, important information and class relationships were often incomplete or omitted, which hindered understanding and clarity. These issues were corrected in the second iterations, ensuring that all relevant connections and links were included. Unnecessary details, such as underlines and redundant descriptions, were removed, leading to more concise translations. Additionally, grammatical errors, including awkward phrasing and missing commas, were addressed, resulting in more fluent, clear, and grammatically accurate translations.