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| 1. STUDENT INFORMATION | | | |
| Name | ID | Section | |
| Munther Mohammed Algarni | 444815993 | Lab | Theory |
| 381 | 330 |

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| 1. PROJECT INFORMATION | | | | | |
| Title |  | | | | |
| Code Links | | | | | Qrcode QR Code Vector Icon. Special Identity Illustration As Simple Sign and ... |
| Source Code | https://github.com/Munther5/OOP222-Lab-Project | | | |  |
| Executable Code | https://pdf.ac/2Bh3TR | | | | A qr code with a black and white background  AI-generated content may be incorrect. |
| Approximation of total number of hours spent to complete the project | | | | 18 hr | |
| Project Due Date | | 20 / 2 / 2025 | Submission Date | 19 / 2 / 2025 | |
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| 1. PERSONAL REFLECTION & Self-ASSESSMENT |
| Summarize the project idea and changes you added to the project: |
| The project calculates fuel efficiency and cost. I added multiple fill-ups using an array, improved the output format, and made sure numbers appear in English. |
| After finishing, any New Concepts learned, or confidence of JAVA has increased in: |
| I learned about constructors, setter methods, and how to format output with printf(). My understanding of OOP and arrays also improved. |
| Challenges Faced and Solutions, especially if you submit late: |
| Aligning the output correctly and fixing Arabic numbers was challenging. Using Locale.US solved the number issue, and adjusting spacing fixed the alignment. |

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| 1. Important TESTING AND DEBUGGING Cases (ignore if you used testing tool) | | | | | | |
| # | Test Case / Error | Correct Output | Actual Output | Date/Time | Passed? | Note |
| 1 | Numbers appeared in Arabic instead of English | Numbers in English | Numbers in Arabic | 2025-02-18 17:58 | Yes | Fixed by using Locale.US |
| 2 | Misaligned table formatting | Columns aligned properly | Data not under correct headings | 2025-02-19 05:28 | Yes | Adjusted spacing in printf() |
| 3 | Used parameterized constructor only | Supports both constructors | No default constructor | 2025-02-19 07:30 | Yes | Added default constructor & setters |
| 4 | Incorrect distance calculation | Correct distance (End - Start) | |  | | --- | | Wrong values |  |  | | --- | |  | | 2025-02-19 13:20 | Yes | Fixed calculation in calcDistance() |

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| 1. COLLABORATION AND RESOURCES | |
| If you received help from any classmates, please provide their names and IDs. This information won't be used against you, but will help in cases where reports are similar. It won't be considered fraud if accompanied by explanations. | |
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| If you utilized any external tools (e.g., AI, websites), please specify | |
| Name of the tool | Nature of assistance received |
| 1. ChatGPT (AI) | Helped with debugging, formatting output, improving Java concepts, and ensuring English number formatting. |
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| Steps taken to understand and integrate it into your learning | |
| 1. Used ChatGPT to clarify concepts like constructors, setters, and formatted output in Java. 2. Applied suggested fixes and tested them to see how they improved the code. 3. Experimented with different approaches based on AI feedback to enhance problem-solving skills. 4. Reviewed explanations carefully to understand why each change was necessary before implementing it. | |

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| EVALUATION (to be filled-out by lab instructors only) | | | |
| Name | Date | Total Marks  100% (5) | Signature |
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| Coding  40% (2) | Presentation / Demo  30% (1.5) | Logistics  10% (0.5) | Report  20% (1) |
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