

IM3180 Design and Innovation Project (AY2023/24 Semester 1)

Individual Report

Name: Ong Yu Heng

Group No: 3

Project Title: nIEMtendo

Contributions to the Project (1 page)

- Cut LED strips to specified dimensions.
- Pasted LED strips onto the mounting board for display.
- Conducted soldering to establish secure connections.
- Measured and cut wood for both the grid and outer structure.
- Sourced materials and purchased required components.
- Applied adhesive for the assembly of components.
- Implemented hinges and plates for structural reinforcement.
- Drilled precise holes for buttons and sensors.
- Conducted thorough testing to ensure game functionality.
- Contributed to the final assembly and mounting of all project components.

Reflection on Learning Outcome Attainment

Reflect on your experience during your project and the achievements you have relating to at least two of the points below:

- (a) Engineering knowledge : -
- (b) Problem Analysis : The project involved meticulous problem analysis, especially during the initial phases of cutting LED strips and determining the appropriate dimensions for the grid and outer structure. This required a detailed understanding of the project requirements and careful analysis to ensure precision in execution.
- (c) Investigation : -
- (d) Design/development of Solutions : Throughout the project, I actively engaged in the design and development of solutions, tackling challenges such as optimizing the LED grid layout, selecting appropriate materials for structural integrity, and integrating hardware components seamlessly.
- (e) Modern Tool Usage : -
- (f) The Engineer and Society : -
- (g) Environment and Sustainability : -
- (h) Ethics : -
- (i) Individual and Team Work : -
- (j) Communication : Communication is necessary in every project and for our project, we had to continuously communicate with other subgroups. As we are all busy with our other modules, continuous updates to everyone in the group helps keep everyone on the same page.
- (k) Project Management and Finance: Throughout the project, I learn to liaise with the team leader and other subgroup to understand the material need. The experience has allowed me to understand the importance of cohesive teamwork.
- (l) Lifelong Learning : -

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