ESC204-DesignDossier
A collection of documents, which provide evidence for our design process, design outcomes, and collaboration process for the ESC204 Prototyping Skills Assignment.

Contents and Important Files:
-> 1 - Framing and Initial Ideas
   -> Material here is about the protective case. Iterative design for code/circuitry was started without initial framing
-> 2 - Code and Circuitry
   -> Includes final code (code_final.py) and circuitry (circuit_diagram_final.png)
   -> Code/breadboard layout iterations
   -> Calculations and design decisions described in resistor_calculations.rtf and update_log.rtf
-> 3 - CAD and CAM
   -> Includes the use of the resource, boxes.py (*boxes.py reference.pdf*)
   -> Includes CAD model of structural elements (*psa-parts.stp*), their assembly (*psa-assembly.stp*) and screenshot of the assembly (*Screenshot of the assembled pieces in Fusion360.png*)
   -> Includes as-built CAM model (*MyMaker_LasercutPlywood3mm_Autocad_mm.dwg*) and screenshot (*Screenshot of as-built CAM model.png)*
   -> Design decisions described (*Update Log.docx*)
   -> Screenshot of confirmation email from MyFab for the Laser cutting order (*MyFab confirmation email.png)*
-> 4 - Systems Integration and Testing
   -> videos of testing functionality (pressing the button for the lights, assembly and disassembly, shaking, plugging and unplugging micro-USB)
   -> videos of testing edge cases (pressing button and holding it, pressing the button very fast)
   -> Update log to show the process of assembling, modifying, and testing (*Update Log.docx)*
-> 5 - Final Product
   -> Top, side, and front view of the final product
   -> Orthographic picture of the final product, open with visible circuit