Assignment 1.8i: Solution Selection

1. List the important design requirements that you will use for criteria to select a solution for your group design project (choose 3-5 from the requirements you already listed).

2. Using Excel create a Pair-wise comparison matrix to rank the criteria
   • List each requirement as both a row and a column heading.
   • Blank out the diagonals where Row and Columns match.
   • Put a 1 on the row for each criterion where the row criterion is more important than the column criterion.
   • Put a 0 on the row for each criterion where the row criterion is less important than the column criterion.
   • Total each row to determine the importance ranking for your criteria.

3. In the same spreadsheet, create a Decision Matrix.
   • Give an importance weight to each criterion (total for all criteria must be 1).
   • Score the 5 most promising designs from your brainstorming.
   • Calculate weighted score for each design and requirement.
   • Calculate total weighted score for each design.