

DESIGN PROJECT II

MISSION STATEMENT

The USB Hub needed to be redesigned with the following features:

- i. *7 Ports*
- ii. *Horizontal and Vertical Mounts*
- iii. *Stackable up to 3 Hubs Tall*
- iv. *Vibration Loading*



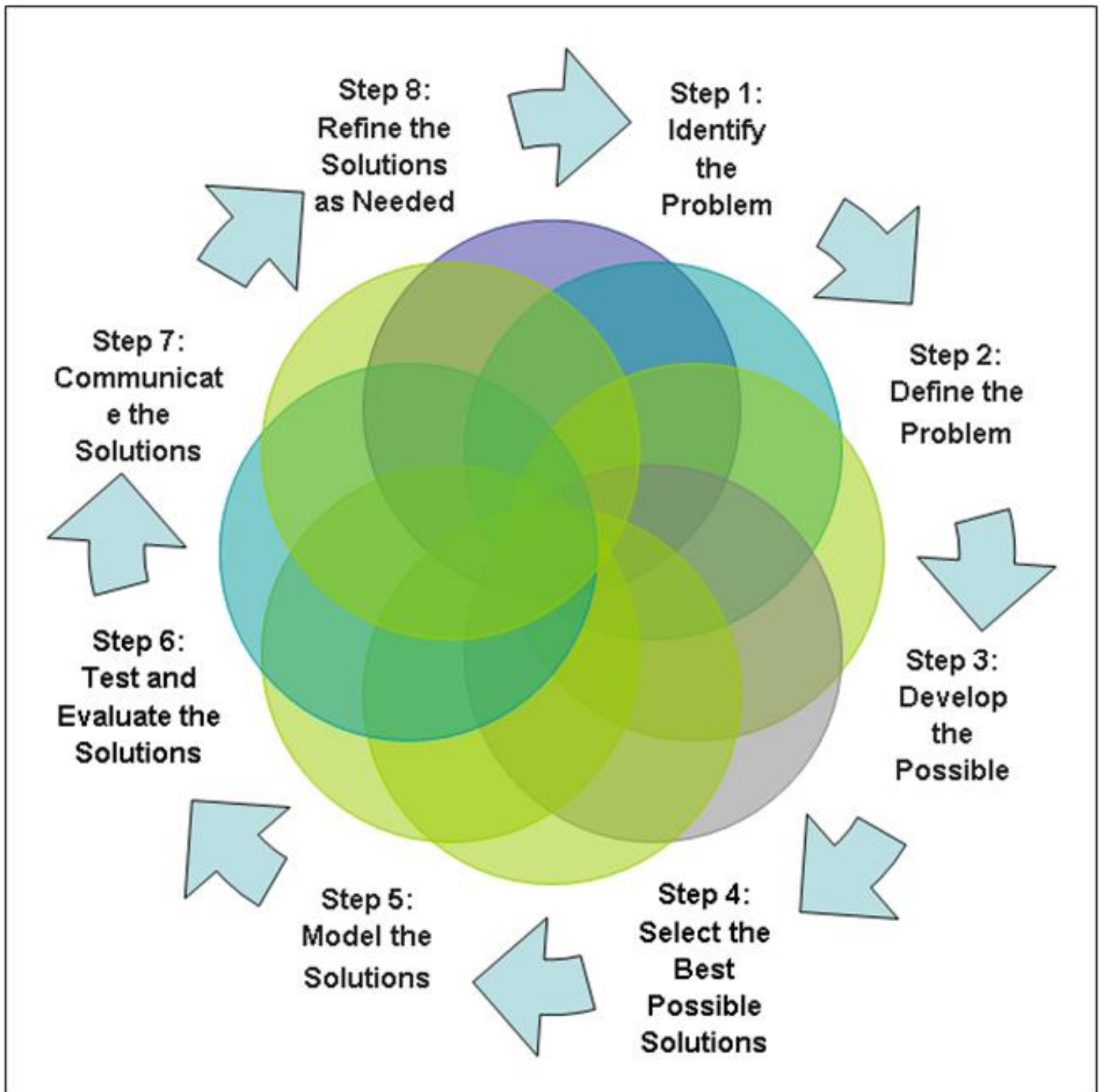
WHY DO THIS PROJECT ?



- *Our design can be used as a debug and auxiliary mounting device for a custom avionics mission system.*
- *Our design will provide a greater capability for the avionic technician through an increased capacity of connection and installation in various areas on platform.*



DESIGN PROCESS



OUR DESIGN

- **Our Design is made of plastic in order to reduce the weight .**
- **We have used combination of spring and neoprene sponge in order to minimize the vibrations .**
- **Our design can be used anywhere and does not requires a lot of assembly parts .**
- **The combination of the spring and sponge makes our design much more vibration insulated as compared to current market designs.**
- **The increased number of ports would help the customers to work more efficiently without any difficulties.**



DESIGN CONCLUSION

- ☐ *A 7 port USB Hub .*
- ☐ *A bracket for vertical as well as horizontal mounting .*
- ☐ *A bracket for stacking three Hubs together.*
- ☐ *Can survive vibration loading.*
- ☐ *Can be used in temperatures varying from 0 - 25°C.*

