Hook – After working on my capstone, I found it very difficult to “think outside the box” because all I dealt with were boxes.

Intro – I absolutely love playing board games but there was always a common problem with them, storage space. With most games, I can never figure out how to get everything back in the box the same way it came out. This is where my idea started, create a better storage solution for people who play board games. I discovered very quickly that I shouldn’t just limit it to board games but should expand it to more areas such as drawers, jewelry boxes, car consoles, and many more. My application Stor3d became the solution I wanted for the storage problems I had.

Point 1 – What does Stor3d do?

* Allows length/width/height to create 3D boxes
  + No learning curve
  + No prior experience needed with 3D modeling
* Allows for celled compartments and even lids

Point 2 – Technology Stack

* Python – 3 Python scripts used to run the application
* PyQt5 – Qt originally made for C++ to help with GUI elements
* QtDesigner – WYSIWYG that helped me design my GUI
* Blender (API) – The component that let me create 3D objects in virtual space
* Powershell – Needed to compile my .ui files from QtDesigner to work with .py files
* OpenGL – Used to translate .obj files into 3D model in my application
* MatterControl – 3D printing software needed to create the G-Code for printers to print

Point 3 – Where I want to go with my project in the future

* Create a web application
  + Allow people to purchase them
  + Allow people to purchase the .STL files
  + Create database for common things stored
* Expand on current cell solution
  + Allow users to designate EXACTLY how they want their storage container laid out
* Allow for different shapes to store things
  + Provide circles, triangles, any other polygon
  + Allow users to still designate compartments in any shape

Recap – Stor3d will help with any storage problem that there may be. NEED MORE!!!!

Closer – So remember, sometimes it is definitely okay to “think inside the box,” as long as you don’t let it limit yourself.