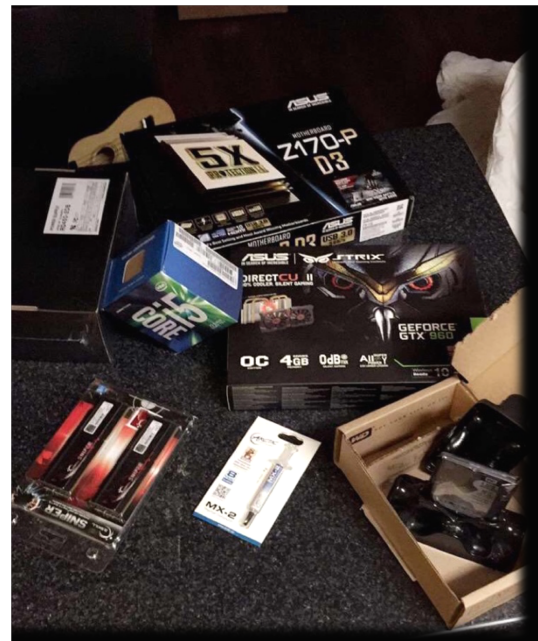# Asus PC

Body:

The main driving force behind building this PC was the ability to continuously improve the system. Having the freedom to add/replace components allows the user to fix and get more familiar with how a computer works. It is also a great way to save money instead of buying a rigid computer from a retail store.

Components:

- Asus Z170-P D3 Mother Board
- Intel Core I5 CPU
- GeForce GTX 960
- 2 Sniper 8 GB RAM
- 1TB HDD
- 400 W power Supply
- Medium Size case
- 3 Cooling fans (1 for CPU

Functionality:

This build was intended for high-end gaming and workstation purposes. Running games at maximum settings with no lag, it can run the newest titles with out any problems, as well as online gaming. The PC will also run heavy engineering programs such as MATLAB and Solid Works with ease. Making it easy to save and work with many files in different programs. The Ram allows the computer to also run multiple windows simultaneously with no loading times. Overall, this PC will run about everything from gaming to working applications.

Information:

1. Gathering Components
   - *Determine the functionality of the computer. Everything must be compatible with each other, and estimate a budget to finance your parts.*

2. Find a processor (CPU)
   - *Otherwise known as "The Brain" of the computer. Find the processor that satisfies your needs.*

3. Mother Board
   - *Make sure that the mother board fits the processor found in step 2. This is the" body" which connects all components together.*

4. RAM (Short term memory)
   - *Or "Random Access Memory" this is the component which runs the active programs. Without RAM the programs will run much slower than they should. This component must match the previous.*

5. Hard Drive (Long term memory)
   - *Memory storage comes in two ways, Hard Disk Drive; which has mechanical components and normally runs slower, stores games and movies. and Solid State Drive; contains no moving parts and usually stores the OS(operating System) for a faster computer.*

6. GPU (Graphics processing unit)
   - used primarily for 3-D applications. It is a single-chip processor that creates lighting effects and transforms objects every time a 3D scene is redrawn. These are mathematically-intensive tasks, which otherwise, would put quite a strain on the CPU.

7. Case/Wiring
   - Picking a case for the PC is important due to the size of the components. With all the wires connecting all components together, wire management is very important; this allows air flow through out the computer components and restricts over heating. Planning out wiring is essential for the computer to run smoothly.

Fully working computer shown in the BIOS settings.