Computer Build Project

You will be building a custom computer for your own needs within a certain budget. You must get the budget approved before putting the parts together in an online cart. This system needs to be complete, working, and every part needs to be new.

[www.newegg.com](http://www.newegg.com) is a great place for research, detail, deals and an overall build. Though I recommend [www.newegg.com](http://www.newegg.com), feel free to use any other site (or a combination of sites) if you choose.

Provide a ‘Screen Shot’ (you can use the Snipping Tool) of your final cart.

The issues below will help as a guide and also need to be typed up in your project write-up.

Budget: 1300

Purpose: Gaming

1. Processor
   1. Intel
   2. speed
      1. 3.4 GHz (3.9GHz Turbo)
      2. DMI speed: 5 GT/s
      3. Multiplier:
   3. Power
      1. Voltage:
      2. Watts: 77
      3. Variable/Dynamic?
   4. Cache
      1. L1
      2. L2: 4 x 256KB
      3. L3: 8MB
   5. 4 cores
   6. 64 Bit
   7. LGA 1155
   8. Manufacturing Technology
      1. 22nm
2. Motherboard
   1. BIOSTAR
   2. Chipset: Intel Z77
   3. On-board components (depending on your build, you may choose to have certain integrated/on-board components. You will have to provide reasoning why you chose either integrated or non-integrated)
   4. Memory
      1. 32GB
      2. 4 240pin slots
      3. Dual channel
      4. Max Speed is 2600, lowest is 1066 (DDR3)
3. Memory
   1. G.SKILL
   2. 16GB (2 x 8GB)
   3. Speed
      1. DDR3 2400
      2. 10-12-12-31
   4. Dual Channel
4. Hard Drive/Storage
   1. 1 TB
   2. 1
   3. Speed
      1. Latency: 12ms
      2. 12ms/12ms
      3. Iops: 24
   4. Interface
      1. SAS
      2. SCSI
      3. SATA: 6.0 Gb/s
      4. IDE
      5. PATA
      6. PCI Ex
   5. Configuration
      1. RAID: N/A
      2. Backup: N/A
      3. Internal: yes
5. Sound
   1. Manufacturer: Realtek
   2. Interface/connections: HDMI/ 6 analog audio ports
   3. Channels: 8
   4. Bits: 16/20/24
6. Video
   1. Manufacturer: MSI
   2. GPU: GeForce GTX 750
      1. Model: N750 TF 1GD5/OC
      2. Core Clock: 1085MHz
      3. Shader Clock: N/A
      4. Processor Cores: 512
   3. Memory
      1. Size (capacity): 1GB
      2. Speed (clock): 5010MHz
      3. Interface: 128-Bit
      4. Type: GDDR5
   4. 3D API: DirectX 11.2/ OpenGL 4.4
   5. Ports: HDMI/ VGA/ DVI
   6. Resolution: 2560x1600
   7. SLI/Cross Fire: no
   8. Power Consumption: 55W
   9. Cooling: 2 Fans
7. Power Supply
   1. Manufacturer: CORSAIR
   2. Watts: 750W
   3. Connectors: 1 x ATX Connector/ 1 x EPS Connector/ 2 x PCI-E Connector/ 4 x 4 Pin Peripheral Connector/ 6 x SATA Connector/ 1 x Floppy Connector
   4. Cooling: 1 Fan
8. Cooling
   1. Fans: 8
   2. Heat Sinks: 1
   3. Thermal Paste: comes with heat sink
   4. Other (liquid, phase change, etc.)
9. Case
   1. Manufacturer: Corsair
   2. Material: Steel structure with molded ABS plastic accent pieces
   3. Design Aesthetics: side window/ white with black/ fan control
   4. Form Factor
      1. Type: ATX mid tower
      2. Size: 20.5 x 8.1 x 20
   5. Capacities
      1. Hard Drives: 6
      2. CD ROMs: 4
      3. Other?
   6. Cooling
      1. Fans
10. Overclocking
    1. Will this system be overclocked?
       1. Why yes
       2. No because no need to.
    2. What are the predicted possibilities
       1. Reviews, ratings
       2. Evidence
       3. Support
11. Internal Components
    1. Cables
    2. Connectors
    3. Adapters
    4. Other?
12. External Components
    1. Audio
    2. Video
    3. Storage
    4. Other?
13. Operating system
    1. Which kind (Windows, Linux, Mac, etc.): windows 8.1
    2. Legal: yes
    3. Pirated: no
    4. Open source
    5. Multi-boot

**Provide a detailed report covering all the above topics/components. You must present the build to the class using one (or more) of the various presentation tools you have learned.**