**Computer Design Project**

You have been asked by a friend to design and build a computer from scratch that fits their specific needs. The friend doesn’t know a lot about computers so has told you what their budget is and what they need from the computer. You really need the money and have plenty of time on your hands so you agree.

The “friends” are as follows:

1. Gamer
* Your PC gaming friend has asked you to build them a high end computer capable of running the most recent PC video games available at the highest resolutions possible. The only issue is that he has a rather limited budget.

**Budget: $1200**

1. Company
* A friend that owns a local business needs a new computer for their receptionist’s desk. The desk is rather small so they need something compact but not slow. They also need a printer that will be able to print lots of black and white copies of documents.

**Budget: $700**

1. Grandmother
* Your friend’s grandmother has asked you to build her a computer that will let her get onto the internet and video chat with her grandson in California. She also wants to be able to print out color photos of her new great grandchild emailed to her.

**Budget: $500**

1. Student
* Your friend is going off to college and needs a computer for their dorm room. They can’t afford to buy a laptop right now but need a computer to write up homework assignments as well as get online. He also has lots of music and movies to bring with him, so make sure he has a big enough hard drive to keep it all in and a nice monitor and speakers to watch it on.

**Budget: $500**

The budget listed with each person must be used to pay for all parts as well as cover the cost of you putting the computer together and testing it. All builds must include all parts necessary for the computer to run. Assume the friend has no other parts that they can currently use with the system.

**Your grade will depend on if the parts you chose are able to be assembled into a fully functional PC that meets all requirements from the client.**

At the conclusion of this assignment you will be required to hand in several items:

* **PARTS LIST:** Must include; Name of part, website, price
* **INVOICE**: Include a breakdown of the costs of parts in the computer as well as the cost for you to assemble it. Bonus points for coming in under budget.
* **ESSAY:** A 5 paragraph essay which explains why you chose the items you chose. Did you choose a specific case for your friend? What about the printer? Explain the choices you made and why you decided the way you did.