September 20, 2013

# Google Glass
# NBA 6120 Assignment

(Rough Draft)

As you all know by now, the Program of Computer Graphics has been fortunate to receive an early version of Google Glass. By now, every person should have had the opportunity to experience the device and to understand how Google Glass works. This unique "wearable computer" introduces a new method of interaction with the vast resources of the global Internet and offers enormous new opportunities for novel and useful computer applications.

The current version of Google Glass is a marvel of engineering prowess and includes, in a relatively unobtrusive way, a five-megapixel camera with capability for capturing video, a small projection display, a conduction transducer which enables voice input, 16 gigabytes of computer memory and WiFi and Bluetooth connectivity. In addition, this hands-free wearable device allows some gestural input, is easy to use, and lightweight due to the miniaturization and clever design of many of its components. The detailed documentation of Google Glass in its current form is available on the website.

We do not know what Google eventually wants to do with this device and thus this first available version should be considered as an experimental piece of equipment and we are all parts of this experiment.

The problem for this class will be to design an application which can take advantage of potential technological advances that this type of wearable computing can offer. You are to define this "app" as well as the potential business model necessary to make this a viable, entrepreneurial venture. For this exercise, assume that there are components which exist in the first experimental version which can be modified, improved or even added to the device, so you need not be restricted to its current operational form.

More specific information will follow, but for the first stage of this project one must define the application in detail. This must be completed early next week. We plan on meeting with each group by the end of next week.

One portion of this assignment will be to have a two-three page document describing potential difficulties with using this mode of interaction with the "cloud." This should include the appropriate arguments with respect to privacy, security and the First Amendment provisions for "free speech." One also must consider the vulnerabilities of wireless data transmission or Federal regulations

related to the privacy or availability of information stored in the cloud. Both Google or you could become the target of lawsuits!

Another portion of the assignment will be to suggest the technological improvements, changes in the way data is being transmitted or encrypted, where information is stored, security measures or modifications or additions to the technology to suit your application. These must be defined in detail. At least two pages of technical descriptions must be included in the final report. This should include all innovative changes as well as the description of the data flow from input to ultimate delivery to the individual user.

The final report and presentation will include a minimum of six and a maximum of eight pages to describe all of the previous. I will also require at least six "slides" for presentation in class.

It is my intention to meet with each group twice prior to the end of the class. I also intend to set one night during the last week prior to Fall Break so that we can have a two-and-a-half hour session with mandatory attendance so that all projects can be presented to the class.

I have divided the class into 13 groups and at least one technical person, one typical Johnson School MBA student is on each team, the teams are identified on the website. Please start the work this weekend. I hope you find this real project to be exciting.

Uncle Don