WEEK 1

**Monday 08/06/2015**

It was at around 9:00am when all intakes or applicants (students) gathered in the operation room ready for the program of the day.The day was dedicated to the orientation exercise.

The orientation session began at exactly 20 minutes past 9 as soon as all the organization’s (TopBrainz) intakes for the industrial training program 2015 were announced present after matching the attendances.  
The session began with an opening prayer from one of the organization’s coordinators.  
Next were speeches from the different organization’s officials that were as follows;  
We had the first speech from Mr. Kawalya Paul, who in the first place introduced the entire team of the organization that includes the organization’s different administrators and the Chief Executive Officer(CEO) who was also present as well as himself through names, position and duty/responsibility in the organization, work experience and many other things about them, then he gave a chance to each one of us to introduce ourselves through names, course we are doing, university we come from, our expectations from the organization and our objective(s) for the essence/purpose of knowing one another. He went ahead and introduced the organization in terms of organization’s origin, name, location, organization sites (email and website), mission, vision, goals and objectives of the organization.

The next speech came from Mr.Muriuki Steven. Mr.Muriuki elaborated on what Mr.Kawalya had said. He asked each one of us to once again to introduce ourselves to our neighbors in order to continuously get to know each other and questioned us why we chose their organization (TopBrainz) for this undergoing industrial training exercise and why we are doing the courses we are doing. He then emphasized time management as key to utilizing our stay at TopBrainz profitably, he furthermore emphasized team work during the course of our industrial training so as to gain knowledge quickly.

The last speech came direct from the organization’s CEO Rev.Dr.Ben Tumuhirwe who began with a powerful prayer and dedicating the industrial training process as well as our stay at the organization in the hand of the almighty God to be a fruitful one. He began by reviewing our passions or interests in the various areas of computing that we had pronounced previously. He went ahead to ask each one of us individually what they intend to innovate in the world today most especially in our country Uganda and different individuals gave their views respectively. He went ahead and shared with us the experience he had in terms of work as well as academics and also showed us the different challenges he has gone through until where he is now.  
After all that, he listed the different guidelines, steps and tips on how to successfully conduct the various stages during our industrial training process and continuously emphasized team work because it is the only way we can easily learn many things in a short period of time since we are different with talents, ideas and way of understanding things, he went on further and said, “You might not know something but when your neighbor knows it better so team work is the only way through”. His speech was more based on examples from the bible scriptures. He further encouraged us to have faith in what we always do so as to do it perfectly, he emphasized this through examples that showed faith in someone such as when one boards a bodaboda to anywhere, they never first ask for the driving license from the bodaboda rider instead they just sit and then have a ride. The CEO clarified upon the different reactions that were passed on from the audience. He concluded his speech with a closing prayer and wishing everyone a safe stay and success during the course of the training.

Following the CEO’s speech, individuals were allowed to make a choice of three days schedule of the week in which they are convenient with to carry out their training program. Individuals were supposed to choose either Monday-Wednesday-Friday schedule or Tuesday-Thursday-Saturday schedule.

The orientation meeting ended at around 2:00pm after the allocations were made and agreed upon, then Interactions began between fellow members and the organization officials hence commencement of the training program/course.

**Tuesday 09th/06/2015**

The program of the day began by selecting the different teams with which we are to work with.

Each team was expected to have the following requirements:

* **Team members**
  + Luganga Albert
  + Bhargav Soni Naresh
  + Kasumba George William
  + Korir K. Victor

A group of varied substance

* **Team leader:**Luganga Albert
* **Team name:**corevelvet
* **Team email:**corevelvet@gmail.com
* **Team Blog:**corevelvet.wordpress.com
* **Team repository:**github/corevelvet

This practice was conducted and supervised by Mr.Kawalya. Immediately we began the program of the day, Mr.Muriuki introduced a new theme to begin with, that is “IT support solutions”. Under this theme, introduced were a variety of computer components and their functionality as well as their effect to both the computer itself and it’s users;

Hardware components such as:

1. Monitors
2. System unit that includes CPU, power supply, motherboard, RAM chips
3. Hard drives and their types (IDE and SATA hard disk)
4. CMOS(metal oxide semiconductor) battery
5. Different peripherals like mice and printers

Software components such as

1. Different programs
2. Different Operating Systems

Instruction was given in the different hardware maintenance skills and under this, taught were various measures for maintaining the efficiency and proper operation of the computer through cleaning it’s components as well as the different techniques and suitable tools that are used to clean the different computer parts.

The different tools used are as below:

* Blower: used to drive dust out of the fan, and CPU at large
* Universal foam detergent: Used to clean the monitor and computer’s exterior
* A brush: Used to clean in corners and hidden areas(3 inches wide)
* A small towel: Used along with the universal foam detergent to clean the surfaces of the system unit, monitor, printers, keyboards, and the like

Also instruction was given in;

deleting temporary files in a computer system; such files include offline web pages, temporary internet files, temporary window files, recycle bin files, duplicate files, setup log files and others.

Also taught was a lot about Disk Cleanup process, why it is necessary, when and how to use it; Disk analysis and disk fragmentation which contribute to the efficient operation of the computer; How to backup information on a computer and different kinds of backups that are available include;

## *1.Full Backup*

## Full backup is a method of backup where all the files and folders selected for the backup will be backed up.  When subsequent backups are run, the entire list of files and will be backed up again. The advantage of this backup is restores are fast and easy as the complete list of files are stored each time. The disadvantage is that each backup run is time consuming as the entire list of files is copied again.  Also, full backups take up a lot more storage space when compared to incremental or differential backups

*2.Incremental backup*

Incremental backup is a backup of all changes made since the **last backup**. With incremental backups, one full backup is done first and subsequent backup runs are just the changes made since the **last backup**. The result is a much faster backup then a full backup for each backup run. Storage space used is much less than a full backup and less then with differential backups. Restores are slower than with a full backup and a differential backup.

## *3.Differential backup*

Differential backup is a backup of all changes made since the **last full backup**. With differential backups, one full backup is done first and subsequent backup runs are the changes made since the **last full backup**. The result is a much faster backup then a full backup for each backup run. Storage space used is much less than a full backup but more then with Incremental backups. Restores are slower than with a full backup but usually faster then with Incremental backups

Computer security in particular passwords and more specifically software that helps to break passwords in case a client forgets his password and he/she needs to retrieve his information. The software that breaks passwords is known as password cracker can help one to break any password on any machine (computer).

# Thursday: 11/06/15

# The day begun with a lecture from an expert in graphic designing on the importance of designing in software engineering. Following, Mr.Kawalya introduced Web application development. Under this introduced were the different software that we would use to design the front-end and back-end of web applications which included distinct software in each case and how they are installed within a given operating system, that is;

Front-end:

* HTML5
* CSS3
* JavaScript
* JQuery

Back-end:

* Ruby
* PHP5

In case of databases the available software includes MySQL,SQLITE, and POSTGRESQL

Also introduced were variety of features in the HTML5 framework and CSS3, from which taught was how to design a layout of any form as well as the three basic modules used in CSS3 that is to say identifiers, classes and tags that help in referencing during the design process.

During the layout designing, further elaboration was given on a lot more distinct attributes such as coloring either text or background, font style, specifying headings, paragraphing, and many others.