**Assignment: Human Computer Interaction** 

Total: 100 Mark Code: HCI21B1 Examiner: G. Toko Due date: 13/10/2017



# **Assignment: Human Computer Interaction**

This assignment is all about exploration, investigation, interaction, user experience and problem solving.

#### **Narrative**

In order to complete this assignment, you need to identify two important artefacts in your immediate home or work environment, one must be a software system or app and the other must be a hardware systems, in the interest of academic persuasion and intellectual reward, you must avoid any trivial object or artefact, refrain from using the same artefacts as your class mate. Please apply the following selection criteria when identifying them:

## Hardware systems:

- Must be an ICT hardware systems and controlled by a known operating systems.
- Must be publicly accessible and visible.
- Must have been in production for at least 10 years.
- Must be robust enough to function for at least 12 hours a day.
- Must be or can be movable.
- Must not be an ATM machine.
- You are able to identify at least five usability problems, which are solely based on poor systems design, poor user experience knowledge and interaction.

# Software systems:

- Must be an application software system with some form of popularity.
- Can be an open source or proprietary system.
- Can run on any compatible hardware.
- Is publicly accessible and known for at least 3 years.
- The specs of the application is freely available online.
- You are able to identify at least five interactivity problems.
- Must not be a Microsoft and Mac software system.
- All the issues or problems are solely based on user experience, interaction, design and usability.

#### Note:

• Regardless on your approach or options, you must be able to advice on the problem, provide solution to the problem, or address the problem as per the above conditions/criteria.

- Images of your hardware and screen-print of your software and hardware systems must be presented and indicating the usability problem you are referring to.
- You must be prepared to go the extra mile to defend your opinion.
- The examiner must be able to access them (hardware and software) for evaluation

#### What to do:

In an Ms Word document, write an essay of about 15 pages, font size: 12-font style: Times new roman, single spacing. The size of all picture must be 10x6 cm (and no more than 6 pictures)

Start with an executive summary, which provides an overview of your identified systems and the identified problem thereof. That must include the background information which might be needed to fully identify, comprehend and recognise the systems, do not assume that everyone knows it. Include at least one picture or screen shot of each systems.

Secondly, describe both issues you encountered in detail using sketches, diagram or any other form of visual aid if that helps. In this section, and to assist you, please use the following header and descriptions:

- 1. What is the issue?
- 2. How does it came about?
- 3. How does it links to poor design paradigm?
- 4. Who are the user? Moreover, how did you identify them?
- 5. How the identified problem does affect user?
- 6. What are the type of metaphors used?
- 7. What are the form of interactions if any?
- 8. In that particular case, what is the conceptual model? Moreover, how did you identify it?
- 9. What is the level of cognition needed in order to control these systems?
- 10. What level of social impact if any does it have?
- 11. Are you detecting any form of emotion when interacting with the systems?
- 12. Does that systems, generate any form of annoyance, which may lead to any form of persuasive technology or behavioural change?
- 13. Can you describe in detail the type of interface?

Thirdly, write a paragraph describing how you think all the issues you identified above can be solved/addressed.

Fourthly, write a conclusion.

Lastly, include at least 15 academic references, based on renowned HCI researchers, only books and peer-reviewed articles are acceptable, also use the Harvard referencing technique.

### Where to submit:

All assignments must be submitted online, the lecturer will provide detail in due course.

# **Plagiarism**

Please note that NO plagiarised work will be tolerated, it is your responsibility to verify any form of similarity and making correction before submitting, as the institution does not tolerate form of dishonesty.