

**BSc (Hons) in Information Technology**

# IT3060 – Human Computer Interaction Year III, Semester II, 2020

**Tutorial Cover Sheet**

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| **Tutorial No** | Tote 2 |
| **Batch No** | WE\_IT\_Y3S2\_G2.1 |
| **Group No** | G2.1 |



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1. You are assigned to design an Online Banking Application to Sampath Bank. Explain what the main activities are if you are planning to use the Design Thinking model.

In creating a online banking application for the Sampath Bank, there are 5 major phases we need to undergo in the process, those steps respectively are;

* Empathise
* Define
* Ideate
* Prototype
* Testing

**Empathise**

Empathy allows design thinkers to set aside their own assumptions about the world in order to gain insight into users and their needs. Depending on time constraints, a substantial amount of information is gathered at this stage to use during the next stage. Empathizing can be done under several instances;

* Consulting experts to find out more about the area of concern through observing
* Empathizing with people to understand their experiences and motivations

**Define**

Defining means putting together the information that created and gathered during the Empathize stage. Here analyzing the observations and synthesize them in order to define the core problems that identified up to this point. Here when we are designing the online banking site we face numerous challenges, in this stage we should clearly identify the challenges, find the root cause for the problems and give quick but meaningful solutions to those identified problems.

**Ideate**

In here, the designers are ready to start generating the ideas process. Here the team members can start to "think outside the box" to identify new solutions to the problem statement, which is created, Can start to look for alternative ways of viewing the problem. In this ideating process, we can follow many techniques such as:

* Brainstorm
* Brain-write
* Worst Possible Idea
* SCAMPER

**Prototype**

The design team will now produce several inexpensive, scaled down versions of the product or specific features found within the product. These prototypes may be shared and tested within; within the team itself, in other departments , a small group of people outside the design team. This phase is particularly an experimental phase; the aim is to identify the best possible solution for each of the problems identified during the first three stages. The solutions are implemented within the prototypes, and, one by one, .They are investigated and accepted, either improved and re-examined, or rejected based on the users’ experiences. In addition, by the end of this phase the design team will have a better idea of

• Constraints inherent to the product and the problems that are present

• Clearer view of how real users would behave, think, and feel when interacting with the product

**Testing**

This is the final stage of the 5 stage-model, but in an iterative process, • The results generated during the testing phase are often used to redefine one or more problems and inform the understanding of the users, the conditions of use, how people think, behave, and feel, and to empathize.

1. Briefly explain the non-linear nature of the Design Thinking model.

This five-phase design thinking model is not always sequential, it may vary according to the user needs;

They do not have to follow any specific order and they can often occur in parallel and be repeated iteratively. The five-stage Design Thinking model is that it systematizes and identifies the 5 stages/modes you would expect to carry out in a design project and in any innovative problem-solving project. Every project will involve activities specific to the product under development, but the central idea behind each stage remains the same.

1. What is Participatory Design? Explain the benefits and limitations of Participatory Design in the design process.

Participatory design is a process that involves developers, business representatives, and users working together to design a solution.

Benefits of Participatory Design

* A forum for identifying issues and assigning them to people for resolution.
* A forum to specify Design Goals that can be used for current and future products or versions.
* Enables a team to rapidly design, evaluate and iterate design approaches.

Limitations of Participatory Design

* Close collaboration between users and developers
* Involvement of users
* Not all systems are workplace-based

1. Why Behavioral Science is necessary for Design Thinking?

Behavioral science is the study of human behaviors dominantly spanning the disciplines of behavioral economics, cognitive neuroscience, sociology, and anthropology. This is so important in design thinking because;

* Our behaviors are the manifestation of the conscious and non-conscious decisions we make
* Human decision-making and thus the emotion appraisals are a focal point of research that uses behavioral sciences.

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