

SYSTEM ANALYSIS AND DESIGN

SECP1013-08
TECHNOLOGY & INFORMATION
SYSTEM



UTM
UNIVERSITI TEKNOLOGI MALAYSIA



DESIGN THINKING

SYSTEM ANALYSIS & DESIGN

SYSTEM ANALYSTS & DESIGNER

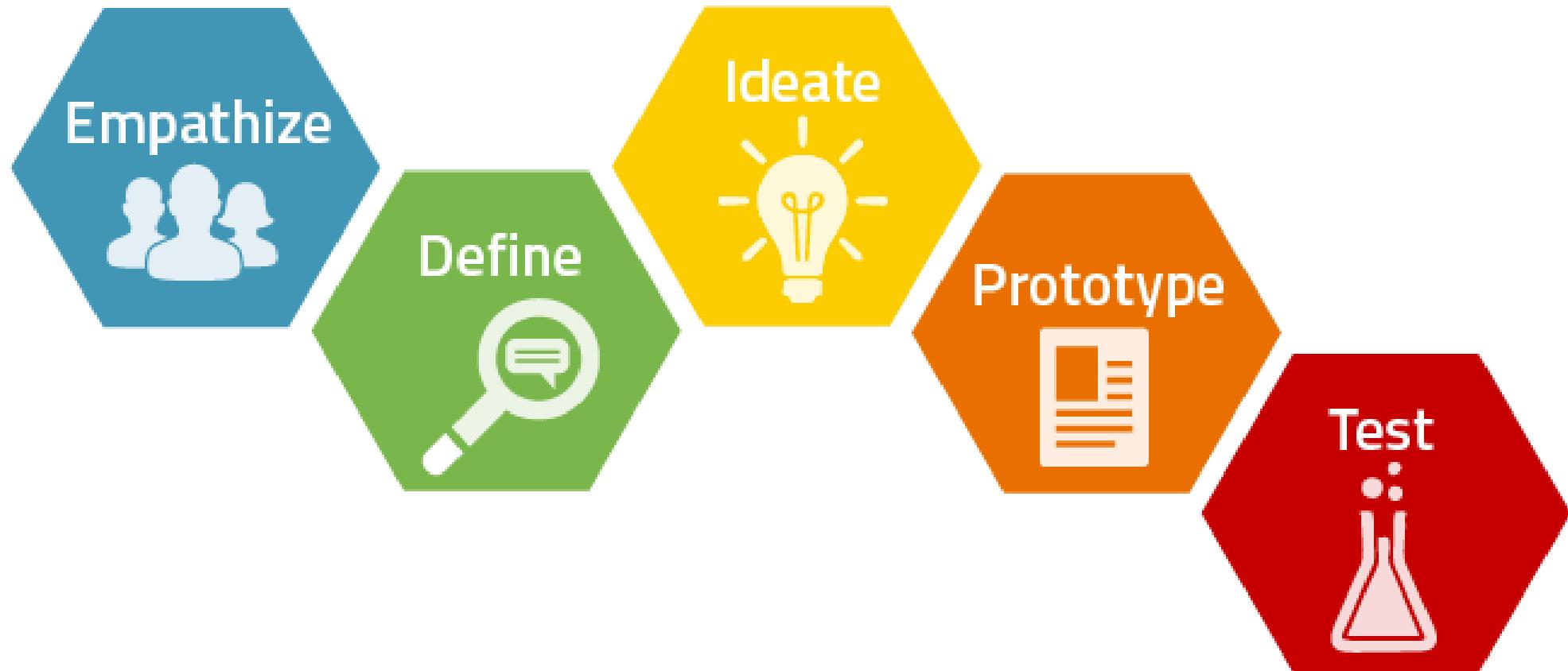
- **AZ MUKHLIS ISKANDAR BIN AZLI**
- **MUHAMMAD ISKANDAR ZULQARNAIN BIN MOHD ISHAK**
- **NUR NABILAH BINTIYUSMAN**

WHAT IS DESIGN THINKING ?

- Design Thinking is a **thinking methodology** by design that uses a **step-by-step approach** into solving problems in a user-centric way. It is especially efficient in order to get to the root of **complex problems** that are unclear and unidentified.



DESIGN THINKING



PROBLEM STATEMENT & SOLUTION

PROBLEM

What system can be created to help the seller to calculate more accurate and faster?

SOLUTION

Creating a C++ Programming Language - based program to perform the calculations

TEAM WORK

Distributing parts of task to be completed

PHASE 1 : EMPATHISE

Empathy is the involvement of **considerate** another person's thoughts, moods, and condition **from his or her point of view**, rather than from one's own. In Design Thinking, we interviewed the person to gain information.



PHASE 1 : EMPATHISE

Name

Puan Rohana

Age

54 years old

Background

A business woman who own a shop and managing all the finance and affairs of the works



PHASE 2 : DEFINE

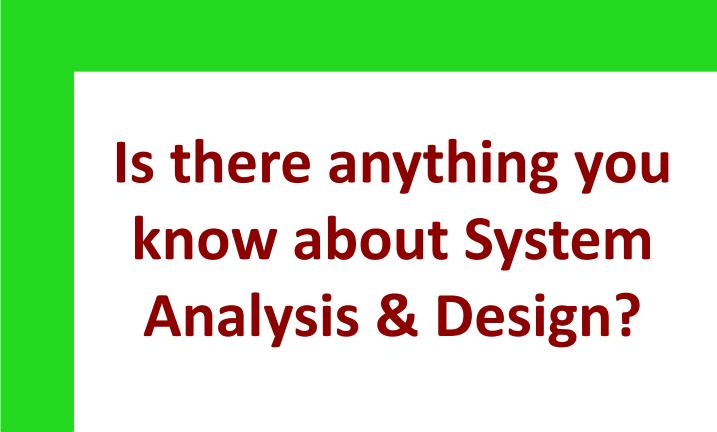
We analyze in detail, interpret the outline info from empathize step and then define clients need. In this stage, we force all the information we have gathered in the first stage and organizes, interprets and makes sense of it.



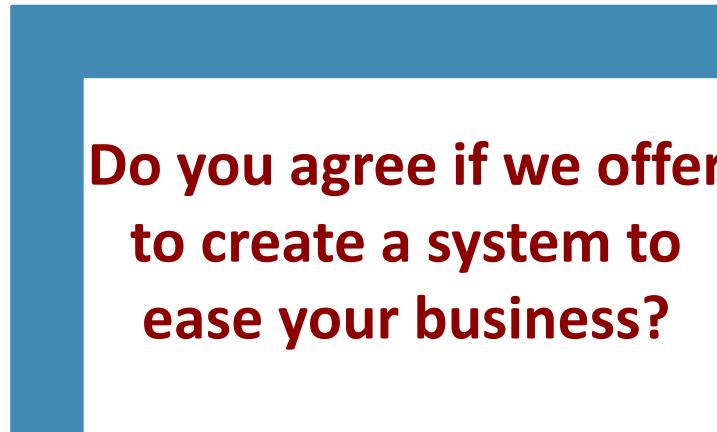
PHASE 2 : DEFINE



**What difficulties that
you ever experienced?**



**Is there anything you
know about System
Analysis & Design?**



**Do you agree if we offer
to create a system to
ease your business?**

PHASE 3 : IDEATE

- Imagine you are a research **ponder**, to create a vision creatively and brainstorming. Ideate refer to **group discussions** to come up with ideas and **ways to solve problems**.



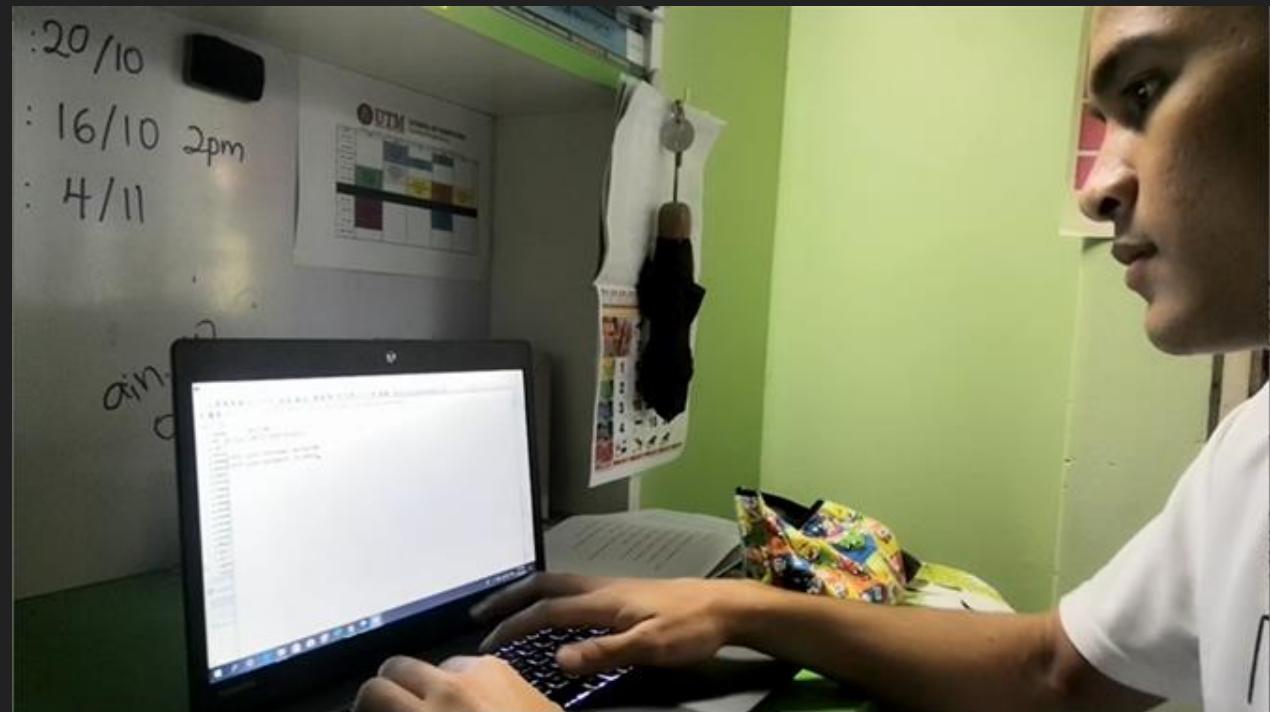
PHASE 4 : PROTOTYPE

Prototypes are built so that designers **can think about their solutions** in a different way, as well as **to fail quickly** and cheaply exploring multiple iterations of designs, so that **less time and money** is invested in an idea that turns out to be **a bad one**.



PHASE 5 : TEST

The process of testing your prototype on real users. During the phase of testing, you will see how your target users interact with your prototype and gather valuable feedback.



Assessments

Phase	Assessments
Empathise	We managed to plan an interview with our client and analyse what is her problem.
Define	Once the problem was inspected, we come out with solutions and ideas to solve it.
Ideate	Creative thoughts lead to a better starter on creating prototype and we learn how the prototype works.
Prototype	Finalizing the project and do the act of finding end user to test the prototype.
Test	

Overall, at the end of project we perceived that design thinking process gave us the biggest influence on the way we document a project from beginning until the end. This is due to a systematic way on defining the problems until the problems were solved.