SOFTWARE ENGINEERING

Is the process of adopting a well defined approach for industrial acquisition,so that the software can be user friendly,very efficient,easy to debug and easy to maintain .

SOFTWARE DEVELOPING LIFECYCLE

SDLC is the general format or frame work that describes the steps to be taken by a system analyst in order to develop a very efficient software.

The steps consist of the following

1. System planning
2. System analysis
3. System modelling and design
4. System Implementation
5. System testing and deployment
6. system Documentation and user manual
7. System Maintenance

SYSTEM PLANNING

Is the process of understanding the deficiencies in a system in order to know whether the system can be improved on, or whether an entirely new system should be adopted or developed. Identifying the deficiencies in a system can be done by interviewing some users of the system as well as consulting with the support personnel of the system. This step provides an insight on the strength and weaknesses of the system

SYSTEM ANALYSIS

Here a system analyst performs a more detailed fact finding technique about the existing system. With respect to input, output,processes, performance, economy, control and the users of the system .

SYSTEM MODELLING AND DESIGN

Here, the findings documents are done into a design plan with graphical representation . The

new system can be models using any or both of the following two popular techniques

S ---- Structural

S ----- System

A ----- Analysis

D ----- Design

M ----- Methodology

SSADM makes use of a graphical tool called Entity Relationship Diagram to represent all the entities that exist in a system. As well as the relationship between those entities. Also SSADM makes use of another graphical tool called Data Flow Diagram . To show a general overview of how data is processed, stored and communicated within a system .

OOADM- makes use of a graphical tool called UML (Unified Modelling Language) to represent all the entities which are called objects that exists in a system,as well as their relationships.

OOADM-

This uses Real world objects to model a system . A Real world objects can be a person,place ,thing or an event.

ATTRIBUTES:

The attributes of an object refers to the characteristics of interest about the object. The name of the object,the size of the object,the length of the object,the age of the object,the colour of the object,the gender of the object,

METHOD- Method refers to the task performed by an object or on an object based on the attributes the object posses . Example: Consider an object called student,It can posses the following attribute;Name, Level,Reg Number,CGPA, State of Origin,Gender, Department.

The methods for the student objects can include the following Change name(), Change department (), Register Course(), take exam(),Check result()