# MICHAEL ORINA SCII/00825/2019 INFORMATION TECHNOLOGY OBJECT ORIENTED ANALYSIS AND DESIGN

# **DISCUSS STRUCTURED SYSTEM ANALYSIS AND DESIGN**

### **HISTORY**

It was developed in early 1980's by Learmonth Burschett Management Systems and the Central Computer Telecommunications Agency in the United Kingdom.

It provided a Systematic approach and was adopted as a Standard in all departments in the British Government.

#### INTRODUCTION

Structured systems analysis and design methodology (SSADM) is a set of standards for systems analysis and application design. It uses a formal methodical approach to the analysis and design of information systems.

SSADM has certain underlying principles and consists of six stages which are broken down into a number of steps and tasks. Within this framework, a number of structured techniques are used and documents produced.

The SSADM is an open methodology based on the waterfall model. It has been used by many commercial businesses, consultants, educational establishments and CASE tool developers.

### **FEATURES OF SSDAM**

One of the main features of SSADM is the intensive user involvement in the requirements analysis stage. The users are made to sign off each stage as they are completed assuring that requirements are met.

The users are provided with clear, easily understandable documentation consisting of various diagrammatic representations of the system. SSADM breaks up a development project into stages, modules, steps and tasks.

The first and foremost model developed in SSADM is the data model. It is a part of requirements gathering and consists of well defined stages, steps and products.

## **TECHNIQUES USED IN SSADM**

- **Logical Data Modeling:** This involves the process of identifying, modeling and documenting data as a part of system requirements gathering. The data are classified further into entities and relationships.
- **Data Flow Modeling:** This involves tracking the data flow in an information system. It clearly analyzes the processes, data stores, external entities and data movement.
- **Entity Behavior Modeling:** This involves identifying and documenting the events influencing each entity and the sequence in which these events happen.

### IMPORTANT CHARACTERISTICS OF SSADM

- Dividing a project into small modules with well defined objectives
- Useful during requirements specification and system design stage
- Diagrammatic representation and other useful modeling techniques
- Simple and easily understood by clients and developers
- Performing activities in a sequence

# THE STAGES OF SSADM INCLUDE

- Determining feasibility
- Investigating the current environment
- Determining business systems options
- Defining requirements
- Determining technical system options
- Creating the logical design
- Creating the physical design

### **CONCLUSION**

Each of these stages applies certain techniques and a sequence of analysis. They include conventions and procedures for recording and interpreting the information with the help of diagrams and text.