



SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE: _____
 SYSTEM PROTOTYPING AND PRESENTATION I

CODE NO.: _____ **SEMESTER:** _____
 EDP307-6 FIVE

PROGRAM: _____
 COMPUTER PROGRAMMER ANALYST

AUTHOR: _____
 WILLEM DEBRUYNE

DATE: _____
 SEPTEMBER, 1994

PREVIOUS OUTLINE DATED: _____
 SEPTEMBER, 1993

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APPROVED: _____ **DATE** _____
 DEAN, SCHOOL OF BUSINESS &
 HOSPITALITY

SYSTEM PROTOTYPING & PRESENT. I

EDP307

COURSE NAME

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REQUIRED STUDENT RESOURCES:

Text: Working with Exelerator, by Allen Schmidt

SPECIAL NOTES:

Assignments received after the due date are subject to a grade of zero unless prior permission is granted by the instructor.

Students are expected to attend classes regularly, participate in class discussion, conduct themselves and treat their peers and instructors in a professional business-like manner throughout any school dealings.

EVALUATION:

Test #1	40%
Presentation 1	10%
Presentation 2	10%
Prototyping Assignment	10%
Exceleator Assignment 1	10%
Exceleator Assignment 2	10%
Participation	10%
	<hr/>
	100%

PHILOSOPHY/GOALS:

It has been stated that two of the most severe problems facing Information Systems today is the increasing backlog of service request and decline in user confidence. The reasons for these problems stem from the traditional methodologies of developing systems which are not meeting these needs. The students have studied in detail the traditional development life cycle of business information systems. They are, therefore, prepared to study this new methodology of prototyping and its apparent advantages of pleasing users, reducing development costs, decreasing communication problems, and so on. The industry is swinging towards prototyping and using tools such as Fourth Generation Languages which prepares the student to meet these new challenges.

The student will use the CASE tool Exelerator to assist them in planning, analysis, design, documentation, and construction of a computer based information system in accordance to one or more software development methodologies.

MODULE 1: (REVIEW SYSTEMS ANALYSIS AND DESIGN)

Objectives:

- define the role of the systems analyst
- describe the system development life cycle
- explain the systems development methodologies
- explain the steps in determining feasibility
- create a process model
- define the project dictionary
- perform fact-finding techniques (interviews, questionnaires, observation)
- view and understand

MODULE 2: (PROTOTYPING)

Objectives:

- define prototyping
- compare prototyping to T.L.C.M.
- list the advantages vs disadvantages of prototyping vs T.L.C.M.
- use prototyping to design and develop a computer based system

MODULE 3: (PRESENTATION TOPICS)

You may choose and research any of the topics found below:

- 1) Assuming the role of the Systems Analyst
- 2) Determining feasibility and managing analysis and design activities
- 3) Sampling and investigating hard data
- 4) Interviewing and questionnaires
- 5) Data flow diagrams

- 6) Data dictionary
- 7) Structured decision systems
- 8) Preparing the systems proposal
- 9) Designing effective output
- 10) Designing effective input
- 11) Designing the file or data base
- 12) Design the user interface
- 13) Successfully implementing the information system
- 14) Other

MODULE 4: (EXCELERATOR)

Objectives:

- understanding Excelerator terminology
- learn how to log onto Excelerator
- know how to change Excelerator project defaults
- understanding effective use of the graphics profile
- know how to use the action keypad options
- learn how to print graphics drawings
- know how to transfer printed output to a file
- understand how to set print options
- know how to save project work using the Backup feature
- know how to transfer backup files into the project
- understand how to use the Export feature for creating project backup
- understand how to Import project backup
- know how to exit Excelerator and the Exit options

- learn how to move objects, connections, text and other drawing components
- know how to copy objects
- know how to delete objects and other graph components
- understand the screen refresh option
- learn how to center the drawing
- know how to add a line or a block of text to the drawing
- learn how to add lines and boxes to the drawing
- understand how to disconnect an object from its XLDictionary ID
- know how to create and delete a drawing title
- learn how to create data flow diagrams
- understand the various methods of connecting objects on the data flow diagram
- know how to create labels and data dictionary descriptions for the graph components
- understand how to link data flow diagram components to detailed drawings and descriptions
- learn how to create child data flow diagrams for processes
- know how to use the Analysis feature to validate data flow diagram syntax and level balancing
- understand how to produce summary reports for data flow diagrams
- know how to create a presentation graph
- learn how to describe objects on the graph
- understand how to link an object to the XLDictionary
- know how to link a process to user, engineering or other management documentation
- understand how to create an explosion path for presentation graph objects

- know how to create a screen flow diagram using Excelerator
- learn how to create data dictionary record structures and elements from description screens
- know how to use the XLDictionary feature for creating record structures and elements
- understand how to create a record description and record type codes
- know what to include in the element description areas
- understand the meaning and use of edit rules
- learn how to print data dictionary entries
- understand how to delete, copy, and rename data dictionary entries
- know how to list and inspect the data dictionary entities
- learn how to use Excelerator for data modeling
- understand the basic differences between the Entity-Relationship and Data Model Diagrams