

JAVA INSTITUTE FOR ADVANCED TECHNOLOGY

Department of Examinations



COURSE(S) – (LEADING TO)	PROFESSIONAL DIPLOMA IN SOFTWARE ENGINEERING
UNIT NAME	SOFTWARE APPLICATION DEVELOPMENT
UNIT ID	H7E1 04
ASSIGNMENT ID	H7E1 04/AS/02
DESCRIPTION	STUDENTS ARE REQUIRED TO COMPLETE AN INDIVIDUAL ASSIGNMENT TO DEVELOP A SOFTWARE SOLUTION BY ANALYSING A SET OF GIVEN REQUIREMENTS CONNECTING WITH A DATABASE SYSTEM
DURATION	2 WEEKS
WORD COUNT	-
SUBMISSION VIA	ONLINE (STUDENT PORTAL)
DOCUMENT FORMAT	MICROSOFT WORD OFFICE DOCUMENT

GUIDE LINES FOR CANDIDATES

- Students are expected to use reference books, the Internet, journals and other similar sources in order to accomplish the task specified above.
- Students are expected to refrain from repeating any content in their research document.
- Students will be penalised for any plagiarism.

NAME	: (BLOCK CAPITALS)
ADMISSION NO	:
NIC NO	:

1. Students should be able to design an Entity Relationship Diagram for a given set of requirements.

Sample set of requirements

"Adyapana" is an institute for students who have completed their Advanced Levels in the Science stream. At present, more than 2500 students study at the institute.

A large number of processes are included in the system utilised at the institute.

01. Student Registration.
02. Subject Registration.
03. Teacher Enrolment.
04. Student Payment.
05. Class Registration.
06. Student and Teacher enrolment for subject
07. Student attendance.

The student attendance of each class can be viewed while due reports of all classes are also viewable.

This process is handled manually at present and has been challenging to the institute's management. They have suggested to move on to a computerised system in order to manage these processes accurately.

Draw ER diagram.

Draw business process diagram.

Draw use case diagram.

Design wireframes and reports.

Code the following:

Student add,update,delete,search
Teacher add,update,delete,search
Subject add,update,delete,search
Class Registration and Student Enrolment
Search Due List by class and student
Payment add,update,search
Generate invoices for payments

Database Scheme

Student (Sno, Name, Address,dob)

Teacher(Tno, Name, Address,subjects)

Subject(Subno, Description, Price)

Class(ClassNo,subNo,Tno,timeslot)

Invoice (Sno, Tno, Subno,month, Value)

Assignment Submission Guidelines for Students

Students are advised to strictly follow the guidelines specified herein when formulating and submitting research assignments

Important Information for Students

1. The assignment should be submitted only as a soft copy in a Microsoft Word format on or before the specified assignment due date.
2. The soft copy of the assignment should be uploaded to the student portal using the SCN number.
3. The submission date provided for all assignments are the final dates on which you can hand upload the assignments. Please note that late submissions are not allowed.
4. Plagiarism is treated as a serious offence and the work you produce should be individual and original. However, note that students will have to work in groups in certain scenarios.
5. All sources of information in any assignment must be referenced using the “Harvard referencing” system, where a reference listing should be included at the end of the assignment.
6. Please contact your branch on assignments, re-submission, and related procedures.
7. Students are expected to maintain a backup of all assignments. The Java Institute for Advanced Technology retains all the rights to re-call soft copies of any assignment at any time during the course.
8. Students should use the attached assignment coversheet and declaration of authentication form to the assignment
9. Students are expected to provide the following information in their assignment coversheet of the softcopy in the CD:
 - Student name
 - SQA ID number
 - NIC No
 - Subject name
 - Subject code
 - Branch.
10. Assignment Report Rules
 - Paper Size:A4
 - Word Count:1500 words
 - Line Spacing:1.5
 - Printing Margin:1 inch on LHS and RHS
 - Binding Margin:½ inch
 - Header and Footer:1 inch

- Printing: Single-sided
- Basic Font Size:12pt
- Heading:16pt
- Sub-headings:14pt, Bold
- Body:12pt, Justified Aligned
- Font Style: Times New Roman/Calibri.