

# JAVA INSTITUTE FOR ADVANCED TECHNOLOGY

## Department of Examinations



COURSE(S) – (LEADING TO)	PROFESSIONAL DIPLOMA IN SOFTWARE ENGINEERING
UNIT NAME	OBJECT ORIENTED SYSTEMS ANALYSIS AND DESIGN
UNIT ID	H7DV 04
ASSIGNMENT ID	H7DV 04/AS/04
RESEARCH NAME	USE OF UML DAIGRAMS
DESCRIPTION	ILLUSTRATE A GIVEN SCENARIO BY UML DAIGRAMS
DURATION	1 WEEK
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	:	.....

### Question:

Students are given an assignment to illustrate a set of scenarios using the following diagrams and the questions should be designed to cover a minimum of 4 diagrams out of the diagrams given below (diagrams should be designed using a software tool).

- a. Use case diagrams
- b. Activity diagrams
- c. Sequence diagrams
- d. Collaboration diagrams
- e. Class diagrams
- f. State diagrams

### Sample Scenario for Use case diagrams:

"Star hotel" is established 10 years ago. With time, the hotel implemented numerous new features to satisfy its customers. Recently, the hotel introduced a new online system for reservations and now customers can make a reservation online through the website. While doing reservations, a customer can provide reservation dates, lodging duration, room type, room count and lodging count. Each reservation has a unique code and the day before the customers checks in, the customer can check or cancel or alter the reservation by this unique reservation code. If the customer is a regular visitor or registered once, the system auto fills the data that is already saved and if not, the customer should register as a new customer in his or her first visit. The receptionist can identify the customers check in and check customer reservation details swiftly from this reservation code. Reports are generated automatically and reports are viewed by the hotel owner as his request. When the customer checks out, the receptionist levy the payment from the Electronic Payment card, because the system has validated the payment as card payment. A printed invoice may be requested by the customer. Hotel possesses numerous rooms and it is specified with the room types. The owner implemented separate systems to achieve the inner hotel functionalities such as maintaining rooms. Considering the separate system is not necessary for this exercise.

# 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.