

Softwarica College of IT & E-Commerce
STW104KM Enterprise
Information Systems



Assignment Brief 2020

Module Title: Enterprise Information Systems	Ind/Group Ind	Cohort March 2020	Module Code: STW104KM
Coursework Title (e.g. CWK1) CW2 Replacement coursework for exam			Hand out date: 20 July, 2020
Lecturer Achyut Timsina			Due date: 20 Aug, 2020
Estimated Time (hrs): Word Limit*: (900-1100)	Coursework type: Individual / Practical		% of Module Mark 50%
Submission arrangement online via Softwarica Moodle: Upload through assignment links			
Mark and Feedback date: Within 3 weeks of final assignment submission			
Mark and Feedback method: Rubric marks and comments			

Module Learning Outcomes Assessed:

1. Demonstrate a clear understanding of organisational structures and an appreciation of the role of information technology in the support of business systems, including an awareness of the ethical, social and legal principles in the professional context.
2. Demonstrate an understanding of the methods and techniques involved in the design and implementation of various types of information systems with justification behind appropriate selection.
3. Apply appropriate methods for the initial analysis of information processing systems, developing a diagrammatic representation of system requirements using selected modelling techniques, supported by the use of a CASE tool.
4. Understand how enterprise systems foster stronger relationships with customers and suppliers and how these systems are widely used to enforce organisational structures and processes.

Task and Mark distribution:

1. Section A: Normalisation and query (38)
2. Section B: Reflective analysis (12)

Notes:

1. You are expected to use the [CUHarvard](#) referencing format. For support and advice on how this students can contact [Centre for Academic Writing \(CAW\)](#).
2. Please notify your registry course support team and module leader for disability support.
3. Any student requiring an extension or deferral should follow the university process as outlined [here](#).
4. The University cannot take responsibility for any coursework lost or corrupted on disks, laptops or personal computer. Students should therefore regularly back-up any work and are advised to save it on the University system.

5. If there are technical or performance issues that prevent students submitting coursework through the online coursework submission system on the day of a coursework deadline, an appropriate extension to the coursework submission deadline will be agreed. This extension will normally be 24 hours or the next working day if the deadline falls on a Friday or over the weekend period. This will be communicated via email and as a Softwarica Moodle announcement.

Assignment Brief

Section A

Background and requirements

Itahari Arts is an arts company that handles and Organize plays and musicals at a range of venues across the country. Loyalty scheme are provided for customers as they receive a discount on future bookings. Current discount levels are 5% for bronze customers, 7% for silver and 10% for gold customers (see figure 1).

The customer will phone **Itahari Arts** and the receptionist will book the tickets. Each booking can have many tickets. The booking form will include the customer details (see figure 2), the quantity of tickets, the event name and other details such as the venue and price (see figure 3). Payment can be made either In cash on delivery(COD) or by Online payments services like E-Sewa , IME pay , Khalti. After the booking has been made the customer will receive email confirmation and tickets (figure 4) are either collected at the venue or sent in the post.

Suppose you are hired as IT Consultant for **Itahari Arts** and it would like an online booking system for improving existing system.

Example Data:

Figure 1: Loyalty Scheme Levels:

Loyalty Level	No of bookings required	Discount
Gold	10	10%
Silver	5	7%
Bronze	2	5%

Figure 2: Customer Details

Customer Ref	Customer Name	Address	Contact Number	Email	Loyalty Level
1	Manis Bhattarai	Dharan-4	07858987789	bmanish@gmail.com	Gold
2	Anmol Basnet	Itahari-4	07754895632	Banmol1@gmail.com	Silver
3	Biru Rai	Itahari-2	07587774147	rbiru@gmail.com	Gold
4	Suv Regmi	BIR -12,	07999852147	dgirl@gmail.com	Bronze

Figure 3: Bookings

Booking Ref	Booking Date	Cust Ref	Payment Method	Event ID	Description	Full Price	Venue Details	Event Date	Time	Ticket QTY	Discount
12	12/06/2019	1	Esewa	1	The Crew G5	1200	The Imperial	25/10/2019	7pm	3	10%
25	04/07/2019	2	COD	3	Sabin Rai	1500	Durbar INN	1/11/2019	7pm	2	7%
32	14/09/2019	3	Esewa	2	The Edge	2500	Kundaline	5/11/2019	2pm	2	10%
45	04/10/2019	3	Khalti	1	The Crew G5	1200	The Imperial	30/10/2019	7pm	1	10%
47	15/10/2019	4	COD	2	The Edge	2500	Kundaline	5/11/2019	2pm	1	5%

Figure 4: Tickets

Ticket No	Seat No	Row	Customer Name	Booking Ref	Post/Collect
1	34	B	Manis Bhattarai	12	Post
2	35	B	Manis Bhattarai	12	Post
3	36	B	Manis Bhattarai	12	Post
4	2	A	Manis Bhattarai	25	Collect
5	3	A	Anmol Basnet	25	Collect
6	45	D	Biru Rai	32	Post
7	46	D	Biru Rai	32	Post
8	5	F	Biru Rai	45	Collect
9	3	H	Suv Regmi	47	Collect

Figure 5: Venues

Venue ID	Name	Address	Contact Name	Tel Number	Capacity
1	The Imperial	Itahari-4	Kiran Rana	07898564456	450
2	Durbar INN	Itahari-2	Pratik Bhushal	07877458854	200
3	Kundaline	Itahari-1	Achyut Timsina	07785456123	124
4	Mahjeri	Itahari-12	Laxmi Khanal	07787452145	50

NOTE: Provided data are not Normalized Data and it is candidate's task to normalize the data up to 3rd normal form. Any assumptions you made needs to be explicitly stated. Provide screenshots of the queries and its output.

Task

- a) Produce an entity relationship model for the proposed system for **Itahari Arts**. This should be a fully normalised model to 3rd normal form [13]
- b) Create all the normalized tables in SQL. Show your SQL scripts and the finished tables. [10]
- c) Enter all data on Normalized Table and show Result [5]
- d) Write a query that selects the first name and surname of customers in alphabetical order of surname [2]
- e) Write a query that shows the number of all the bookings according to their Payment Methods [4]
- f) Change the contact name for 'The Imperial' to Sudeep Shrestha [2]
- g) Delete the venue 'Mahjeri' [2]

Section B

Suppose you are hired as IT Consultant for Itahari Arts.

- 1) How would you suggest Itahari Arts to implement cloud computing services to improve on their various computing systems? List out various cloud computing services and identify the key business value of each service. [6]
- 2) Suggest one appropriate software development model for developing the online booking system for Itahari Arts. Briefly describe phases in chosen software development model. [6]

Marking Guidelines for Students

To achieve above 70%

- Excellent grasp of relevant concepts illustrated.
This will include correct and clear **ER diagram** showing all relevant entities, attributes and relationships among them.
- Show evidence of **correct SQL commands** with screenshots of the output.
No serious flaws in solution.
Professional quality product, discussion and documentation of design process
Evidence of application of own original ideas to problem solving
All handing in requirements met

To achieve above 40%

- Understanding of some of the relevant concepts illustrated
Some serious flaws in solution
Poor documentation format, brief but sound coverage of design process
Evidence of application of taught material to problem solving
Most of handing in requirements met

Below 40%

- Poor understanding of the relevant concepts demonstrated
Many serious flaws in solution
Poor standard of documentation and explanation of design process
Lack of understanding of how to apply taught material to problem solving
- Little of handing in requirements have been met

0-39	40-49	50-59	60-69	70-79	80+
Work mainly incomplete and/or weaknesses in most areas	Most elements completed; weaknesses outweigh strengths	Most elements are strong, minor weaknesses	Strengths in all elements	Most work exceeds the standard expected	All work substantially exceeds the standard expected