INFO20003 Database Systems
Semester 1 2020

Assignment 1 feedback for **Kumi Sotomatsu (940966)**

Criterion	Available marks	Your mark
Conceptual Diagram		
Entities + Keys	4	**3**
Attributes	3	**3**
Multivalued / Composite / Derived attributes	2	**1**
Relationships	3	**3**
Key Constraints	3	**3**
Participation Constraints	3	**2**
Clarity / Readability	2	**2**
Physical Model - General Criteria		
PK/FK/PFK	4	**3**
Complexity Test (Superfluous Entities & Attributes)	3	**2**
Simplicity Test (Missing Entities & Attributes)	3	**3**
Data types	4	**4**
Null/Not Null	2	**2**
Relationship Labels	3	**3**
Understandability and readability of model in PDF file	3	**3**
Relationships: Cardinality	5	**5**
Relationships: Participation Constraints	4	**3**
Relationships: identifying, non-identifying	4	**4**
Physical Model - Business Rules		
Do card purchases have a type (digital wallet, debit card, credit card), Card number last+first digits, Institution, Country, Expiry, and Account name? Can the same card-details entity be used for Tickets, Audioguides and Apps? Is the Card details entity separate from the 'transaction' entity?	5	**4**
Can the payment method used to purchase a ticket be identified? Can a cash payment for a ticket have the customer's name, city and country stored? Is cash information stored separately from the 'transaction' entity?	4	**2**
Can many tickets be purchased in the same transaction? Can we determine if a ticket was purchased online or in person?	3	**3**
Does the ticket store the barcode + how the patron first arrived? Is the transportation method stored as an enum or lookup table?	4	**3**
Can we record every time a ticket was used at an entrance?Are the museum entrances stored as an enum or lookup table?	4	**0**

Criterion	Available marks	Your mark
Can we identify every time a ticket was used to enter a wing? Are the wings stored as an entity (and are reused with audioguide hire)?	4	2
Can we identify whether a ticket has a reservation for a particular specialist exhibition timeslot? Can we see how many tickets have been admitted to the exhibition currently/in a given 15 minute period? (and thus, can we determine how many people are yet to arrive)	4	2
Do specialist exhibitions store their total capacity? Can we identify how many reservations have been made for a given timeslot? (and thus, can we identify how many spaces remain for a timeslot?)	4	2
Can we store the audioguides serialnumber, and the dates that it was put into and removed from service?	2	2
Is an audioguide hire event associated with a (single) ticket? Can the language of an audioguide be determined?	3	1
Is an audioguide hire event associated with the wing in which it was rented and returned to? Are the times for these events recorded?	3	2
Is an audioguide hire event associated with a payment event? Are the entities used for storing of sale/payment the same as was used with the ticket (should be reused)?	3	2
Can we store purchase information for the App? Are the entities used for storing of sale/payment the same as was used with the ticket (should be reused)?	2	1
Penalties		
Late penalty (if applicable)		
Overall mark for Assignment 1	**100**	**75**

Personal feedback

Hi Kumi, this is a good attempt on the assignment. There is no need to have a scanner entity if you model Ticket-SpecialExhbition Booking, Ticket-Entrance, Ticket-Wing as many to many relationship as you can put the details of the scanning as attributes to the associative entity. It is better to put the Payment details outside of transaction as it make a seperation of concern between the actual transaction and the details of the methods used. Your handling of Audio Guide can be simplify if you merge audio guide recording and audio guide machine. Although I do understand why you would like to seperate them, I feel that in this case, it is creating an extra layer of complexity.