Vacoliday offers:

* customizable holidays
* great emphasis on localness and well-being

Location: Vacomedita, Mediterranean coast

Vacoliday has several residences in Vacomedita to accommodate holiday makers. Residences offer two types of accommodation:

1. Apartments:

* Large
* One or more bedrooms
* Other rooms:
  + Kitchens
  + Bathrooms
  + Washing rooms
  + Dining rooms
  + Lounges

1. Standalone rooms:

* Bedrooms
* En-suite bathroom

Vacoliday offers meals:

* Meal options that can also be booked.
* Collective meals can be taken at specific times at dining suites available at Vacoliday residences.
* Meals can be delivered to accommodations, if pre-booked in advance.

Vacoliday offers bookable experiences:

* Three **ON-SITE experiences** (at a specific residence):
  + Fitness classes
    - Yoga
    - Pilates
    - Any other well-being physical activities under the guidance of a fitness instructor
  + Craft workshops
    - Customers learn a local craft with a workshop instructor
  + Cooking classes
    - Customer learn how to prepare local dishes by a chef.
* Two **OFF-SITE experiences** led by guides (around the area surrounding Vacomedita):
  + Excursions to places of interest
    - Excursions are run by a driver on a bus and allow the visiting of places of interest, beauty spots and other landmarks across Vacomedita.
  + Walking hikes.
    - Hikes are on foot and involve walking in the countryside/wilderness around Vacomedita.

Staffing:

* Vacoliday relies on employees with well-defined roles:
  + **Guides** oversee all off-site experiences
  + **Drivers** use their buses to accompany people on excursions
  + **Chefs** take care of meals but also teach cooking classes
  + **Housekeeping attendants** are responsible for the good maintenance of their allocated accommodations.
  + **Instructors**:
    - **Fitness instructors** run the exercise classes for well-being
    - **Craft instructors** lead and deliver workshops teaching local craft skills.

You have been hired by Vacoliday as a Database Architect to undertake a database project to support the data needs of Vacoliday.

Your job:

* Investigate the Vacoliday company
* Produce a high-quality CONCEPTUAL ENHANCED ENTITY RELATIONSHIP DIAGRAM (EERD) to support its data needs
* Document it with a data dictionary.

***Prefix the names of all entities and attributes with your UoW ID (see end of doc)***

**QUESTION 1: INVESTIGATION, BUSINESS QUESTIONS & REFLECTIVE COMMENTARY (10 Marks)**

1. Study the Vacoliday Project Brief very carefully and start identifying the building blocks of the Conceptual EERD: entities, specialisations, relationships, multiplicities, attributes, and primary keys.
2. Formulate five Business Questions (BQs) for the Vacoliday’s Board of Directors to investigate Vacoliday and clarify your understanding of the building blocks of the Conceptual EERD. Your questions must be formulated in a way that is understandable to Managing Directors who do not have technical knowledge in the field of database systems. Your questions must be unique and formulated by you only. Questions directed at lecturers will not be accepted.
3. Post your five Business Questions on the Coursework Q&A Forum on Blackboard by Friday 27 October 2023 at 17:00:00. The forum is available at: https://learning.westminster.ac.uk/ultra/courses/\_94126\_1/outline/discussion/\_4709172\_1?view=discussi ons&courseId=\_94126\_1
4. Insert screenshots of your five Business Questions and the related answers in your report, clearly identifying your full name. e) Write a five bullet points-based Reflective Commentary to explain how each of your Business Questions helped you clarify your understanding of the building blocks of the Conceptual EERD

**ENTITIES**

List of main entities:

1. Customer
2. Staff
   1. Chef
   2. Instructor
      1. Fitness Instructor
      2. Craft instructor
   3. Driver
   4. Guide
   5. Housekeeping attendant
3. Residence
4. Dining suite
5. Meal
6. Accommodation
   1. Large apartment
   2. Small room
7. Experience
   1. Off-site experience
      1. Excursion
      2. Walking hike
   2. On-site experience
      1. Cooking class
      2. Fitness class
      3. Craft workshop

QUESTION 1: INVESTIGATION, BUSINESS QUESTIONS & REFLECTIVE COMMENTARY (10 Marks)

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2. Formulate five Business Questions (BQs) for the Vacoliday’s Board of Directors to investigate the company and clarify your understanding of the building blocks of the Conceptual EERD. Your questions must be formulated in a way that is understandable to Managing Directors who do not have technical knowledge in the field of database systems. Your questions must be unique and formulated by you only. Questions directed at lecturers will not be accepted.
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**QUESTION 2: ENTITIES (08 Marks)**

1. Identify and list the **main entities** for Vacoliday.
2. Create an **Entity Data Dictionary Table** to document the identified entities. To produce this supporting documentation, fill in the table below to briefly explain each entity.

|  |  |
| --- | --- |
| *Entity name* | *Brief explanation* |
| Customer |  |
| Staff |  |
| Residence |  |
| Dining Suite |  |
| Meal |  |
| Accommodation |  |
| Experience |  |

|  |  |  |
| --- | --- | --- |
| *Entity name* | *Specialised entity* | *Brief explanation* |
| Staff | Instructor |  |
| Chef |  |
| Driver |  |
| Guide |  |
| Housekeeping attendant |  |
| Meal |  |  |
| Accommodation |  |  |
| Experience |  |  |

**QUESTION 3: SPECIALISATIONS (07 Marks)**

1. Identify and list the main **specialisations** for Vacoliday.
2. Create a **Specialisation Data Dictionary Table** to document the identified specialisations. To produce this supporting documentation, fill in the table below to briefly explain each specialisation.

**QUESTION 4: RELATIONSHIPS & MULTIPLICITIES (15 Marks)**

1. Identify the main **relationships and multiplicities (participations + cardinalities)** for Vacoliday.
2. Create a **Relationship & Multiplicities Data Dictionary Table** to document the identified relationships and associated multiplicities. To produce this supporting documentation, fill in the table below to briefly explain the relationships and multiplicities.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Entity name* | *Multiplicity* | *Relationship* | *Multiplicity* | *Entity name* | *Brief justification for the multiplicity* |
|  |  |  |  |  |  |
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