Leonell Puso

CSC 174

Prof. Kathy Applebaum

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HOMEWORK # 2

BOAT

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| vessel\_id | name | year\_built | boat\_type | #\_of\_bedrooms | TEUs |

RENTS

|  |  |  |  |
| --- | --- | --- | --- |
| rental\_date | return\_date | vessel\_id | customer\_id |

CUSTOMER

|  |
| --- |
| customer\_id |

BUSINESS

|  |  |  |
| --- | --- | --- |
| TIN | name | address |

BILLIONAIRE

|  |  |  |
| --- | --- | --- |
| id | name | swiss\_account\_# |

ASSISTANT

|  |  |  |
| --- | --- | --- |
| name | phone | boss\_id |

The disjoint constraint in BOAT entity between YACHT and CARGO\_SHIP will be enforced using a trigger. The attribute boat\_type will use an enum (yacht, cargo, null) and will show an error and reject an entry if there is a breach in disjoint constraint in the following:

|  |  |  |  |
| --- | --- | --- | --- |
| boat\_type | #\_of\_bedroom | TEUs | STATE |
| yacht | not null | not null | error |
| yacht | not null | null | OK |
| cargo | not null | not null | error |
| cargo | null | not null | OK |

Attribute TEUs cannot have a value if boat\_type is yacht.

Attribute #\_of\_bedrooms cannot have a value if boat\_type is cargo.

If boat\_type is null then all accompanying attributes should be null to show partial participation.

Example rows of BOAT:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| vessel\_id | name | year\_built | boat\_type | #\_of\_bedrooms | TEUs |
| 0156 | Going Merry | 1997 | yacht | 5 | null |
| 0880 | LuMeat | 2012 | cargo | null | 500 |
| 6429 | Thousand Sunny | 2008 | null | null | null |