GROUP 2 dbs211_212b27

August 05, 2021

View 1 - dbs211_212b25

UNF

INVOICE [InvoiceId (PK), InvoiceDate, TeamId, CustNo, CustName, CustAddress, (EquipDesc), (ServiceCode, ServiceDesc, ChargePerHour, WorkDuration)]

1NF

INVOICE [InvoiceId (PK), InvoiceDate, TeamId, CustId, CustName, CustAddress]

EQUIPMENT [EquipId (PK), InvoiceId (PK, FK), EquipDesc]

SERVICE [ServiceCode (PK), InvoiceId (PK, FK), ServiceDesc, WorkDuration, ChargePerHour]

2NF

INVOICE [InvoiceId (PK), InvoiceDate, TeamId, CustId, CustName, CustAddress]

EQUIPMENT [EquipId (PK), EquipDesc]

EQUIP_AND_INVOICE [EquipId (PK, FK), InvoiceId (PK, FK)]

SERVICE [ServiceCode (PK), ServiceDesc, ChargePerHour]

SERVICE_AND_INVOICE [ServiceCode (PK, FK), InvoiceId (PK, FK), WorkDuration]

3NF

CUSTOMER [CustId (PK), CustName, CustAddress, CustCity, CustPostalCode]

EMPLOYEETEAM [EmployeeId (PK), TeamId]

INVOICE [InvoiceId (PK), InvoiceDate, TeamId (FK), CustId (FK)]

EQUIPMENT [EquipId (PK), EquipDesc]

EQUIP_AND_INVOICE [EquipId (PK, FK), InvoiceId (PK, FK)]

SERVICE [ServiceCode (PK), ServiceDesc, ChargePerHour]

SERVICE_AND_INVOICE [ServiceCode (PK, FK), InvoiceId (PK, FK), WorkDuration]

View 2 - dbs211-212b18

UNF:

EMPLOYEETEAM [TeamId (PK), TeamDesc, Position, EmployeeName, EmployeeId, OHIP, HomePhone, StartDate, (Skills)]

1NF:

EMPLOYEE [EmployeeId (PK), TeamId (PK), TeamDesc, EmployeeName, Position, OHIP, HomePhone, StartDate]

SKILLS [SkillId (PK), EmployeeId (PK, FK), SkillName]

2NF:

TEAM [TeamId (PK), TeamDesc]

EMPLOYEE [EmployeeId (PK), EmployeeName, Position, OHIP, HomePhone, StartDate]

SKILLS [Skill (PK), SkillName]

EMPLOYEESKILL [SkillId (PK, FK), EmployeeId (PK, FK)]

EMPLOYEETEAM [EmployeeId (PK, FK), TeamId (PK, FK)]

3NF:

TEAM [TeamId (PK), TeamDesc]

POSITIONS [PositionId (PK), PositionName]

EMPLOYEE [EmployeeId (PK), EmployeeName, PositionId (FK), OHIP, HomePhone, StartDate]

SKILLS [Skill (PK), SkillName]

EMPLOYEESKILL [SkillId (PK, FK), EmployeeId (PK, FK)]

EMPLOYEETEAM [EmployeeId (PK, FK), TeamId (PK, FK)]

View 3 - dbs211_212b36

UNF:

PRODUCTSALE [(ProdClass, ProdId, Product, Charge), <u>InvoiceId</u> (PK), InvoiceDate, Quantity, EmployeeID, EmployeeName, CustId]

1NF:

PRODUCT [<u>ProdId</u> (PK), ProdClass, Product, Charge]

INVOICE [<u>InvoiceId</u> (PK), <u>ProdId </u>(PK, FK), InvoiceDate, Quantity, EmployeeId, EmployeeName, CustId]

2NF:

PRODUCT [<u>ProdId</u> (PK), ProdClass, Product, Charge]

INVOICE [<u>InvoiceId</u> (PK), InvoiceDate, EmployeeId, EmployeeName, CustId]

PRODUCTSALE [<u>InvoiceId</u> (PK, FK), <u>ProdId</u> (PK, FK), Quantity)

3NF:

PRODUCT [<u>ProdId</u> (PK), ProdClass, Product, Charge]

EMPLOYEE [<u>EmployeeId</u> (PK), EmployeeName]

CUSTOMER [<u>CustId</u> (PK), CustName]

INVOICE [<u>InvoiceId</u> (PK), InvoiceDate, EmployeeId (FK), CustId (FK)]

PRODUCTSALE [<u>InvoiceId</u> (PK, FK), <u>ProdId</u> (PK, FK), Quantity)

View 4 - dbs211_212b05

UNF :

PRODUCT [ProdClass,ProdClassification,Prodmarkup, (<u>ProdId</u> (PK), ProdDesc, ProdCost)]

1NF:

PRODUCT_CLASS [<u>ProdClass</u> (PK), ProdClassification,Prodmarkup]

PRODUCT [<u>ProdID</u> (PK), ProdDesc, ProdCost, ProdClass (FK)]

2NF:

PRODUCT_CLASS [<u>ProdClass</u> (PK), ProdClassification,Prodmarkup]

PRODUCT [<u>ProdID</u> (PK), ProdDesc, ProdCost, ProdClass (FK)]

3NF: NO NEED FOR 3NF

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UNF:

    INVENTORY [<u>ProdId</u> (PK), ProdDesc, (Inventory, AisleNo, Supplier)]

1NF:

    PRODUCT [<u>ProdId</u> (PK), ProdDesc]

    INVENTORY [<u>ProdId</u> (PK, FK), <u>AisleNo</u> (PK), Inventory, Supplier]

2NF:

    PRODUCT [<u>ProductID</u> (PK), ProdDesc]

    INVENTORY [<u>ProdID</u> (PK, FK), <u>AisleNo</u> (PK), Quantity, Supplier]

3NF: No need for 3NF

Merging Relationship

1A CUSTOMER [CustId (PK), CustName, CustAddress, CustCity, CustPostalCode]

1B EMPLOYEETEAM [EmployeeId (PK), TeamId]

1C INVOICE [InvoiceId (PK), InvoiceDate, TeamId (FK), CustId (FK)]

1D EQUIPMENT [EquipId (PK), EquipDesc]

1E EQUIP_AND_INVOICE [EquipId (PK, FK), InvoiceId (PK, FK)]

1F SERVICE [ServiceCode (PK), ServiceDesc, ChargePerHour]

1G SERVICE_AND_INVOICE [ServiceCode (PK, FK), InvoiceId (PK, FK), WorkDuration]

2A TEAM [TeamId (PK), TeamDesc]

2B POSITIONS [PositionId (PK), PositionName]

2C EMPLOYEE [EmployeeId (PK), EmployeeName, PositionId (FK), OHIP, HomePhone, StartDate]

2D SKILLS [Skill (PK), SkillName]

2E EMPLOYEESKILL [SkillId (PK, FK), EmployeeId (PK, FK)]

2F EMPLOYEETEAM [EmployeeId (PK, FK), TeamId (PK, FK)]

3A PRODUCT [ProdId (PK), ProdClass, Product, Charge]

3B EMPLOYEE [EmployeeId (PK), EmployeeName]

3C CUSTOMER [CustId (PK), CustName]

3D INVOICE [InvoiceId (PK), InvoiceDate, EmployeeId (FK), CustId (FK)]

3E PRODUCTSALE [InvoiceId (PK, FK), ProdId (PK, FK), Quantity)

4A PRODUCT_CLASS [ProdClass (PK), ProdClassification,Prodmarkup]

4B PRODUCT [ProdId (PK), ProdDesc, ProdCost, ProdClass (FK)]

5APRODUCT [ProductId (PK), ProdDesc]

5B INVENTORY [ProdId (PK, FK), AisleNo (PK), Quantity, Supplier]

Creating Relationship:

1A, 3C **CUSTOMER** [CustId (PK), CustName, CustAddress, CustCity, CustPostalCode]

1B, 2F **EMPLOYEETEAM** [EmployeeId (PK, FK), TeamId (PK, FK)]

1C, 3D **INVOICE** [InvoiceId (PK), InvoiceDate, EmployeeId (FK), TeamId (FK), CustId (FK)]

1D **EQUIPMENT** [EquipId (PK), EquipDesc]

1E **EQUIP_AND_INVOICE** [EquipId (PK, FK), InvoiceId (PK, FK)]

1F **SERVICE** [ServiceCode (PK), ServiceDesc, ChargePerHour]

1G **SERVICE_AND_INVOICE** [ServiceCode (PK, FK), InvoiceId (PK, FK), WorkDuration]

2A **TEAM** [TeamId (PK), TeamDesc]

2B **POSITIONS** [PositionId (PK), PositionName]

2C, 3B **EMPLOYEE** [EmployeeId (PK), EmployeeName, PositionId (FK), OHIP, HomePhone, StartDate]

2D **SKILLS** [SkillId (PK), SkillName]

2E **EMPLOYEESKILL** [SkillId (PK, FK), EmployeeId (PK, FK)]

3A, 4B, 5A **PRODUCT** [ProdId (PK), ProdDesc, ProdCost, ProdClass (FK)]

3E **PRODUCTSALE** [InvoiceId (PK, FK), ProdId (PK, FK), Quantity)

4A **PRODUCT_CLASS** [ProdClass (PK), ProdClassification,Prodmarkup]

5B **INVENTORY** [ProdId (PK, FK), AisleNo (PK), Quantity, Supplier]