Entity: Vendor

Candidate keys: (VendorName,VendorContact,VendorAddress;VendorStatus); VendorID

Primary key: VendorID

Foreign keys: n/a

Super key: VendorID

Primary key reasoning: We used a unique, integer identifier that is not an intelligent characteristic of the entity as the primary key to aid in auto-incrementing and easy identification.

Entity: Customer

Candidate keys: CustomerID; (FirstName, LastName, DateOfBirth, Phone#, Email); (CompanyName, Address, Phone#, Email)

Primary key: CustomerID

Foreign keys: VendorID

Super key: CustomerID

Primary key reasoning: We used a unique, integer identifier that is not an intelligent characteristic of the entity as the primary key to aid in auto-incrementing and easy identification.

Entity: Payment

Candidate keys: PaymentID; TransactionID; (InvoiceID,OrderID,PaymentDateTime, PaymentStatus, TotalAmount)

Primary key: PaymentID

Foreign keys: InvoiceID; VendorID; OrderID; CustomerID

Super key: PaymentID

Primary key reasoning: We used a unique, integer identifier that is not an intelligent characteristic of the entity as the primary key to aid in auto-incrementing and easy identification.

Entity: Invoice

Candidate keys: InvoiceID; (InvoiceDateTime, InvoiceAmount, CustomerID, VendorID)

Primary key: InvoiceID

Foreign keys: VendorID; CustomerID; OrderID; PaymentID; ApprovedBy

Super key: InvoiceID

Primary key reasoning: We used a unique, integer identifier that is not an intelligent characteristic of the entity as the primary key to aid in auto-incrementing and easy identification.

Entity: FinanceRequest

Candidate keys: FinanceRequestID; (RequestDate,SpaceshipID, FinancedAmount,RequestedBy)

Primary key: FinanceRequestID

Foreign keys: SpaceshipID; RequestedBy; ApprovedBy

Super key: FinanceRequestID

Primary key reasoning: We used a unique, integer identifier that is not an intelligent characteristic of the entity as the primary key to aid in auto-incrementing and easy identification.

Entity: Parts

Candidate keys: PartsID; (PartName, Manufacturer, PartNumber, PartStatus)

Primary key: PartsID

Foreign keys: SpaceshipID

Super key: PartsID

Primary key reasoning: We used a unique, integer identifier that is not an intelligent characteristic of the entity as the primary key to aid in auto-incrementing and easy identification.

Entity: Spaceship

Candidate keys: SpaceshipID; (Make, Model, ModelYear, VendorID); (Make, Serial#)

Primary key: SpaceshipID

Foreign keys: VendorID

Super key: SpaceshipID

Primary key reasoning: We used a unique, integer identifier that is not an intelligent characteristic of the entity as the primary key to aid in auto-incrementing and easy identification.

Entity: MaintenanceRequest

Candidate keys: MaintenanceRequestID; (SpaceshipID, RequestedBy, ReqeuestedDate, RequestType, RequestStatus)

Primary key: MaintenanceRequestID

Foreign keys: SpaceshipID, PartsID, RequestedBy

Super key: MaintenanceRequestID

Primary key reasoning: We used a unique, integer identifier that is not an intelligent characteristic of the entity as the primary key to aid in auto-incrementing and easy identification.

Entity: Order

Candidate keys: OrderID; (CustomerID, InvoiceID, OrderDateTime, TotalAmount, OrderStatus)

Primary key: OrderID

Foreign keys: InvoiceID; CustomerID; SpaceshipID; PaymentID; PartsID

Super key: OrderID

Primary key reasoning: We used a unique, integer identifier that is not an intelligent characteristic of the entity as the primary key to aid in auto-incrementing and easy identification.

Entity: Employee

Candidate keys: EmployeeID; (EmployeeFirstName,EmployeeLastName, EmployeeRole, EmployeeStatus, EmployeeHireDate, EmployeeSupervisorID)

Primary key: EmployeeID

Foreign keys: SupervisorID

Super key: EmployeeID

Primary key reasoning: We used a unique, integer identifier that is not an intelligent characteristic of the entity as the primary key to aid in auto-incrementing and easy identification.