Silahkan memilih salah satu dari lima proses bisnis yang terdapat pada <https://bit.ly/3vUspMs>.

Diagram

Description automatically generated

Tugas anda sebagai konsultan adalah untuk merancang data warehouse dengan memanfaatkan ERD yang ada pada proses bisnis yang dipilih.

1. **Rancanglah enterprise bus matrix** berdasarkan proses bisnis dan ERD yang dipilih. **(10%)**

**Jawaban:**

Graphical user interface, chart, application

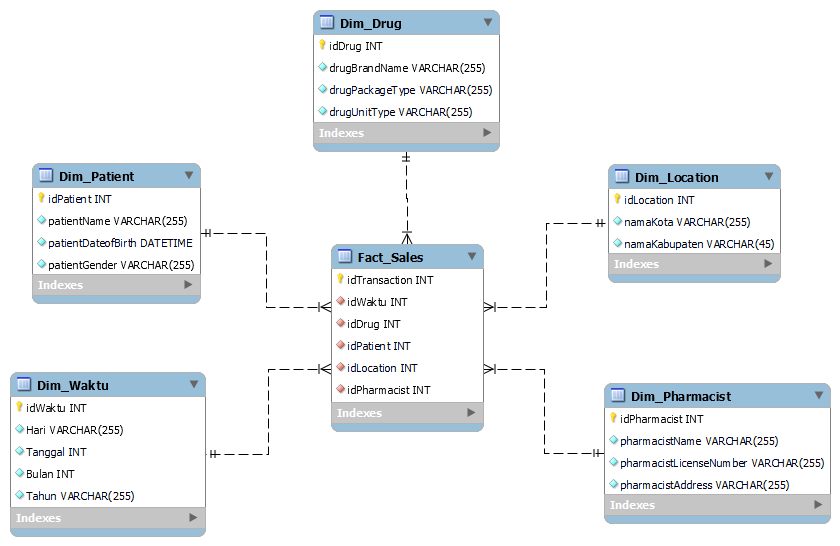
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Table

Description automatically generated

1. **Rancanglah diagram star** atau snowflake atau constellation schema sesuai dengan kebutuhan dan hasil analisis dari proses bisnis dan ERD yang dipilih. **(15%)**

**Jawaban:**



1. **Rancanglah proses untuk Extract, Transform, Load (ETL)** dari ERD yang dipilih ke sistem data warehouse yang dirancang. Anda dapat menggunakan tabel dibawah sebagai contoh format proses ETL. **(15%)**

**Jawaban:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Source tables** | **Destination table** | **Transformation** | **Remark** |
| Patient | Dim\_Patient | Select to make all the required attributes that are available in the source table transformation available in the sub-transformation. |  |
| Manufacturer, DrugItemPackage, Drug, DrugItem | Dim\_Drug | Select to make all the required attributes that are available in the source table transformation available in the sub-transformation. |  |
| Client Health-Care Organization, Client Unit | Dim\_Location | Select to make all the required attributes that are available in the source table transformation available in the sub-transformation. |  |
| Pharmacist, Order, Client Health-Care Organization, Client Unit | Dim\_Pharmacist | Select to make all the required attributes that are available in the source table transformation available in the sub-transformation. |  |
| Prescription, Order | Dim\_Waktu | Select to make all the required attributes that are available in the source table transformation available in the sub-transformation. |  |

1. Implementasikan table data warehouse yang anda rancang dengan menggunakan RDBMS pilihan anda. **Minimal setiap dimensi ada 15 records, dan fakta ada 50 records**. **(25%)**

**Jawaban:**

**Dim\_Waktu (61 Records)**

Table

Description automatically generated with medium confidence

Table

Description automatically generated

**Dim\_Drug (18 Records)**

Table

Description automatically generated

**Dim\_Location (15 Records)**

Table

Description automatically generated

**Dim\_Patient (15 Records)**

A picture containing application

Description automatically generated

**Dim\_Pharmacist (15 Records)**

Table

Description automatically generated with medium confidence

**Fact\_Sales (755 Records)**

A picture containing table

Description automatically generated

A picture containing table

Description automatically generated

A picture containing table

Description automatically generated

A picture containing background pattern

Description automatically generated

A picture containing table

Description automatically generated

A picture containing table

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A picture containing background pattern

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A picture containing table

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A picture containing background pattern

Description automatically generated

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Description automatically generated

Table

Description automatically generated with low confidence

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Description automatically generated

Table

Description automatically generated

1. **Rancanglah dashboard BI untuk data warehouse yang anda rancang** dengan menggunakan tools pilihan anda. Jelaskan juga perancangan anda. **(35%)**

**Jawaban:**

|  |  |
| --- | --- |
| **Nama Kueri** | **Proses Kueri** |
| Transaksi per Bulan | SELECT [Measures].[Fact\_Sales Count] on Columns, NON EMPTY order({[Dim\_Waktu].[Bulan].[1], [Dim\_Waktu].[Bulan].[2], [Dim\_Waktu].[Bulan].[3], [Dim\_Waktu].[Bulan].[4], [Dim\_Waktu].[Bulan].[5], [Dim\_Waktu].[Bulan].[6], [Dim\_Waktu].[Bulan].[7], [Dim\_Waktu].[Bulan].[8], [Dim\_Waktu].[Bulan].[9], [Dim\_Waktu].[Bulan].[10], [Dim\_Waktu].[Bulan].[11], [Dim\_Waktu].[Bulan].[12]}, [Measures].[Bulan], ASC) on Rows FROM [Dim\_Waktu]; |
| Transaksi per Kota | SELECT [Measures].[Fact\_Sales Count] on Columns, NON EMPTY order([Dim\_Location].[Nama Kota].members, [Measures].[Dim\_Location Count], ASC) on Rows FROM [Dim\_Location]; |
| Transaksi per Produk | SELECT [Measures].[Fact\_Sales Count] on Columns, NON EMPTY order ([Dim\_Drug].[drugBrandName].members, [Measures].[Fact\_Sales Count], DESC) on Rows FROM [Dim\_Drug]; |
| Transaksi per Jenis Kelamin | SELECT [Measures].[Fact\_Sales Count] on Columns, NON EMPTY order ({[Dim\_Patient].[patientGender].[Pria], [Dim\_Patient].[patientGender].[Wanita]}, [Measures].[Fact\_Sales Count], DESC) on Rows FROM [Dim\_Patient]; |

**Hasil Dashboard Menggunakan Tools Tableau:**

Chart, bubble chart

Description automatically generated

**Materi yang dikumpulkan:**

- Softcopy star atau snowflake, atau constellation diagram

- Softcopy tabel source to target mapping proses ETL

- Script SQL untuk membuat masing-masing tabel fakta dan dimensi

- Softcopy screenshot dashboard BI