

1. Product

Schema:

```
name: { type: String, required: true },
dimension: { length: { type: Number, required: true },
width: { type: Number, required: true },
height: { type: Number, required: true } },
needUrgent: { type: Boolean, default: false },
reachStatus: { type: String, enum: ['Pending', 'In-Transit', 'Delivered'], default: 'Pending' }
```

2. Destination:

```
address: { type: String, required: true },
city: { type: String, required: true },
state: { type: String, required: true },
zipCode: { type: String, required: true }
```

3. Truck Schema:

```
truckId: { type: String, required: true },
capacity: { type: Number, required: true }, // Capacity in kilograms
currentLocation: { lat: { type: Number, required: true }, lng: { type: Number, required: true } }
```

4. Cost Schema:

```
product: { type: Schema.Types.ObjectId, ref: 'Product', required: true },
destination: { type: Schema.Types.ObjectId, ref: 'Destination', required: true },
cost: { type: Number, required: true }
```

5. GraphSchema:

```
destinations: [{ type: Schema.Types.ObjectId, ref: 'Destination' }],
costMatrix: [{
  from: { type: Schema.Types.ObjectId, ref: 'Destination' },
  to: { type: Schema.Types.ObjectId, ref: 'Destination' },
  cost: { type: Number, required: true } }]
```