# **Appointments:**

Business Purpose:

The Appointments collection stores data about the appointments between a patient and doctor. This allows for scheduling and tracking the status of appointments (scheduled, completed, canceled).

Data/Data Types:

\_id: ObjectId- Unique Identifier generated by MongoDB

appointment\_id: Int32- Unique identifier for easier tracking

patient\_id: Int32- References to patient ID

doctor\_id: Int32- References to doctor ID

appointment\_date: String- Scheduled date for appointment

status: String- Used to track progress of appointment

{

"count": 10,

"fields": [

{

"name": "\_id",

"path": [

"\_id"

],

"count": 10,

"type": "ObjectId",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "ObjectId",

"path": [

"\_id"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

"671bd5f2b4caffdcff09834e",

"671bd5f2b4caffdcff098351",

"671bd5f2b4caffdcff098356",

"671bd5f2b4caffdcff098353",

"671bd5f2b4caffdcff098357",

"671bd5f2b4caffdcff098350",

"671bd5f2b4caffdcff098354",

"671bd5f2b4caffdcff09834f",

"671bd5f2b4caffdcff098355",

"671bd5f2b4caffdcff098352"

],

"bsonType": "ObjectId"

}

]

},

{

"name": "appointment\_date",

"path": [

"appointment\_date"

],

"count": 10,

"type": "String",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "String",

"path": [

"appointment\_date"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

"2024-10-30",

"2024-11-06",

"2024-11-16",

"2024-11-10",

"2024-11-18",

"2024-11-04",

"2024-11-12",

"2024-11-02",

"2024-11-14",

"2024-11-08"

],

"bsonType": "String"

}

]

},

{

"name": "appointment\_id",

"path": [

"appointment\_id"

],

"count": 10,

"type": "Int32",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "Int32",

"path": [

"appointment\_id"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

5001,

5004,

5009,

5006,

5010,

5003,

5007,

5002,

5008,

5005

],

"bsonType": "Int32"

}

]

},

{

"name": "doctor\_id",

"path": [

"doctor\_id"

],

"count": 10,

"type": "Int32",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "Int32",

"path": [

"doctor\_id"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

101,

104,

109,

106,

110,

103,

107,

102,

108,

105

],

"bsonType": "Int32"

}

]

},

{

"name": "patient\_id",

"path": [

"patient\_id"

],

"count": 10,

"type": "Int32",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "Int32",

"path": [

"patient\_id"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

1,

4,

9,

6,

10,

3,

7,

2,

8,

5

],

"bsonType": "Int32"

}

]

},

{

"name": "status",

"path": [

"status"

],

"count": 10,

"type": "String",

"probability": 1,

"hasDuplicates": true,

"types": [

{

"name": "String",

"path": [

"status"

],

"count": 10,

"probability": 1,

"unique": 4,

"hasDuplicates": true,

"values": [

"Completed",

"Completed",

"Completed",

"Completed",

"Scheduled",

"Canceled",

"Scheduled",

"Scheduled",

"No Show",

"Scheduled"

],

"bsonType": "String"

}

]

}

]

}

# **Billing:**

Business Purpose:

The Billing collection tracks the transactions related to the appointments. Tracking this helps make sure that services provided are billed properly, and helps manage the revenue stream and pending payments.

Data/Data Types:

\_id: ObjectId- Unique Identifier generated by MongoDB

billing\_id: Int32- Unique identifier for easier tracking

appointment\_id: Int32- References to appointment ID

amount: Int32- Total amount billed for the appointment

payment\_status: String- Tracks which payments have been completed or are pending

{

"count": 10,

"fields": [

{

"name": "\_id",

"path": [

"\_id"

],

"count": 10,

"type": "ObjectId",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "ObjectId",

"path": [

"\_id"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

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"671bd622b4caffdcff09835d",

"671bd622b4caffdcff09835a",

"671bd622b4caffdcff098362",

"671bd622b4caffdcff09835f",

"671bd622b4caffdcff09835e",

"671bd622b4caffdcff09835c",

"671bd622b4caffdcff098360",

"671bd622b4caffdcff098361",

"671bd622b4caffdcff09835b"

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]

},

{

"name": "amount",

"path": [

"amount"

],

"count": 10,

"type": "Int32",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "Int32",

"path": [

"amount"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

160,

250,

200,

210,

300,

220,

175,

180,

0,

150

],

"bsonType": "Int32"

}

]

},

{

"name": "appointment\_id",

"path": [

"appointment\_id"

],

"count": 10,

"type": "Int32",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "Int32",

"path": [

"appointment\_id"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

5010,

5004,

5001,

5009,

5006,

5005,

5003,

5007,

5008,

5002

],

"bsonType": "Int32"

}

]

},

{

"name": "billing\_id",

"path": [

"billing\_id"

],

"count": 10,

"type": "Int32",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "Int32",

"path": [

"billing\_id"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

9010,

9004,

9001,

9009,

9006,

9005,

9003,

9007,

9008,

9002

],

"bsonType": "Int32"

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]

},

{

"name": "payment\_status",

"path": [

"payment\_status"

],

"count": 10,

"type": "String",

"probability": 1,

"hasDuplicates": true,

"types": [

{

"name": "String",

"path": [

"payment\_status"

],

"count": 10,

"probability": 1,

"unique": 4,

"hasDuplicates": true,

"values": [

"Pending",

"Paid",

"Paid",

"Paid",

"Paid",

"Pending",

"Canceled",

"Pending",

"No Charge",

"Pending"

],

"bsonType": "String"

}

]

}

]

}

# **Doctors:**

Business Purpose:

The Doctors collection stores information about the doctors employed by the hospital. This data helps schedule appointments based on specialization, and assists in internal communication and patient referrals.

Data/Data Types:

\_id: ObjectId- Unique Identifier generated by MongoDB

doctor\_id: Int32- Unique identifier for easier tracking

name: String- Doctor’s full name

specialization: String- Doctor’s specialty, to assign to patients appropriately

contact\_info: String- Contact information for internal communication and patient referrals

{

"count": 10,

"fields": [

{

"name": "\_id",

"path": [

"\_id"

],

"count": 10,

"type": "ObjectId",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "ObjectId",

"path": [

"\_id"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

"671bd52ab4caffdcff09833a",

"671bd52ab4caffdcff09833d",

"671bd52ab4caffdcff09833c",

"671bd52ab4caffdcff098338",

"671bd52ab4caffdcff098337",

"671bd52ab4caffdcff098339",

"671bd52ab4caffdcff098336",

"671bd52ab4caffdcff09833f",

"671bd52ab4caffdcff09833b",

"671bd52ab4caffdcff09833e"

],

"bsonType": "ObjectId"

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},

{

"name": "contact\_info",

"path": [

"contact\_info"

],

"count": 10,

"type": "String",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "String",

"path": [

"contact\_info"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

"drdavis@hospital.com",

"drgarcia@hospital.com",

"drthompson@hospital.com",

"drejohnson@hospital.com",

"drdoe@hospital.com",

"drbrown@hospital.com",

"drsmith@hospital.com",

"drrodriguez@hospital.com",

"drmartinez@hospital.com",

"drmoore@hospital.com"

],

"bsonType": "String"

}

]

},

{

"name": "doctor\_id",

"path": [

"doctor\_id"

],

"count": 10,

"type": "Int32",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "Int32",

"path": [

"doctor\_id"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

105,

108,

107,

103,

102,

104,

101,

110,

106,

109

],

"bsonType": "Int32"

}

]

},

{

"name": "name",

"path": [

"name"

],

"count": 10,

"type": "String",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "String",

"path": [

"name"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

"Dr. Sarah Davis",

"Dr. William Garcia",

"Dr. Linda Thompson",

"Dr. Emily Johnson",

"Dr. John Doe",

"Dr. Michael Brown",

"Dr. Jane Smith",

"Dr. David Rodriguez",

"Dr. Robert Martinez",

"Dr. Jessica Moore"

],

"bsonType": "String"

}

]

},

{

"name": "specialization",

"path": [

"specialization"

],

"count": 10,

"type": "String",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "String",

"path": [

"specialization"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

"Neurology",

"Endocrinology",

"Gastroenterology",

"Dermatology",

"Pediatrics",

"Orthopedics",

"Cardiology",

"Urology",

"Oncology",

"Ophthalmology"

],

"bsonType": "String"

}

]

}

]

}

# **Patients:**

Business Purpose:

The Patients collection stores personal information about each patient. The data collected helps with identification, communication, and linking to appointments and billing.

Data/Data Types:

\_id: ObjectId- Unique Identifier generated by MongoDB

patient\_id: Int32- Unique identifier for easier tracking

name: String- Patient’s full name

age: Int32- Age in years for medical records/assessment

gender: String- Patient’s gender

contact\_info: String- Contact information for communication and follow-ups

{

"count": 10,

"fields": [

{

"name": "\_id",

"path": [

"\_id"

],

"count": 10,

"type": "ObjectId",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "ObjectId",

"path": [

"\_id"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

"671bd412b4caffdcff09832b",

"671bd412b4caffdcff098331",

"671bd412b4caffdcff09832f",

"671bd412b4caffdcff09832a",

"671bd412b4caffdcff09832c",

"671bd412b4caffdcff098332",

"671bd412b4caffdcff098329",

"671bd412b4caffdcff09832d",

"671bd412b4caffdcff098330",

"671bd412b4caffdcff09832e"

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"bsonType": "ObjectId"

}

]

},

{

"name": "age",

"path": [

"age"

],

"count": 10,

"type": "Int32",

"probability": 1,

"hasDuplicates": true,

"types": [

{

"name": "Int32",

"path": [

"age"

],

"count": 10,

"probability": 1,

"unique": 9,

"hasDuplicates": true,

"values": [

29,

39,

49,

34,

27,

62,

45,

39,

44,

32

],

"bsonType": "Int32"

}

]

},

{

"name": "contact\_info",

"path": [

"contact\_info"

],

"count": 10,

"type": "String",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "String",

"path": [

"contact\_info"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

"bobsmith@mail.com",

"corythompson@mail.com",

"lacymonroe@mail.com",

"janedoe@mail.com",

"frankocean@mail.com",

"josecuervo@mail.com",

"johndoe@mail.com",

"marylane@mail.com",

"jenniferanniston@mail.com",

"curiousgeorge@mail.com"

],

"bsonType": "String"

}

]

},

{

"name": "gender",

"path": [

"gender"

],

"count": 10,

"type": "String",

"probability": 1,

"hasDuplicates": true,

"types": [

{

"name": "String",

"path": [

"gender"

],

"count": 10,

"probability": 1,

"unique": 2,

"hasDuplicates": true,

"values": [

"M",

"M",

"F",

"F",

"M",

"M",

"M",

"F",

"F",

"M"

],

"bsonType": "String"

}

]

},

{

"name": "name",

"path": [

"name"

],

"count": 10,

"type": "String",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "String",

"path": [

"name"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

"Bob Smith",

"Cory Thompson",

"Lacy Monroe",

"Jane Doe",

"Frank Ocean",

"Jose Cuervo",

"John Doe",

"Mary Lane",

"Jennifer Anniston",

"Curious George"

],

"bsonType": "String"

}

]

},

{

"name": "patient\_id",

"path": [

"patient\_id"

],

"count": 10,

"type": "Int32",

"probability": 1,

"hasDuplicates": false,

"types": [

{

"name": "Int32",

"path": [

"patient\_id"

],

"count": 10,

"probability": 1,

"unique": 10,

"hasDuplicates": false,

"values": [

3,

9,

7,

2,

4,

10,

1,

5,

8,

6

],

"bsonType": "Int32"

}

]

}

]

}