

Data Model Table 1:

Users: This table contains all parameters of Users collection in MongoDB.

Parameter	Datatype	Description
userName	String	Name of a user
age	Integer	Age of a user
userId	String	UserName+uniqueId
gender	String	Gender of a user
emailId	String	Email-id of a user
occupation	String	Occupation of a user
userType	String	Type of a user. E.g.: event organizer or event attendee

1	<code>_id: ObjectId("5cc0027bb96a5c122ced54f6")</code>	ObjectId
2	<code>userName : "Maria "</code>	String
3	<code>age : 25</code>	Int32
4	<code>userID : "Maria001 "</code>	String
5	<code>gender : "female "</code>	String
6	<code>emailID : "mariapinto01@gmail.com "</code>	String
7	<code>occupation : "Interior Designer "</code>	String
8	<code>userType : "common "</code>	String

Data Model Table 2:

Events Collection: This table contains all parameters of Events collection in MongoDB.

Parameter	Datatype	Description
eventId	String	EventName+eventDate
name	String	The name of the event
description	String	The description of the event
genre	String	The category of the event. Ex- music, dance, theatre, art, circus etc
venue	String	The venue of the event
city	String	The city where the event is held
type	String	Indoor/Outdoor event
offers	Array of objects	The different types of offers such as students, kids, group, early bird, clubbed (multiple combined event offer), senior citizens along with their details are added as an embedded document. This parameter is added as an embedded document because there are only definite and limited number of offers for each event
capacity	String	Maximum number of users that can be accommodated at event venue.
seatMap	ObjectId	This is a referred document that contains the seat layout of the venue. This seatmap is specific to the event and venue. The object id of the Seating collection is referred here. The parameters of this collection are explained in seating section

Parameter	Datatype	Description
ageRestriction	Integer	Age restriction for user to attend the event.
friendly	Array	This is an array which consists, event is friendly to attend for different type of user groups like kids, disabled, elderly. This parameter is helpful when tourists need to know if the event that they are planning to attend is kids friendly or disabled friendly if they are accompanied by kids, physically challenged or elderly people.
ageGroup	Array	The intended age group of the audience E.g: kids, youth, elderly
startDate	Date	The start time of the event
endDate	Date	The end time of the event. If it's a day event, the start and end date would be the same
startTime	String	The start time of the event (considering the event last for multiple days and entry starts at 09:00 in the morning)
endTime	String	The end time of the event (considering the event last for multiple days and entry starts at 12:00 in the night)
additionalInfo	String	Additional info, if any
eventContact	String	The contact details of the event organiser
socialLinks	String	Any promotional links can be added here
eventPoster	String	Image links to the poster of the event
createdBy	String	UserId of the event Organizer, added here

```

1  _id:ObjectId("5cbf0b88d7a953d7c9138b4")      ObjectId
2  event_id : "NeckarMusicFestival2019-05"      String
3  name : "Neckar Music Festival"               String
4  city : "Heidelberg"                         String
5  : "Experience the abundance, quality and complexity of the colorful and intense works, get to know award-winning soloists, duos and cham... " String
6  date : 2019-05-07T22:00:00.000+00:00         Date
7  venue : "Jasperstraße 2, 69126, Heidelberg"   String
8  genre : "music"                             String
9  startTime : "10:00 hrs"                     String
10 endTime : "12:00 hrs"                       String
11 type : "Indoor"                             String
12 capacity : "300"                            String
13 ageRestriction : "No"                       String
14 > offers : Array                            Array
15 > friendly : Array                          Array
16 > ageGroup : Array                          Array
17 seatMap : ObjectId("5cc98d79eff447235c1ef5d4") ObjectId
18 additionalInfo : "Book online tickets from https://shop.reservix.de" String
19 eventContact : "reservix@gmail.com"          String
20 socialLinks : "www.facebook.com/neckar-music-festival" String
21 eventPoster : "https://cdn.pixabay.com/photo/2018/06/10/11/38/festival-3466251_960_720.jpg" String
22 createdBy : "jessicaSmith"                  String

```

Data Model Table 3:

City: This table contains all parameters of cities in Neo4j

Parameter	Properties	Label	Description
node	cityName	name	Each city will be a node
edge	relationship	distance in kilometres	Edge is link between two cities, and it has its properties as relationship
		average time in minutes	



Data Model Table 4:

ServiceProvider: This table contains all parameters of Service provider collection in MongoDB.

Parameter	Datatype	Description
name	String	Name of a service provider
details	String	Basic details regarding service provider
category	String	Service offered for a particular category like food, security etc.
eventsServedFor	Array	List of eventId from event collection that service provider served

1	<code>_id: ObjectId("5cc0367b96a5c122ced54f7")</code>	ObjectId
2	<code>name : "Food Catering services Heidelberg"</code>	String
3	<code>details : "We provide with delicious cusines since year 2000"</code>	String
4	<code>category : "food"</code>	String
5	<code>eventsServedFor : ["LeimenMusicFestival2017-06-11"]</code>	String

Data Model Table 5:

TopTrendingEvents: This table contains all parameters of trending events in Redis.

Parameter	Datatype	Description
userId	Set	A unique identifier for each User

```
127.0.0.1:6379> SADD NeckarMusicFestival2019-10-11 Lisa01
(integer) 1
```

```
127.0.0.1:6379> SMEMBERS NeckarMusicFestival2019-10-11
1) "Lisa01"
```

```
127.0.0.1:6379> SCARD NeckarMusicFestival2019-10-11
(integer) 1
```

Data Model Table 6:

Shows: This table contains all parameters of Shows collection in MongoDB.

Parameter	Datatype	Description
eventId	String	EventId from events collection
showStartTime	Timestamp	Show starting time
showEndTime	Timestamp	Show end time
seatLayout	Array	Available seats in the layout of a show

1	_id: ObjectId("5ccd9d80a9dd0914d64e1de4")	ObjectId
2	event_id : "JumboCircusHeidelbergMay2019 "	String
3	showStartTime : 2019-05-01T12:00:00.000+00:00	Date
4	showEndTime : 2019-05-01T16:00:00.000+00:00	Date
5	✓ seatLayout : Object	Object
6	✓ Platinum : Object	Object
7	> A : Array	Array
8	> B : Array	Array
9	> C : Array	Array
10	✓ Gold : Object	Object
11	> A : Array	Array
12	> B : Array	Array
13	> C : Array	Array

Data Model Table 7:

Seating: This table contains all parameters of Seating collection in MongoDB.

Parameter	Datatype	Description
eventId	String	EventId from event collection
totalSeats	String	Total count of seats that are available for booking
section	Object	Embedded objects of a different sections available in the event venue to book with following details: - sectionName: String - sectionDescription: String - cost: String - sectionLayout: Object to display the seating arrangement within event venue in 2D array

1	<code>_id: ObjectId("5ccc50720952aea46c0415a1")</code>	ObjectId
2	<code>event_id : "NeckarMusicFestival2019-05-28 "</code>	String
3	<code>totalSeats : "50 "</code>	String
4	<code>sections : Array</code>	Array
5	<code> 0 : Object</code>	Object
6	<code> sectionName : "Platinum "</code>	String
7	<code> sectionDescription : "This is the premium seat category "</code>	String
8	<code> cost : "50 EUR "</code>	String
9	<code> sectionLayout : Object</code>	Object
10	<code> A : Array</code>	Array
11	<code> B : Array</code>	Array
12	<code> C : Array</code>	Array
13	<code> 1 : Object</code>	Object
14	<code> sectionName : "Gold "</code>	String
15	<code> sectionDescription : "This is the middle seat category "</code>	String
16	<code> cost : "10 EUR "</code>	String
17	<code> sectionLayout : Object</code>	Object
18	<code> D : Array</code>	Array
19	<code> E : Array</code>	Array
20	<code> F : Array</code>	Array

Data Model Table 8:

Booking: This table contains all parameters of Booking collection in MongoDB.

Parameter	Datatype	Description
userName	String	Name of the user who is making seat reservation
userId	String	UserId from user collection
eventId	String	EventId from events collection
eventName	String	Name of the event
showStartTime	Timestamp	Show start time of the event
showEndTime	Timestamp	Show end time of the event

Parameter	Datatype	Description
seatCategory	String	Seat type E.g: Platinum,Gold,Silver etc
seatNumberArray	Array	User selected seats booking number. P.S.: one user can book multiple snneats
price	Integer	Cost per seat booking
totalAmount	Integer	Total cost for booking (= price*no of seats booked)
bookingDate	Timestamp	Time of booking seat

```

1  _id: ObjectId("5ccea2cda8187914febac898")      ObjectId
2  userName : "Maria "                          String
3  userID : "Maria001 "                         String
4  event_id : "JumboCircusHeidelbergMay2019 "   String
5  eventName : "Jumbo Circus "                  String
6  showStartTime : 2019-05-06T17:00:00.000+00:00 Date
7  showEndTime : 2019-05-06T21:00:00.000+00:00 Date
8  seatCategory : "Platinum "                   String
9  ✓ seatNumberArray : Array                    Array
10     0 : "A8 "                                String
11     1 : "A9 "                                String
12  price : 50                                  Int32
13  totalAmount : 100                           Int32
14  bookingDate : 2019-05-05T08:46:05.028+00:00 Date

```

Data Model Table 9:

eventReviews: This table contains all parameters of Event Reviews collection in MongoDB.

Parameter	Datatype	Description
reviewFor	String	EventId from event collection to identify review is for which event
userId	String	Review posted by userId from users Collection
rating	Integer	Rating given by a user for event
review	String	Review comment about an event
isActive	Boolean	Is the comment currently active or not

```

1  _id: ObjectId("5ccee8fdffee0495fc6cb44")      ObjectId
2  reivenFor : "HockenheimMusicFestival2017-08-11 " String
3  userId : "amandaCely002 "                   String
4  rating : 5                                   Double
5  review : "Awesome music "                   String
6  isActive : true                             Boolean

```

Data Model Table 10:

ServiceProviderReviews: This table contains all parameters of Service provider reviews collection in MongoDB.

Parameter	Datatype	Description
reviewFor	String	Service provider name from serviceProvider collection to identify review is for which service provider
userId	String	Is a unique identifier for the user
rating	Integer	Rating given by a user (event organizer) for service provider
review	String	Review comment about service provider
isActive	Boolean	Is the comment currently active or not

```
1  _id: ObjectId("5cc9978d5776b3184fc2e9ef")      ObjectId
2  reivewFor : "Food Catering services Heidelberg"  String
3  userId : "Lisa01"                               String
4  rating : 3                                       Int32
5  review : "food was good with good management"   String
6  ✓event : Object                                Object
7    id : "5cbf0b888d7a953d7c9138b4"              String
8    eventName : "NecherMusicFestival"            String
9    isActive : true                               Boolean
```

Data Model Table 11:

Top5Events: This table contains all parameters of Top 5events in Redis

Parameter	Datatype	Description
eventId	Set	A unique identifier for each Event

```
127.0.0.1:6379> SCARD NeckarMusicFestival2019-10-11
(integer) 1
```

```
127.0.0.1:6379> SMEMBERS top5Music2017
1) "LeimenMusicFestival2017-06-11"
2) "RohrbachMusicFestival2017-07-11"
3) "HockenheimMusicFestival2017-08-11"
4) "NeckarMusicFestival2017-10-11"
5) "dielhemMusicFestival2017-10-11"
```