1. Member Schema

|  |  |  |
| --- | --- | --- |
| Column Name | Data Type | Constraints |
| id | Number | Unique |
| initials | String | Not Null |
| name | String | Not Null |
| email | String | Unique, Not Null, Validated |
| phone | String | Not Null |
| password | String | Not Null |
| designation | String | Not Null |
| guideApprovalLetter | String | Not Null |
| department | String | Not Null |
| institution | String | Not Null |
| riccoin | Number | Default: 0 |
| memberId | String | Default: null |
| approve | Boolean | Default: false |

2. OTP Schema

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** |
| email | String | Not Null |
| otp | String | Not Null |
| expiresAt | Date | Not Null, **Automatically expires after 5 minutes** |

3. Payment Schema

|  |  |  |
| --- | --- | --- |
| Column Name | Data Type | Constraints |
| booking\_id | String | Unique, Not Null (Reference to Booking ID) |
| member\_id | String | Default: null |
| amount | Number | Not Null (Base Amount before GST) |
| sgst | Number | Not Null (SGST Amount) |
| cgst | Number | Not Null (CGST Amount) |
| total\_amount | Number | Not Null (Total Amount after GST) |
| discount\_percentage | Number | Default: 0 (Discount Percentage if any) |
| final\_price | Number | Not Null (Final Payable Amount after discount) |
| riccoin\_deduction | Number | Default: 0 |
| paid\_status | String | Default: 0 |
| transaction\_id | String | Enum: "Pending", "Paid", "Failed", Default: "Pending" |
| payment\_proof | String | Default: null (File path/URL for payment proof) |
| createdAt | Timestamp | Auto-generated |
| updatedAt | Timestamp | Auto-generated |

4. Instrument Schema

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** |
| **ins\_id** | String | Unique, Not Null |
| **instrumentName** | String | Not Null |
| **inst\_image** | String | Not Null |
| **instrumentTypes** | Array (Object) | Default: null |
| **instrumentTypes.name** | String | Not Null |
| **instrumentTypes.amountTypes** | Array (Object) | Default: null |
| **instrumentTypes.amountTypes.name** | String | Not Null |
| **instrumentTypes.amountTypes.amount** | Number | Not Null |
| **elements** | Array (Object) | Default: null |
| **elements.name** | String | Not Null |
| **elements.amountTypes** | Array (Object) | Default: null |
| **elements.amountTypes.name** | String | Not Null |
| **elements.amountTypes.amount** | Number | Not Null |
| **gst.sgst** | Number | Not Null |
| **gst.cgst** | Number | Not Null |
| **features** | String | Not Null |
| **generalAvailability** | Boolean | Not Null |
| **defaultSlots** | Array (String) | Not Null |
| **bookedSlots** | Array (Object) | Default: [] |
| **bookedSlots.date** | String | Not Null |
| **bookedSlots.slot** | String | Not Null |
| **bookedSlots.isBooked** | Boolean | Not Null, Default: true |
| **d\_amountTypes** | Array (Object) | Default: null |
| **d\_amountTypes.name** | String | Not Null |
| **d\_amountTypes.amount** | Number | Not Null |
| **hour\_basis** | Boolean | Not Null, Default: false |
| **createdAt** | Date | Auto-generated |
| **updatedAt** | Date | Auto-generated |

5. Booking Schema

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Constraints** |
| **booking\_id** | String | Unique, Not Null |
| **instrument\_id** | String | Not Null |
| **instrument\_name** | String | Not Null |
| **slots** | Array (String) | Not Null |
| **date** | String | Not Null |
| **no\_of\_hours** | Number | Default: null |
| **no\_of\_samples** | Number | Default: null |
| **instrument\_type** | String | Default: null |
| **element\_type** | Array (Object) | Default: null |
| **element\_type.elementName** | String | Not Null |
| **element\_type.samples** | Number | Not Null |
| **amount** | Number | Not Null |
| **gst.sgst** | Number | Not Null |
| **gst.cgst** | Number | Not Null |
| **total\_amount** | Number | Not Null |
| **member\_id** | String | Default: null |
| **name** | String | Not Null |
| **designation** | String | Not Null |
| **department** | String | Not Null |
| **mobile\_number** | String | Not Null |
| **email** | String | Not Null |
| **guide\_name** | String | Not Null |
| **guide\_email** | String | Not Null |
| **guide\_approval\_letter** | String | Default: null |
| **discount** | Number | Default: null |
| **status** | String (Enum) | ["Pending", "Accepted", "Rejected", "Completed"], Default: "Pending" |
| **report** | String | Default: null |
| **staff\_incharge** | String | Default: null |
| **createdAt** | Timestamp | Auto-generated |
| **updatedAt** | Timestamp | Auto-generated |