**TABLE DESIGN**

1. **User**

Primary Key: UserId

Foreign Key: RoleId references Role

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | UserId | int | Primary Key | Key for this table |
| 2 | UserName | string | Not Null | User's username |
| 3 | Password | string | Not Null | User's password |
| 4 | Email | string | Not Null | User's email address |
| 5 | FirstName | string | Not Null | User's first name |
| 6 | LastName | string | Not Null | User's last name |
| 7 | ContactNumber | string | Not Null | User's contact number |
| 8 | Address | string | Not Null | User's address |
| 9 | EmailConfirmed | bool | Not Null | Indicates if email is confirmed |
| 10 | RoleId | int | Foreign Key | Foreign key to Role |
| 11 | CreatedBy | string | Not Null | Created by user |
| 12 | Status | string | Not Null | User's status |
| 13 | CreatedOn | DateTime | Not Null | Date and time of creation |

1. **Race**

Primary Key: RaceId

Foreign Key: SeasonId references Season

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| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | RaceId | int | Primary Key | Key for this table |
| 2 | RaceName | string | Not Null | Name of the race |
| 3 | SeasonId | int | Foreign Key | Identifier of the associated season |
| 4 | RaceDate | DateTime | Not Null | Date of the race |
| 5 | RaceLocation | string | Not Null | Location of the race |
| 6 | ImageFile | IFormFile | Not Null | Image file of the race |
| 7 | ImagePath | string | Not Null | Path to the image file of the race |

1. **TicketCategory**

Primary Key: TicketCategoryId

|  |  |  |  |  |
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| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | TicketCategoryId | int | Primary Key | Key for this table |
| 2 | CategoryName | string | Not Null | Name of the ticket category |
| 3 | Description | string | Not Null | Description of the ticket category |
| 4 | TicketPrice | int | Not Null | Price of the ticket category |
| 5 | ImageFile | IFormFile | Not Null | Image file of the ticket category |
| 6 | ImagePath | string | Not Null | Path to the image file of the ticket |

1. **TicketBooking**

Primary Key: TicketBookingId

Foreign Key: UserId references User, RaceId references Race, TicketCategoryId references TicketCategory

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| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | TicketBookingId | int | Primary Key | Key for this table |
| 2 | UniqueId | string | Not Null | Unique identifier for the ticket booking |
| 3 | ReceiptNumber | string | Not Null | Receipt number associated with the booking |
| 4 | UserId | int | Foreign Key | Foreign key to User |
| 5 | RaceId | int | Foreign Key | Foreign key to Race |
| 6 | TicketCategoryId | int | Foreign Key | Foreign key to TicketCategory |
| 7 | NumberOfTicketsBooked | int | Not Null | Number of tickets booked |
| 8 | BookingDate | DateTime | Not Null | Date and time of booking |
| 9 | TotalAmount | decimal | Not Null | Total amount for the booking |
| 10 | PaymentStatus | string | Not Null | Payment status (Paid/Unpaid) |
| 11 | PaymentDate | DateTime | Not Null | Date and time of payment |
| 12 | Confirmation  Number | string | Not Null | Confirmation number |
| 13 | BookingStatus | string | Not Null | Booking status (Confirmed/Cancelled) |
| 14 | FirstName | string | Not Null | First name of the person booking |
| 15 | LastName | string | Not Null | Last name of the person booking |
| 16 | Address | string | Not Null | Address of the person booking |
| 17 | Email | string | Not Null | Email of the person booking |
| 18 | PhoneContact | string | Not Null | Phone contact of the person booking |

1. **Discussion**

Primary Key: DiscussionId

Foreign Key: UserId references User

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| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | DiscussionId | int | Primary Key | Key for this table |
| 2 | Title | string | Not Null | Title of the discussion |
| 3 | Content | string | Not Null | Content of the discussion |
| 4 | CreatedOn | DateTime | Not Null | Date and time of the discussion is created |
| 5 | UserId | int | Foreign Key | User who created the discussion |

1. **Comment**

Primary Key: CommentId

Foreign Key: UserId references User, DiscussionId references Discussion

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| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | CommentId | int | Primary Key | Key for this table |
| 2 | Content | string | Not Null | Content of the comment |
| 3 | CreatedOn | DateTime | Not Null | Date and time, the comment is created |
| 4 | UpdatedOn | DateTime | Not Null | Date and time, the comment is updated |
| 5 | UserId | int | Foreign Key | User who made the comment |
| 6 | DiscussionId | int | Foreign Key | Identifier of the associated discussion |

1. **Forum**

Primary Key: ForumId

Foreign Key: UserId references User

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| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | ForumId | int | Primary Key | Key for this table |
| 2 | Title | string | Not Null | Title of the forum |
| 3 | Description | string | Not Null | Description of the forum |
| 4 | CreatedOn | DateTime | Not Null | Date and time when the forum is created |
| 5 | UserId | int | Foreign Key | User who created the forum |

1. **Team**

Primary Key: TeamId

Foreign Key: UserId references User

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| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | TeamId | int | Primary Key | Key for this table |
| 2 | TeamName | string | Not Null | Name of the team |
| 3 | Description | string | Not Null | Description of the team |
| 4 | CreatedOn | DateTime | Not Null | Date and time when the team is created |
| 5 | UserId | int | Foreign Key | User who created the team |

1. **Product**

Primary Key: ProductId

Foreign Key: TeamId references Team

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| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | ProductId | int | Primary Key | Key for this table |
| 2 | Name | string | Not Null | Name of the product |
| 3 | Description | string | Not Null | Description of the product |
| 4 | Price | decimal | Not Null | Price of the product |
| 5 | ImageFile | IFormFile | Not Null | Image file of the product |
| 6 | ImagePath | string | Not Null | Path to the image file of the product |
| 7 | CreatedOn | DateTime | Not Null | Date and time, the product is created |
| 8 | TeamId | int | Foreign Key | The team associated with the product |

1. **Order**

Primary Key: OrderId

Foreign Key: UserId references User, ProductId references Product

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| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | OrderId | int | Primary Key | Key for this table |
| 2 | OrderNumber | string | Not Null | Order number |
| 3 | UserId | int | Foreign Key | User who placed the order |
| 4 | ProductId | int | Foreign Key | Identifier of the product ordered |
| 5 | Quantity | int | Not Null | Quantity of the product ordered |
| 6 | TotalAmount | decimal | Not Null | Total amount of the order |
| 7 | OrderDate | DateTime | Not Null | Date and time of the order |
| 8 | OrderStatus | string | Not Null | Status of the order |

1. **Attendance**

Primary Key: AttendanceId

Foreign Key: EmployeeId references User

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| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | AttendanceId | int | Primary Key | Key for this table |
| 2 | EmployeeId | int | Foreign Key | Identifier of the employee |
| 3 | Date | DateTime | Not Null | Date of attendance |
| 4 | TimeIn | DateTime | Not Null | Time in |
| 5 | TimeOut | DateTime | Not Null | Time out |

1. **F1History**

Primary Key: HistoryId

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| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | HistoryId | int | Primary Key | Key for this table |
| 2 | Heading | string | Not Null | Heading of the F1 history |
| 3 | Paragraph | string | Not Null | Paragraph describing the F1 history |

1. **TeamHistory**

Primary Key: HistoryId

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | HistoryId | int | Primary Key | Key for this table |
| 2 | Heading | string | Not Null | Heading of the team history |
| 3 | Paragraph | string | Not Null | Paragraph describing the team history |

1. **Gallery**

Primary Key: ImageId

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | ImageId | int | Primary Key | Key for this table |
| 2 | ImageUrl | string | Not Null | URL of the gallery image |
| 3 | Caption | string | Not Null | Caption for the gallery image |

1. **Role**

Primary Key: RoleId

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | RoleId | int | Primary Key | Key for this table |
| 2 | RoleName | string | Not Null | Name of the role |
| 3 | CreatedBy | string | Not Null | User who created the role |
| 4 | CreatedOn | DateTime | Not Null | Date and time when the role is created |

1. **Season**

Primary Key: SeasonId

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | SeasonId | int | Primary Key | Key for this table |
| 2 | Year | int | Not Null | Year of the season |
| 3 | Champion | string | Not Null | Champion of the season |
| 4 | ImageFile | IFormFile | Not Null | Image file of the season |
| 5 | ImagePath | string | Not Null | Path to the image file of the season |

1. **Poll**

Primary Key: PollId

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | PollId | int | Primary Key | Key for this table |
| 2 | Question | string | Not Null | Question for the poll |
| 3 | Option1 | string | Not Null | Option 1 for the poll |
| 4 | Option2 | string | Not Null | Option 2 for the poll |
| 5 | Option3 | string | Not Null | Option 3 for the poll (Nullable) |
| 6 | CreatedOn | DateTime | Not Null | Date and time when the poll is created |
| 7 | PollingDate | DateTime | Not Null | Date when the poll is scheduled for polling |

1. **Vote**

Primary Key: VoteId

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | VoteId | int | Primary Key | Key for this table |
| 2 | UserId | int | Not Null | User ID associated with vote |
| 3 | PollId | int | Not Null | Poll ID associated with vote |
| 4 | OptionId | int | Not Null | Option ID chosen by the user |

**19. ErrorLog**

Primary Key: Id

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | Id | int | Primary Key | Key for this table |
| 2 | Message | string | Not Null | Error message |
| 3 | Source | string | Not Null | Source of the error |
| 4 | StackTrace | string | Not Null | Stack trace information |
| 5 | TargetSite | string | Not Null | Target site of the error |
| 6 | InnerException | string | Not Null | Inner exception information |
| 7 | Data | string | Not Null | Additional data related to the error |
| 8 | HelpLink | string | Not Null | Help link for the error |
| 9 | HResult | string | Not Null | Result code of the error |
| 10 | Type | string | Not Null | Type of the error |
| 11 | User | string | Not Null | User related to the error |
| 12 | CreatedOn | DateTime | Not Null | Date and time when the error is logged |

**20. UserSession**

Primary Key: SessionId

Foreign Key: UserId references User

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | SessionId | int | Primary Key | Key for this table |
| 2 | UserId | int | Foreign Key | User ID associated with the session |
| 3 | LoginTime | DateTime | Not Null | Time of login |
| 4 | LogoutTime | DateTime | Not Null | Time of logout |

1. **TeamAchievement**

Primary Key: AchievementId

Foreign Key: TeamId references Team

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | AchievementId | int | Primary Key | Key for this table |
| 2 | TeamId | int | Foreign Key | Team ID associated with the achievement |
| 3 | AchievementDescription | string | Not Null | Description of the achievement |
| 4 | AchievementDate | DateTime | Not Null | Date of the achievement |

1. **Admin**

Primary Key: AdminId

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | AdminId | int | Primary Key | Key for this table |
| 2 | UserName | string | Not Null | Admin's username |
| 3 | Password | string | Not Null | Admin's password |
| 4 | Email | string | Not Null | Admin's email address |
| 5 | FirstName | string | Not Null | Admin's first name |
| 6 | LastName | string | Not Null | Admin's last name |
| 7 | CreatedOn | DateTime | Not Null | Date and time when the admin is created |

1. **DiscussionApproval**

Primary Key: ApprovalId

Foreign Key: DiscussionId references Discussion

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | ApprovalId | int | Primary Key | Key for this table |
| 2 | DiscussionId | int | Foreign Key | Identifier of the discussion |
| 3 | ApprovedBy | string | Not Null | User who approved the discussion |
| 4 | ApprovedOn | DateTime | Not Null | Date and time ,the discussion is approved |

1. **CommentApproval**

Primary Key: ApprovalId

Foreign Key: CommentId references Comment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | ApprovalId | int | Primary Key | Key for this table |
| 2 | CommentId | int | Foreign Key | Identifier of the comment |
| 3 | ApprovedBy | string | Not Null | User who approved the comment |
| 4 | ApprovedOn | DateTime | Not Null | Date and time, the comment is approved |

1. **TeamMember**

Primary Key: MemberId

Foreign Key: UserId references User, TeamId references Team

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | MemberId | int | Primary Key | Key for this table |
| 2 | UserId | int | Foreign Key | Identifier of the user |
| 3 | TeamId | int | Foreign Key | Identifier of the team |
| 4 | Role | string | Not Null | Role of the team member |

1. **TicketManagement**

Primary Key: TicketId

Foreign Key: TicketCategoryId references TicketCategory, RaceId references Race

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | TicketId | int | Primary Key | Key for this table |
| 2 | TicketCategoryId | int | Foreign Key | Identifier of the ticket category |
| 3 | RaceId | int | Foreign Key | Identifier of the race |
| 4 | AvailableCapacity | int | Not Null | Available capacity of the ticket |
| 5 | TotalCapacity | int | Not Null | Total capacity of the ticket |

1. **ForumManagement**

Primary Key: ForumId

Foreign Key: UserId references Use

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | ForumId | int | Primary Key | Key for this table |
| 2 | Title | string | Not Null | Title of the forum |
| 3 | Description | string | Not Null | Description of the forum |
| 4 | CreatedOn | DateTime | Not Null | Date and time when the forum is created |
| 5 | UserId | int | Foreign Key | User, who created the forum |

1. **TeamManagement**

Primary Key: TeamId

Foreign Key: UserId references User

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | TeamId | int | Primary Key | Key for this table |
| 2 | TeamName | string | Not Null | Name of the team |
| 3 | Description | string | Not Null | Description of the team |
| 4 | CreatedOn | DateTime | Not Null | Date and time when the team is created |
| 5 | UserId | int | Foreign Key | User, who created the team |

1. **MLFaceDetectionLog**

Primary Key: LogId

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Field name** | **Datatype** | **Key Constraints** | **Description of the field** |
| 1 | LogId | int | Primary Key | Key for this table |
| 2 | UserId | int | Not Null | User ID associated with face detection |
| 3 | ImageFile | IFormFile | Not Null | Image file for face detection |
| 4 | DetectionResult | string | Not Null | Result of face detection |
| 5 | DetectionTime | DateTime | Not Null | Date and time of face detection |