

**CSE302: Database Systems (Section: 2)**

**[Summer 2021]**

**Project Report**

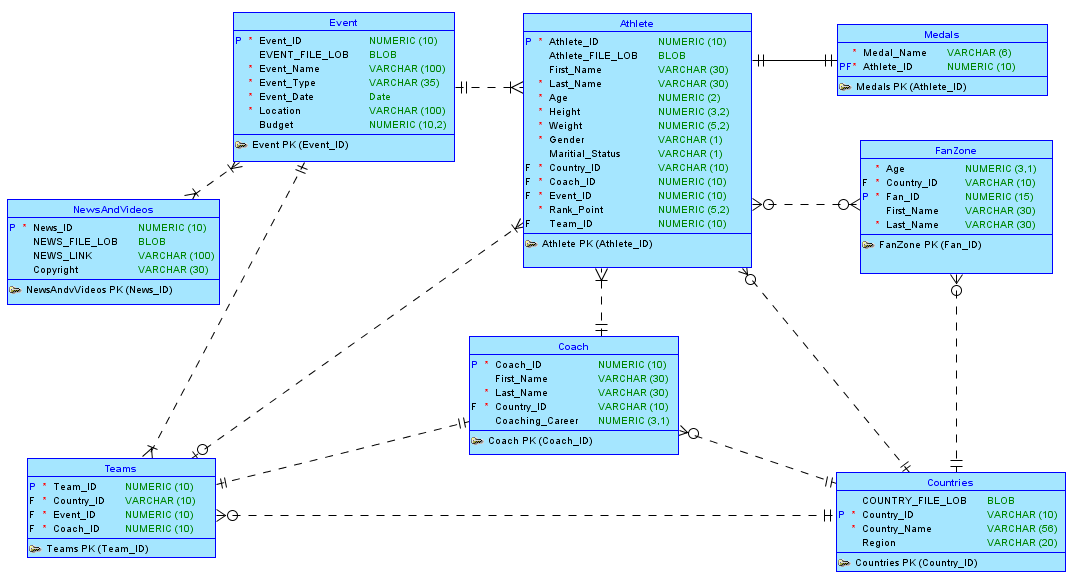
**Tokyo Olympic 2020**

Project: <https://apex.oracle.com/pls/apex/f?p=44413>

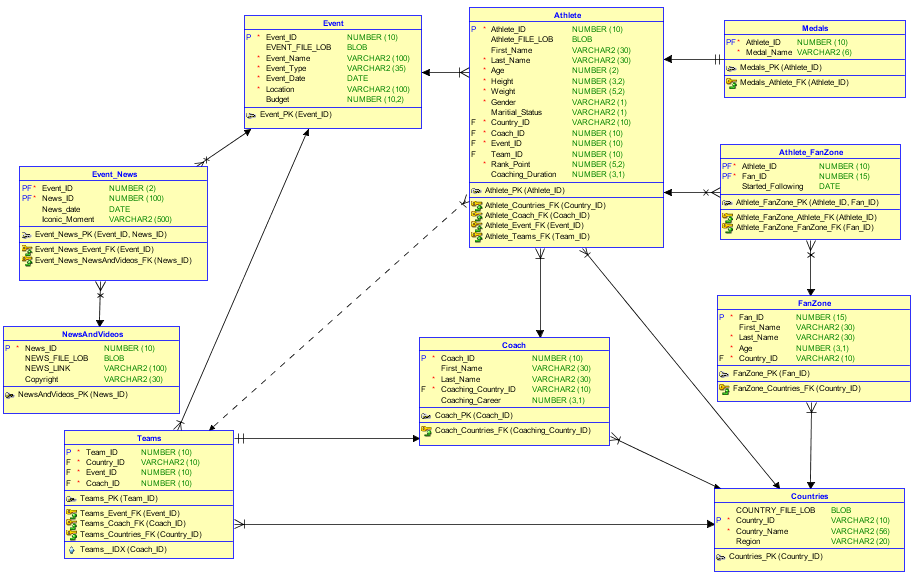
**Submitted by: Group 03**

|  |  |  |
| --- | --- | --- |
| **Student ID** | **Student Name** | **Contribution Percentage** |
| **2019-1-60-068** | **Md. Shahadat Anik Sheikh** | **30%** |
| **2019-1-60-008** | **Md. Ahnaf Morshed** | **23%** |
| **2019-1-60-139** | **Fabiha Bushra Fabin** | **23%** |
| **2019-1-60-236** | **S. M. Manziul Azad** | **24%** |

# 1. The E-R Model of Tokyo Olympic 2020



# 2. The Relational Data Model of Tokyo Olympic 2020



The following E-R diagram and relationship schema is based upon current events. We have excluded any type of past events data to simplify the overall project for better understanding. We assumed that, an athlete can join only one event, that’s why an athlete can get maximum one medal. Any inclusion of past events or statistically data, the understanding of the overall project and functionality will be hampered and this could lead to data loss or data redundancy.

# Implementation Checklist

|  |  |
| --- | --- |
| Description | Remarks |
| Project ID | Application 44413 |
| Workspace Name | olympics2020\_sec2\_group3 |
| Workspace Email | 2019-1-60-068@std.ewubd.edu |
| Workspace Password | anik1234 |
|  |  |
| Authentication Type | Custom |
| Username and Password to Login | Username: 2019-1-60-068@std.ewubd.edu  Password: anik1234 |
| Username: admin  Password: admin123 |
| Username: contributor  Password: con123 |
| Username: reader  Password: reader123 |
| Username: Anik  Password: anik1234 |
| Username: Reporter  Password: repo123 |
| Uploaded and Displayed Images in Reports | Yes |
| Implemented Page-wise Authorization | Yes |
|  |  |
| Number of Reports with Forms | 9 |
| Number of Master-detail Forms | 3 |
| Number of Reports based on Queries, Aggregate Queries | 14 |
| Number of Parameterized Reports | 3 |
| Number of Graphs/Charts | 2 |
|  |  |
| Included any trigger/other feature which is not taught in class. If yes, please explain briefly. | Yes, we have included 8 triggers’, in which name like ‘ID\_INSERT’ automatically inserts the IDs of individual tables. And the name ‘RANK\_POINT\_INCREASE’ trigger increases the rank points automatically after inserting in medal table by its medal name. |
| Write the most unique feature/functionality in your application or the page of your application which you are proud of. Explain briefly. | We have added a slide, time and videos on the home page and icons for individual pages |

# Reports with Forms

|  |  |  |
| --- | --- | --- |
| Report Page Number and Name | Form Page Number and Name | Table |
| Page Number: 2  Name: Athletes | Page Number: 3  Name: Athletes Form | Athlete |
| Page Number: 4  Name: Events | Page Number: 5  Name: Events Form | Event |
| Page Number: 7  Name: Country | Page Number: 8  Name: Country Form | Countries |
| Page Number: 13  Name: Athlete-wise Medals Report | Page Number: 14  Name: Athlete-wise Medals Form | Medals |
| Page Number: 15  Name: News And Videos Report | Page Number: 16  Name: News And Videos Form | NewsAndVideos |
| Page Number: 18  Name: Coach Report | Page Number: 19  Name: Coach Form | Coach |
| Page Number: 20  Name: User Report | Page Number: 21  Name: User Form | My\_User |
| Page Number: 27  Name: FanZone | Page Number: 28  Name: FanZone Form | FanZone |
| Page Number: 33  Name: Athlete FanZone | Page Number: 34  Name: Athlete FanZone Form | Athlete\_FanZone |

Screenshots:

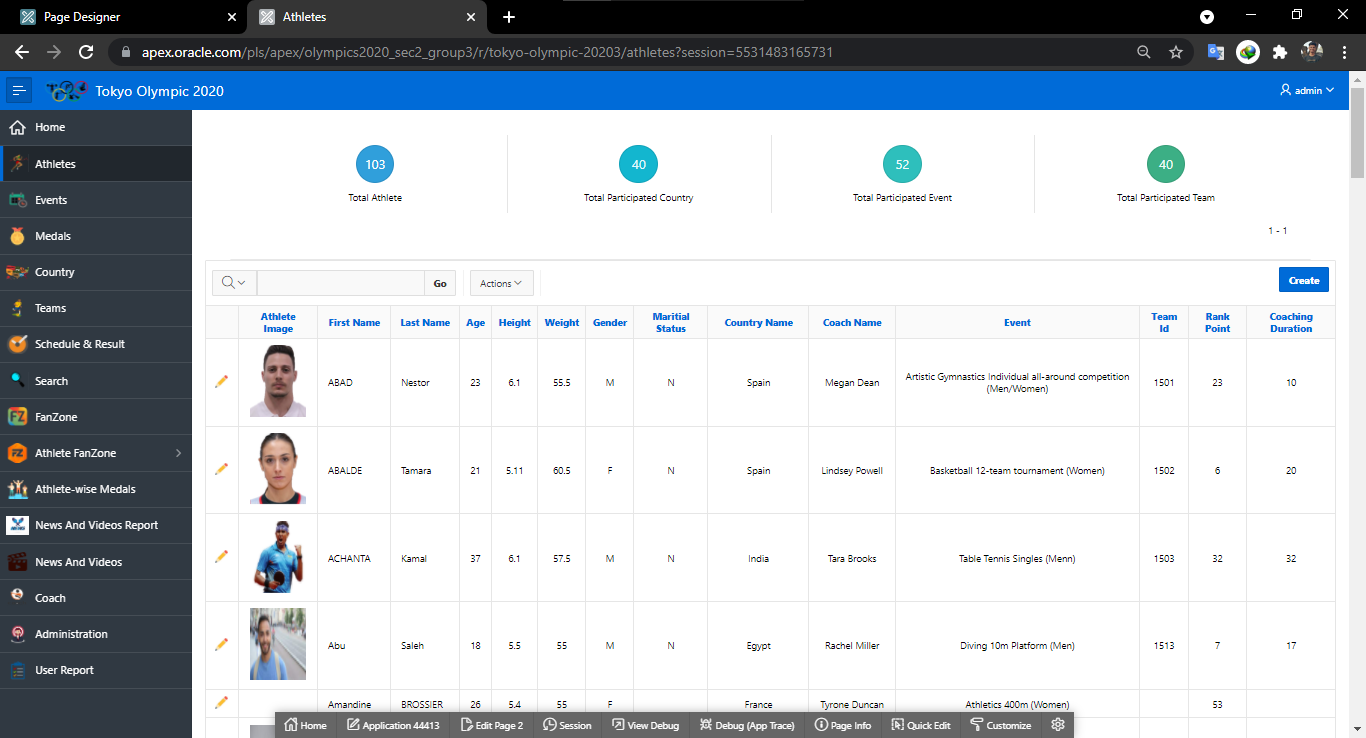


Figure 4.1: Athletes

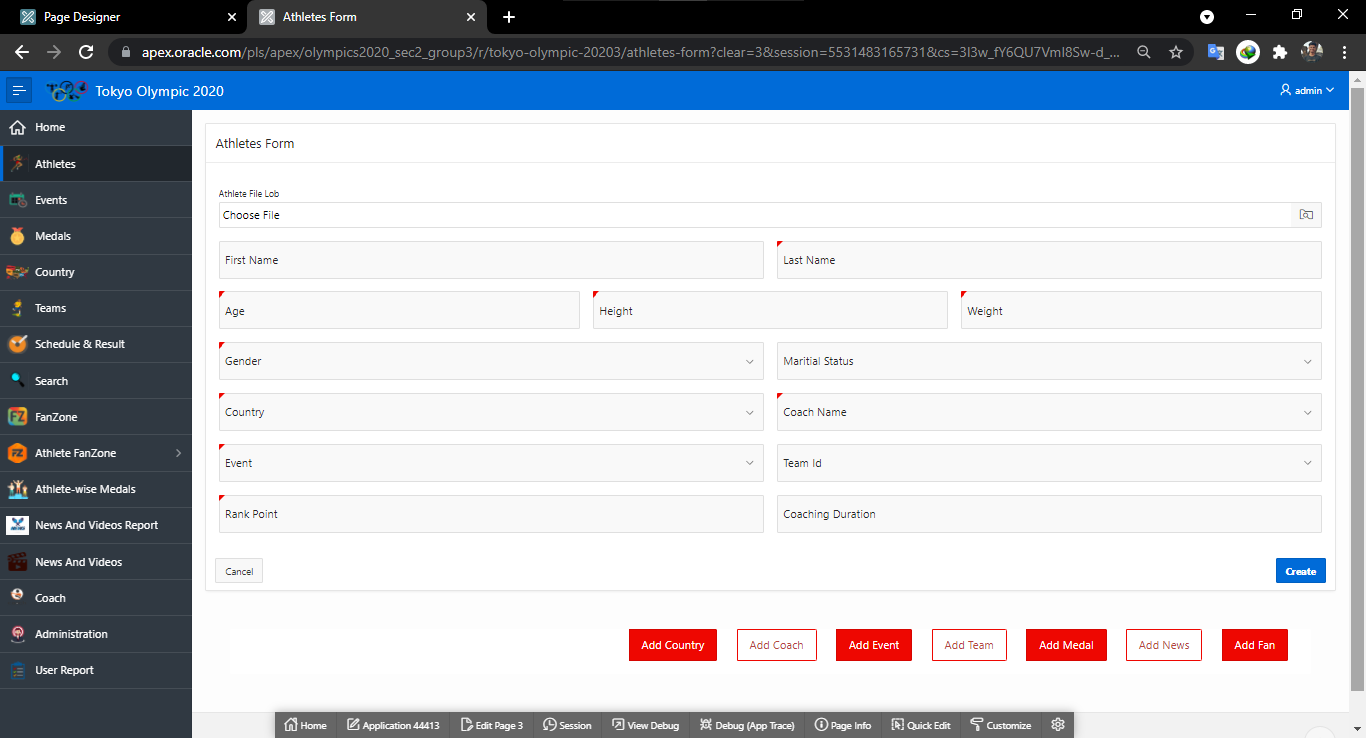


Figure 4.2: Athletes Form

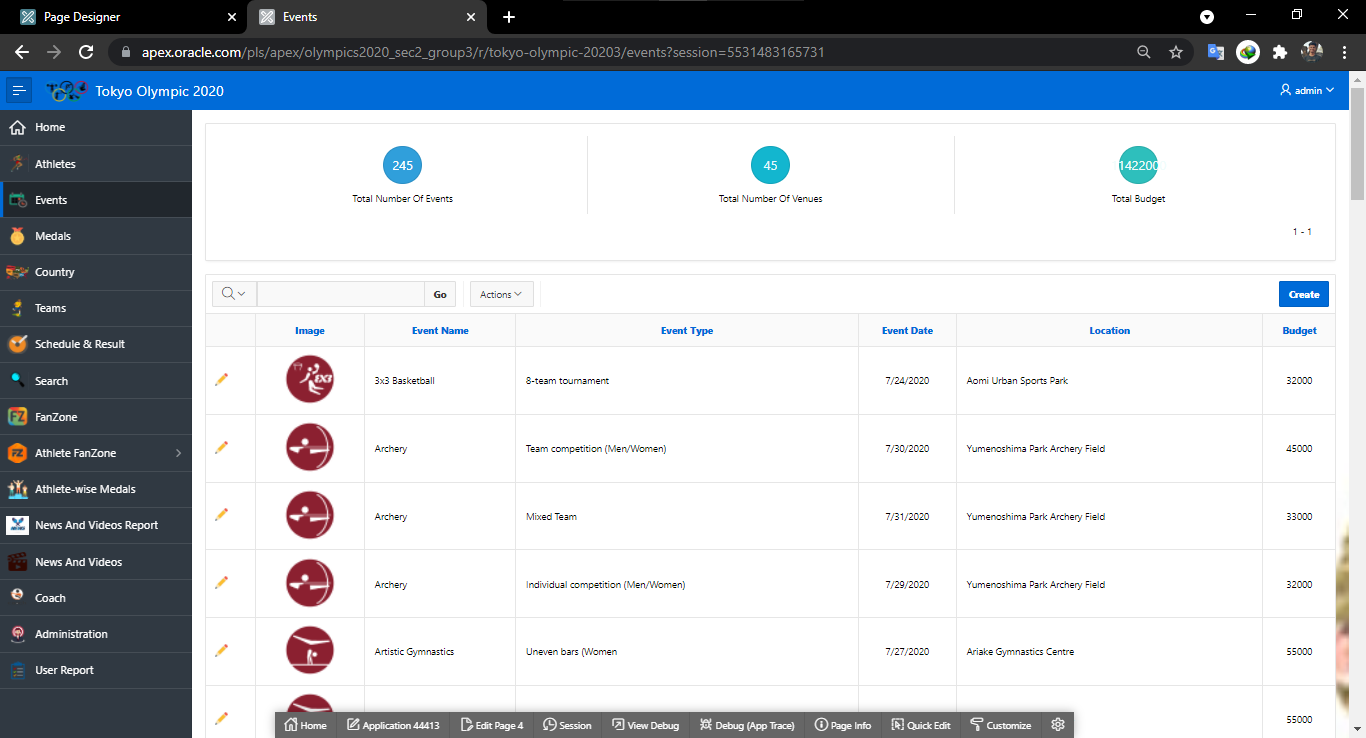


Figure 4.3: Events

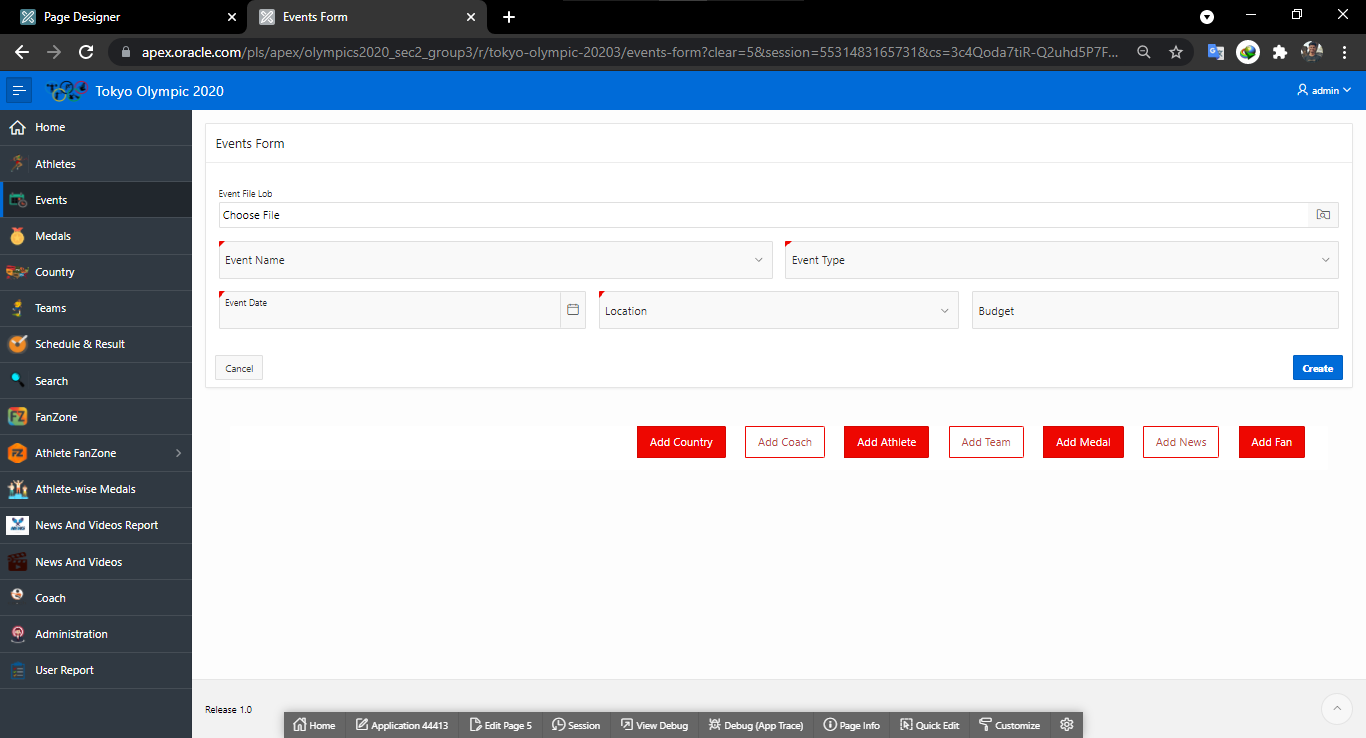


Figure 4.4: Events Form

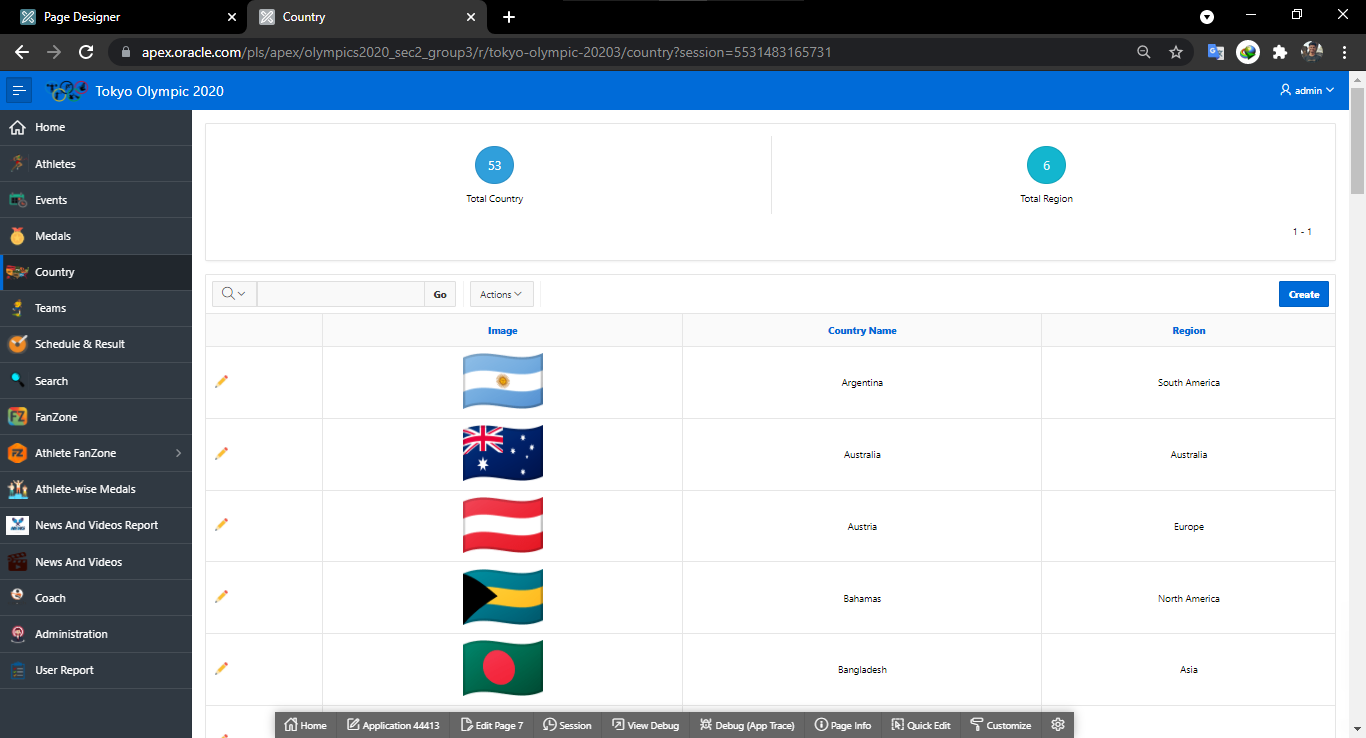


Figure 4.5: Country

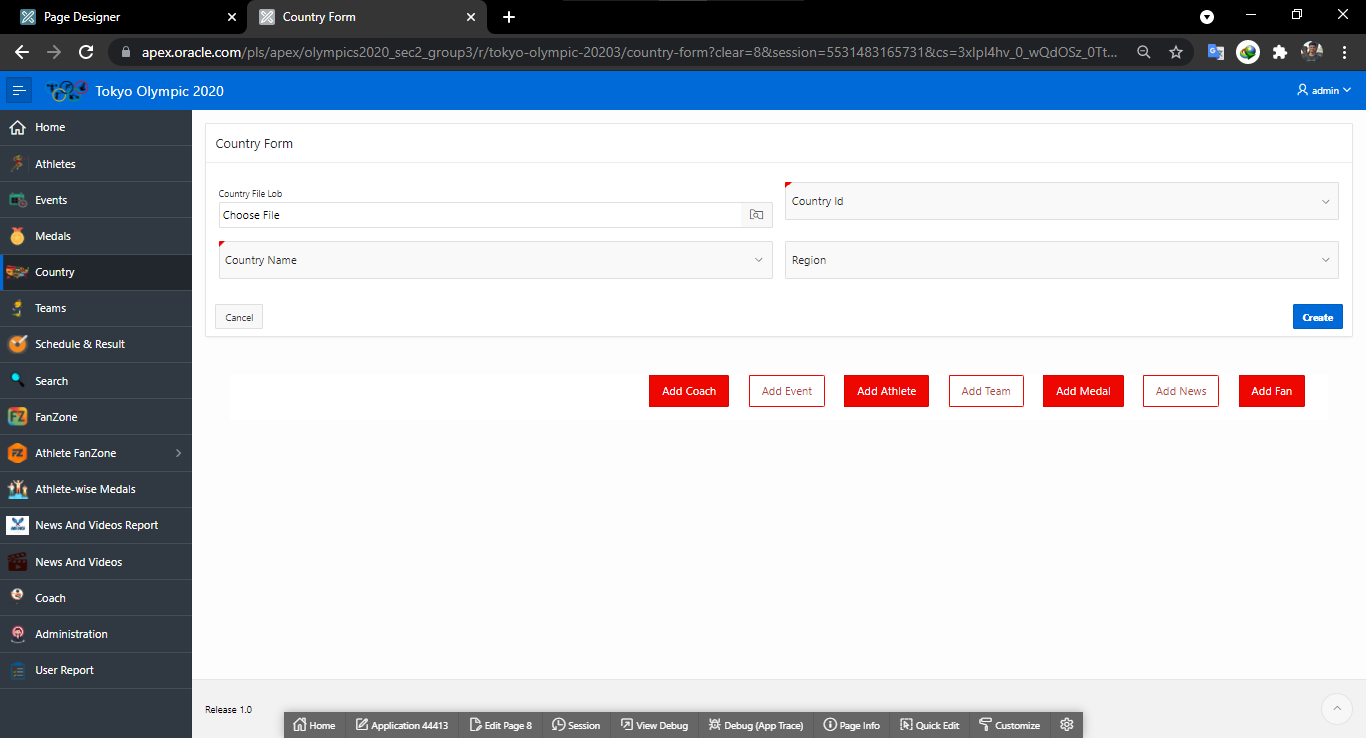


Figure 4.6: Country Form

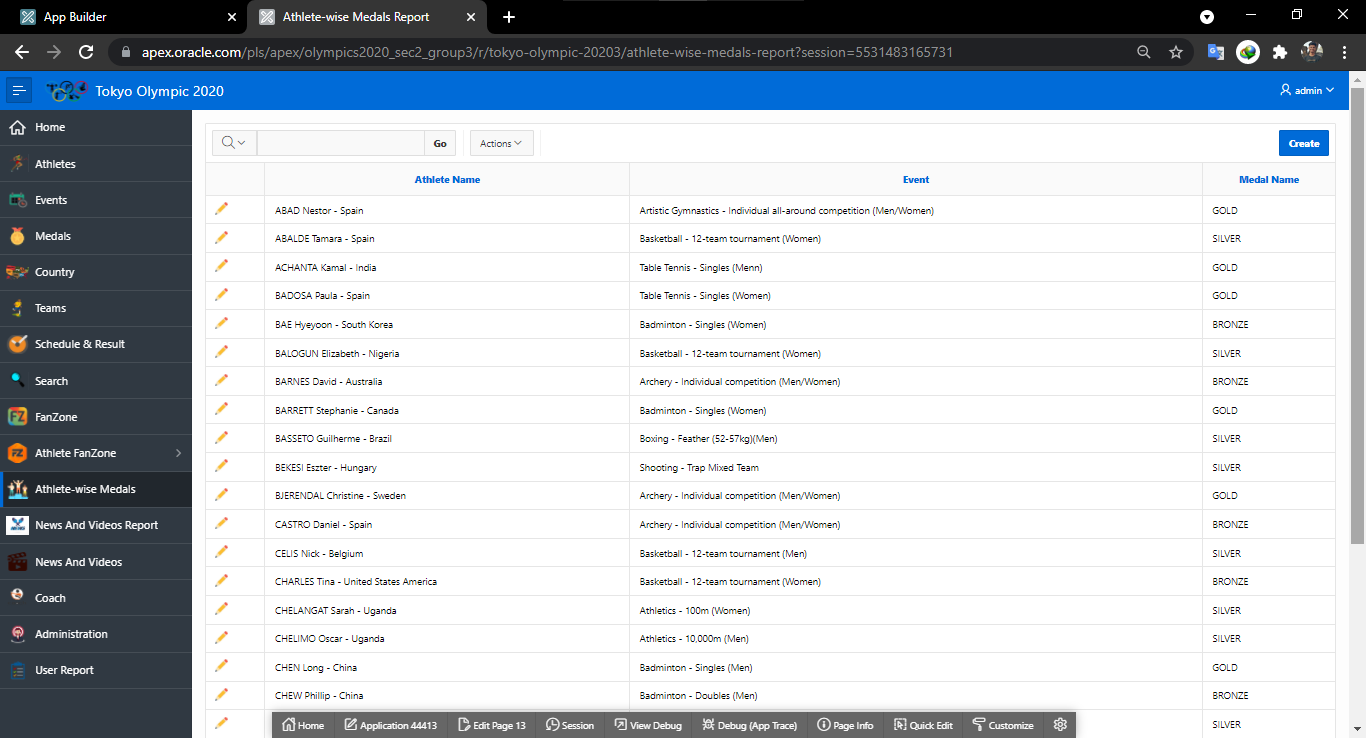


Figure 4.7: Athlete-wise Medals Report

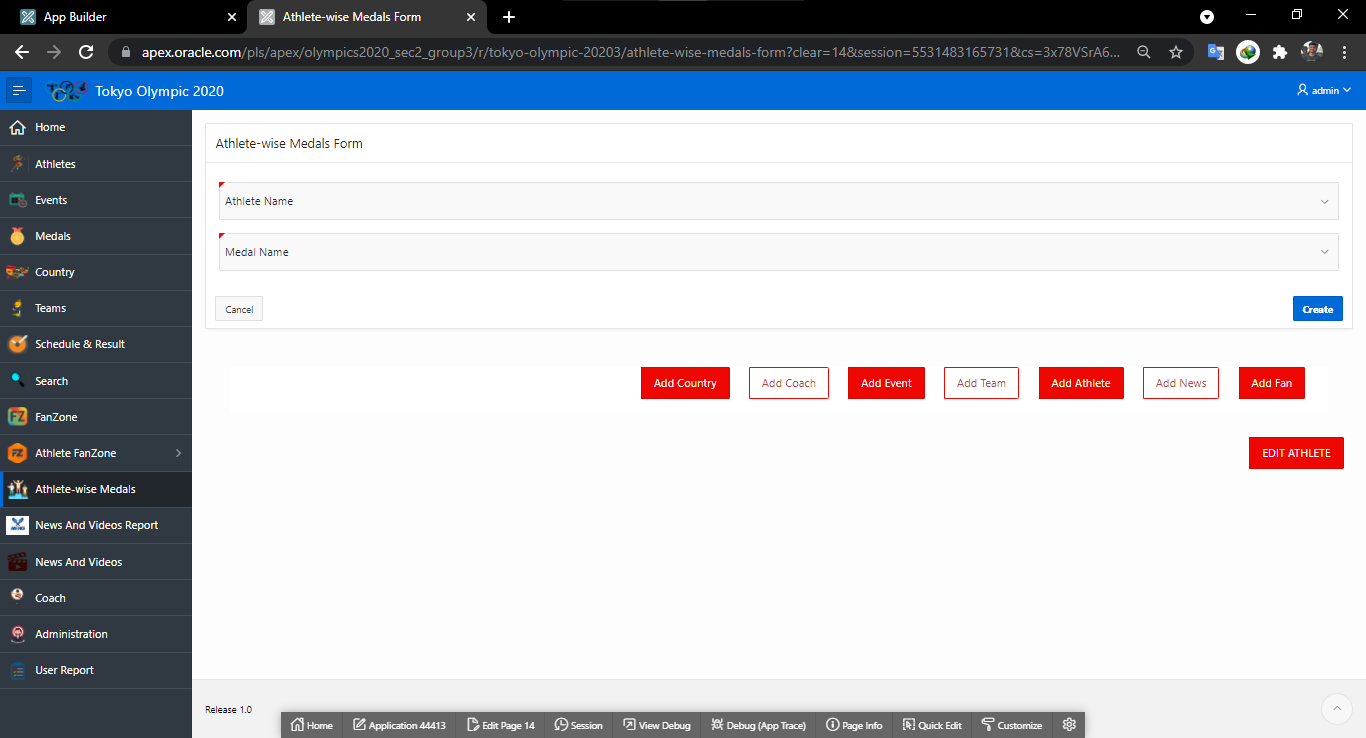


Figure 4.8: Athlete-wise Medals Form

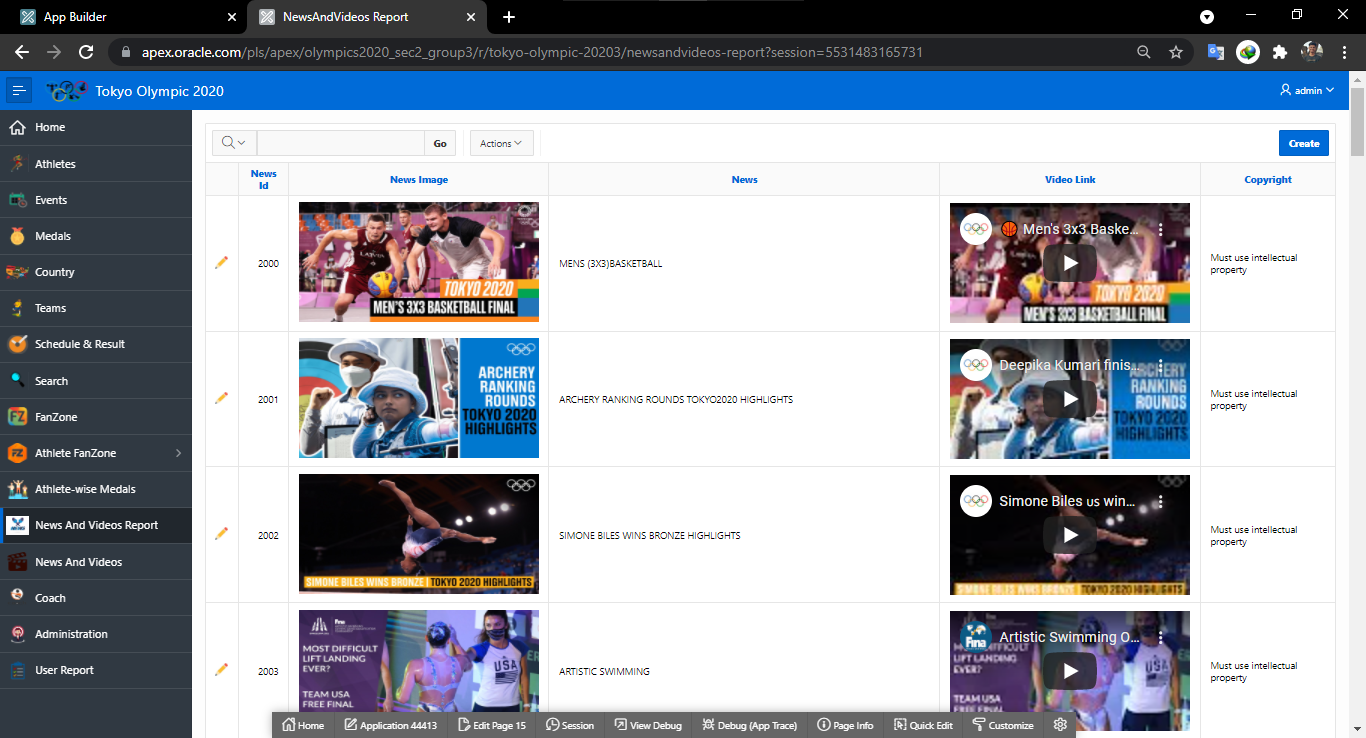


Figure 4.9: News And Videos Report

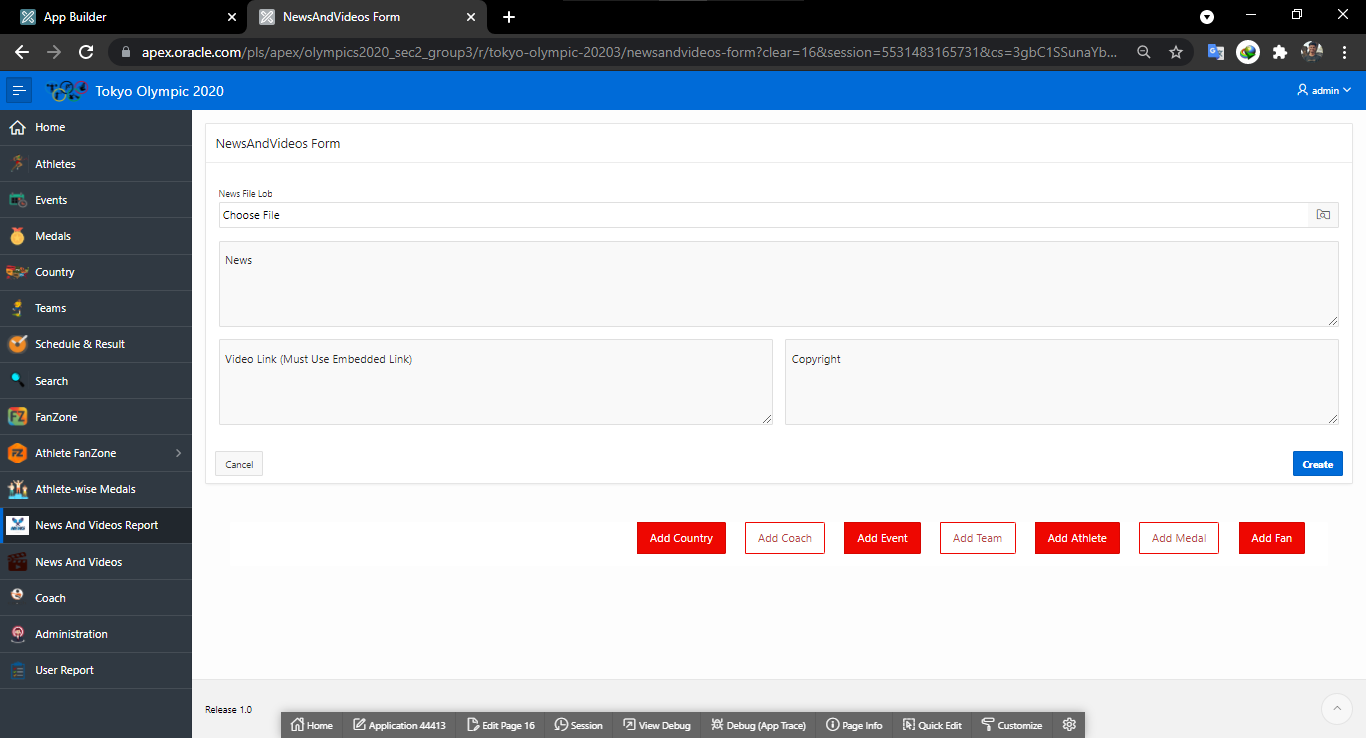


Figure 4.10: News And Videos Form

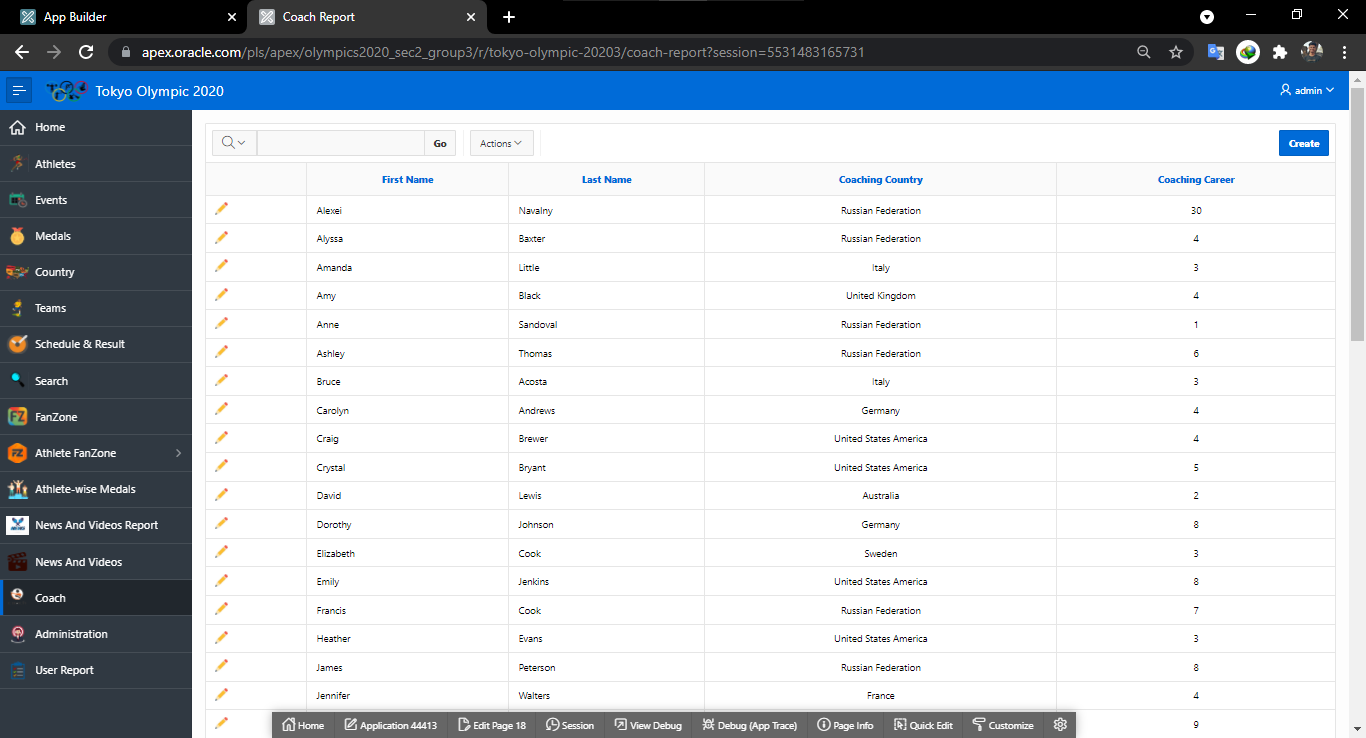


Figure 4.11: Coach Report

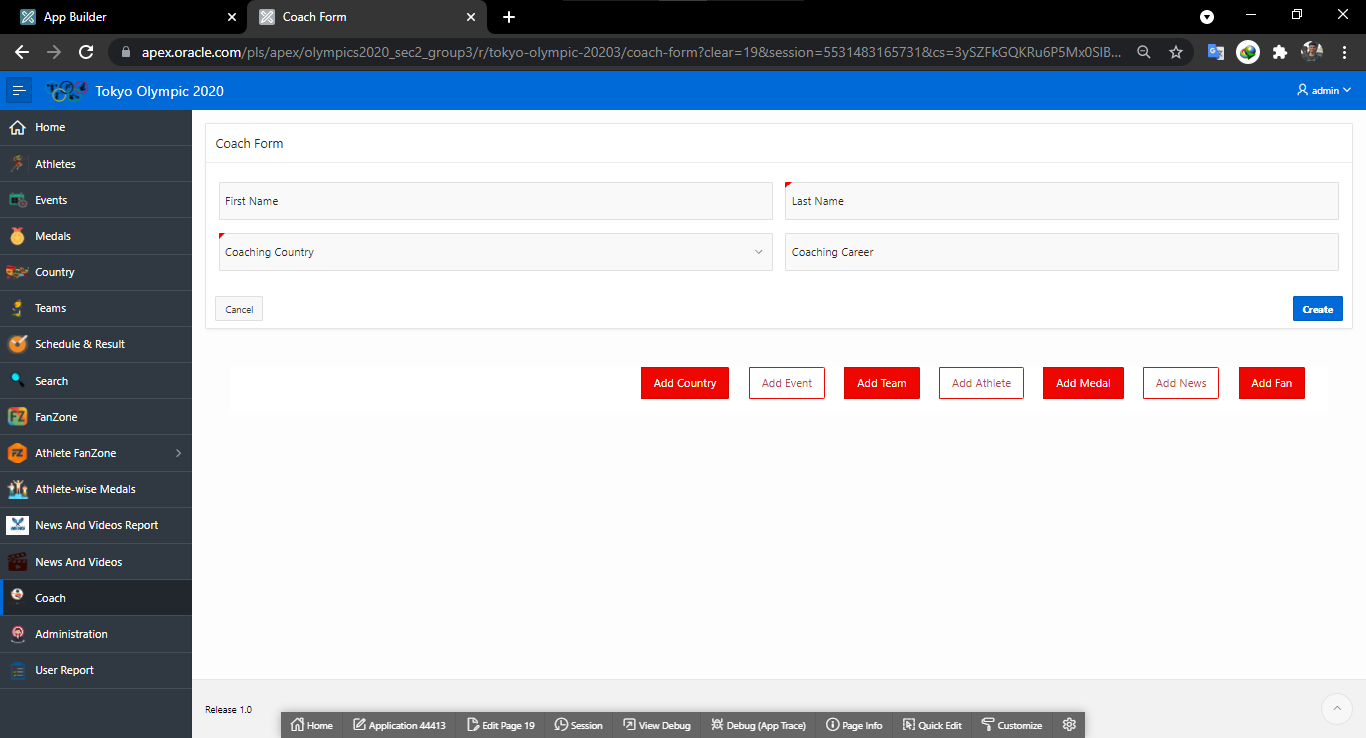


Figure 4.12: Coach Form

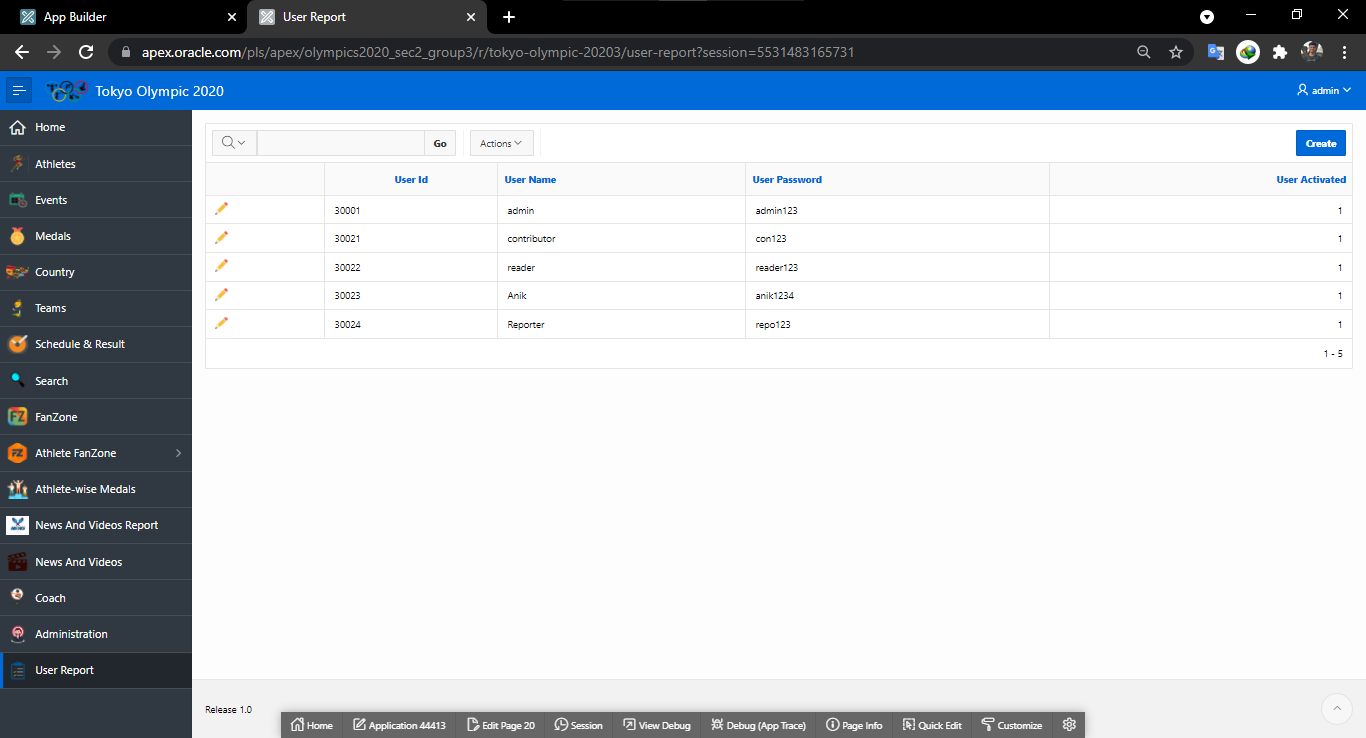


Figure 4.13: User Report

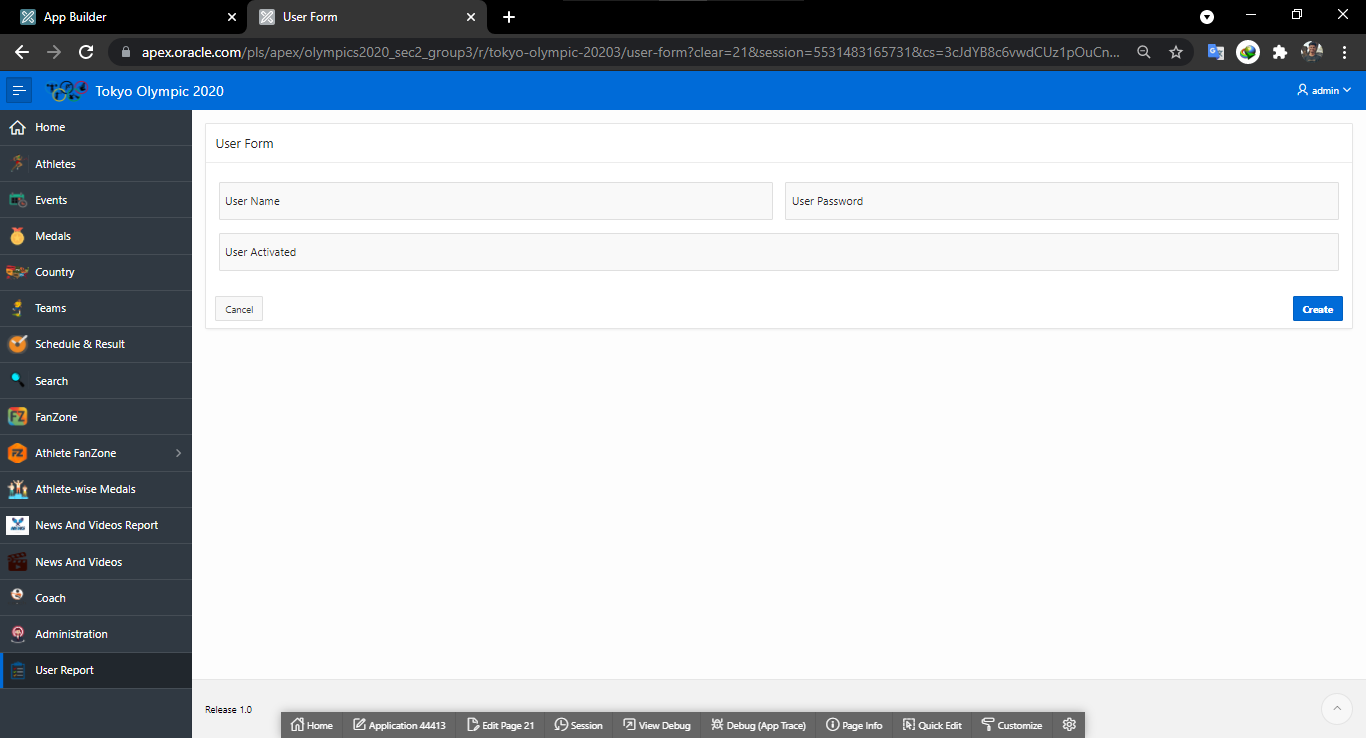


Figure 4.14: User Form

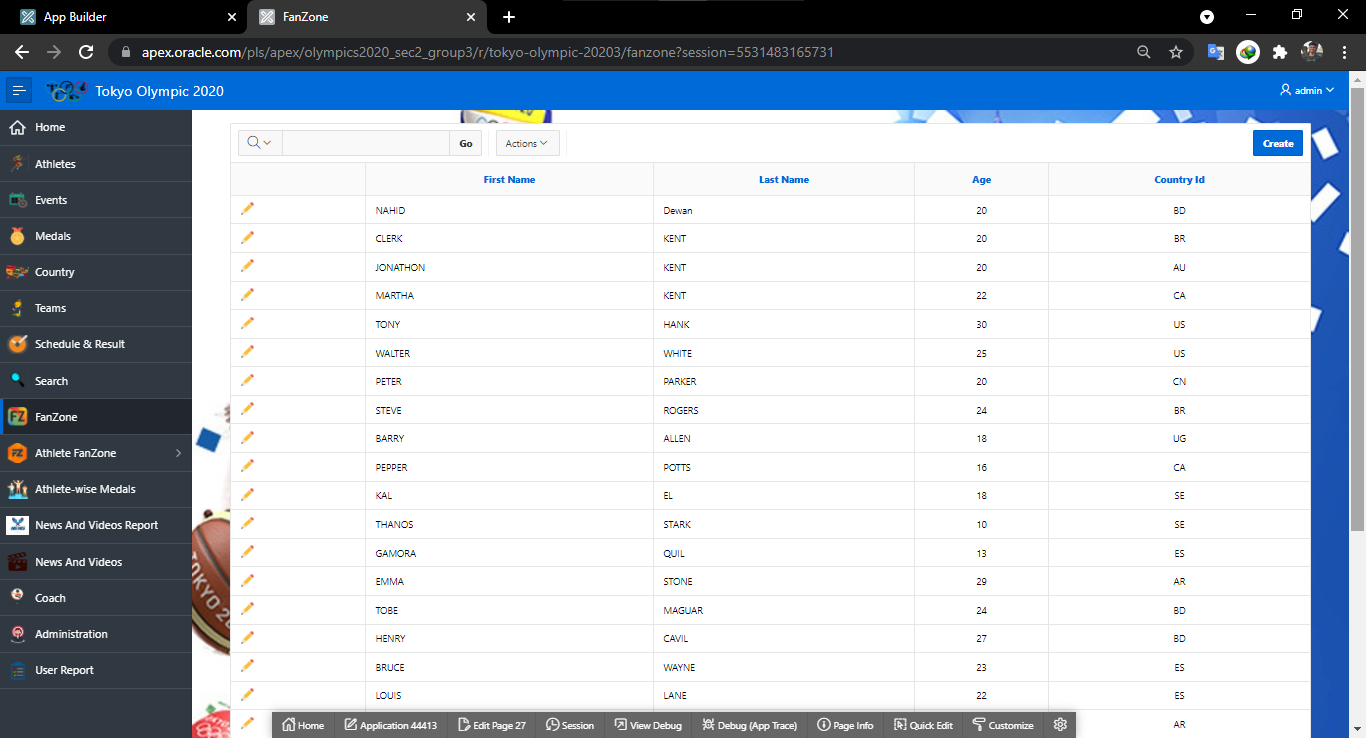


Figure 4.15: FanZone

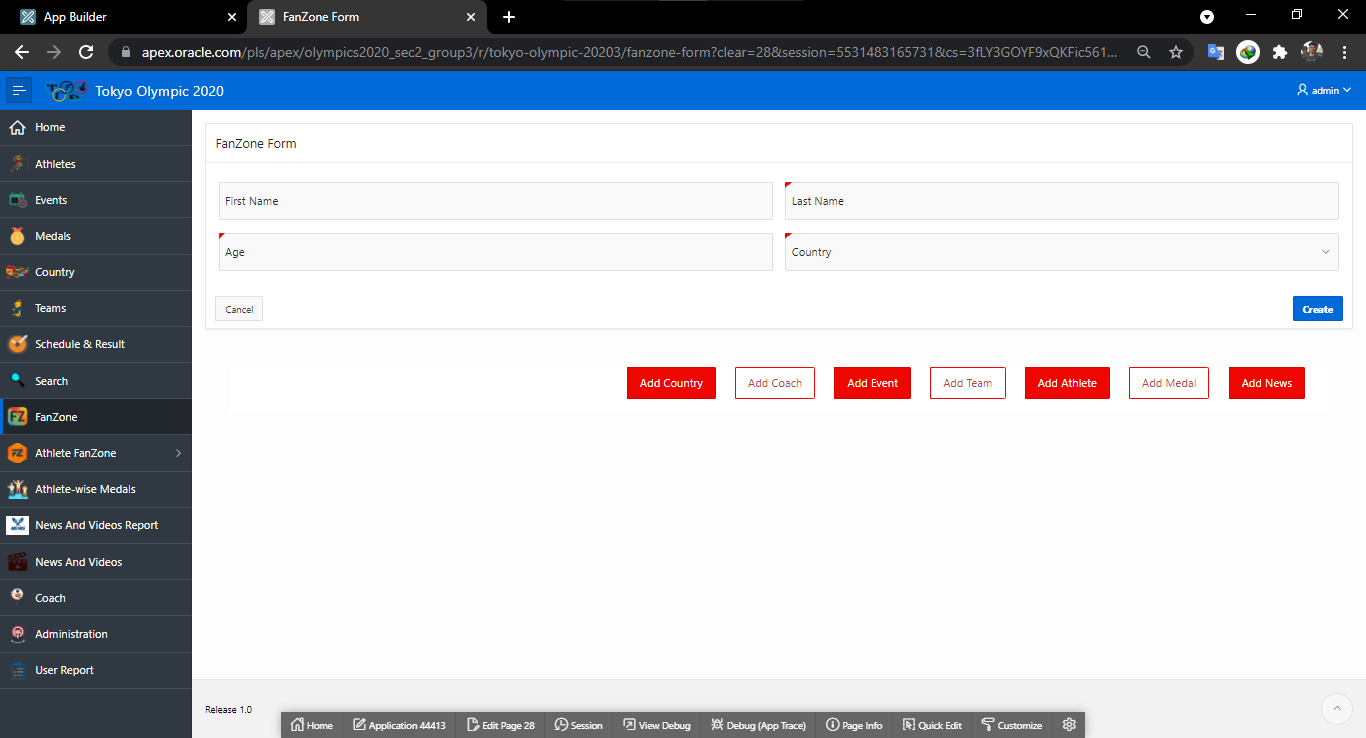


Figure 4.16: FanZone Form

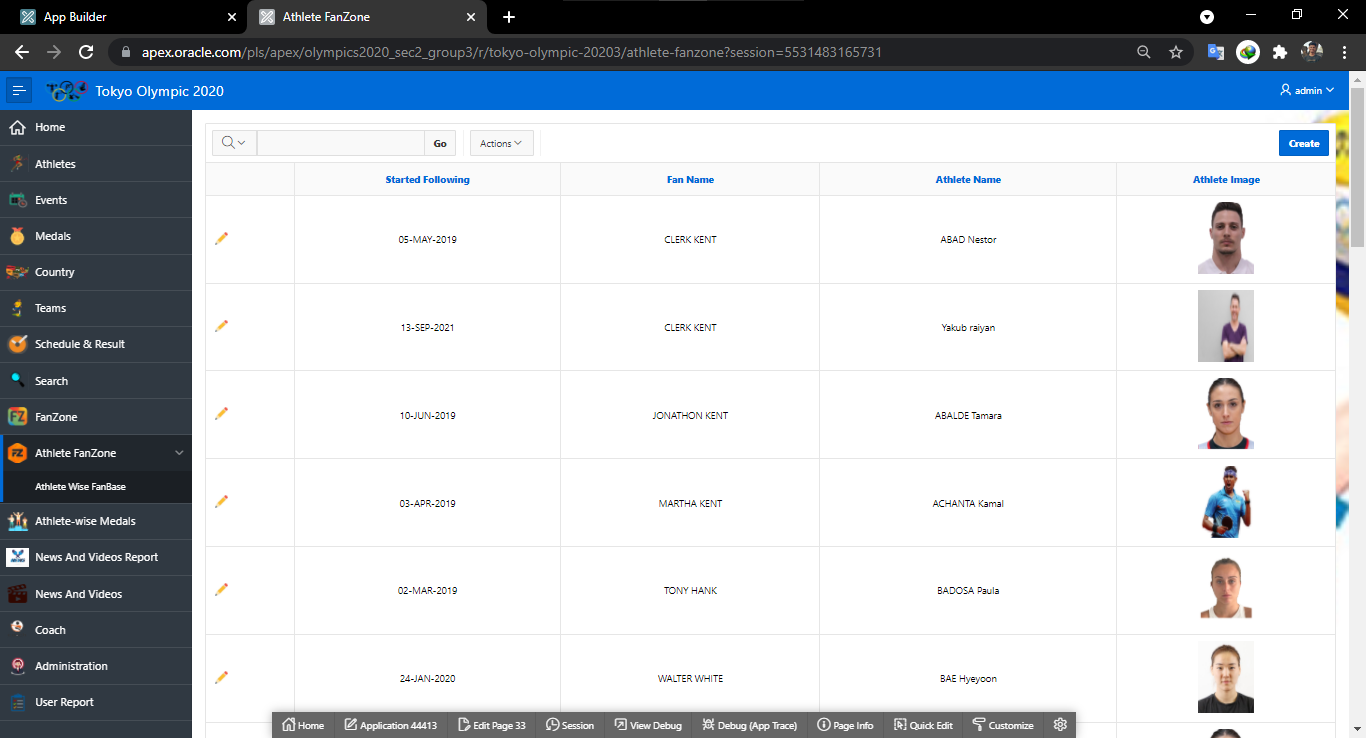


Figure 4.17: Athlete FanZone

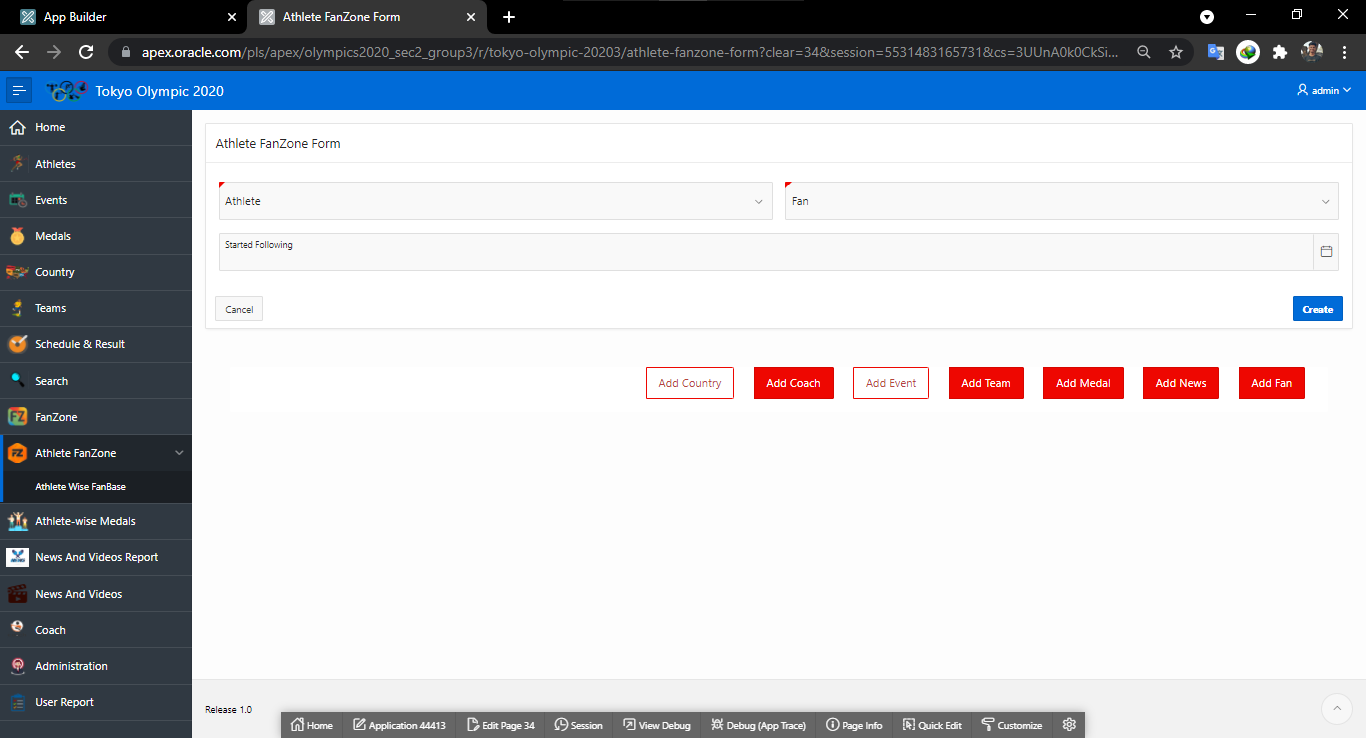


Figure 4.18: Athlete FanZone Form

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# Master-Detail Form

|  |  |  |
| --- | --- | --- |
| Page Number and Name | Master Table (Parent) | Detail Table (Child) |
| Page Number: 9  Page name: Teams | Country | Teams, Athlete |
| Page Number: 12  Page name: Schedule & Result | Event | Athlete, Teams |
| Page Number: 35  Page name: Athlete Wise FanBase | Athlete | Athlete\_FanZone |

Screenshots:

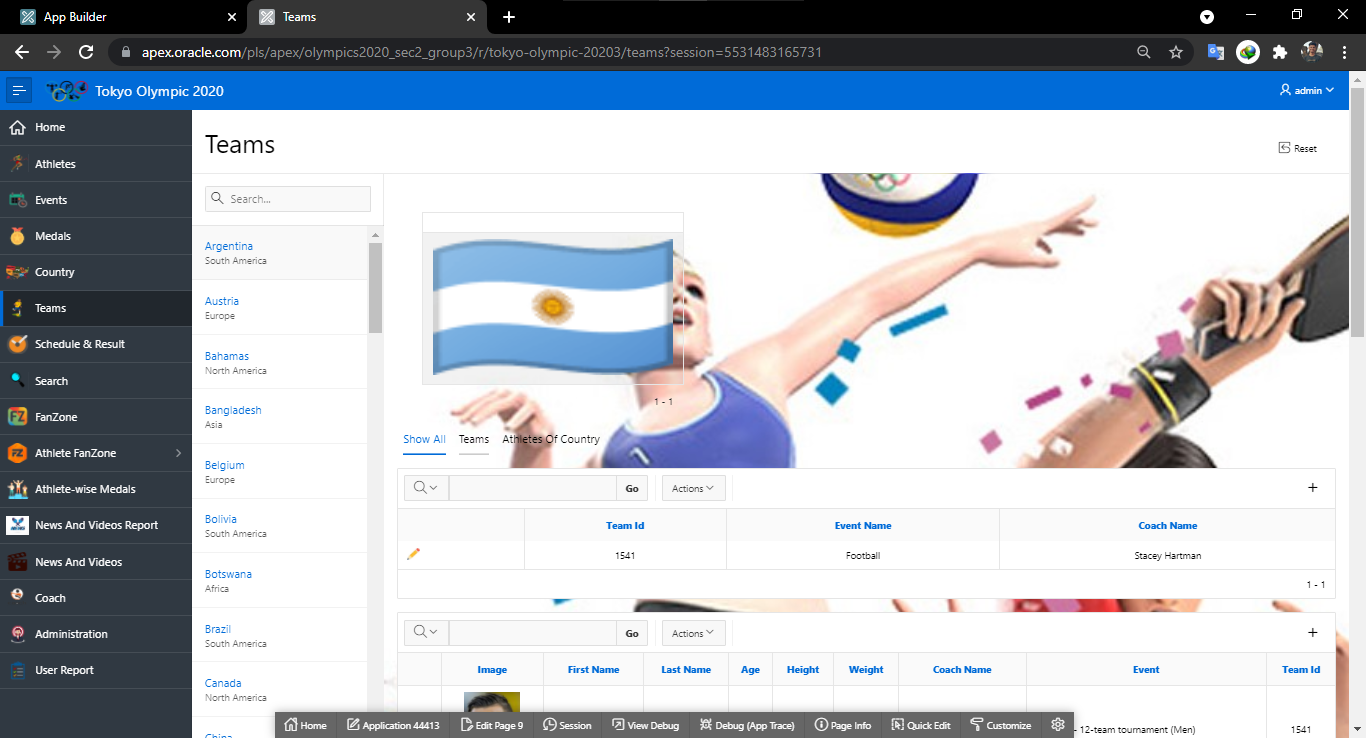


Figure 5.1: Teams

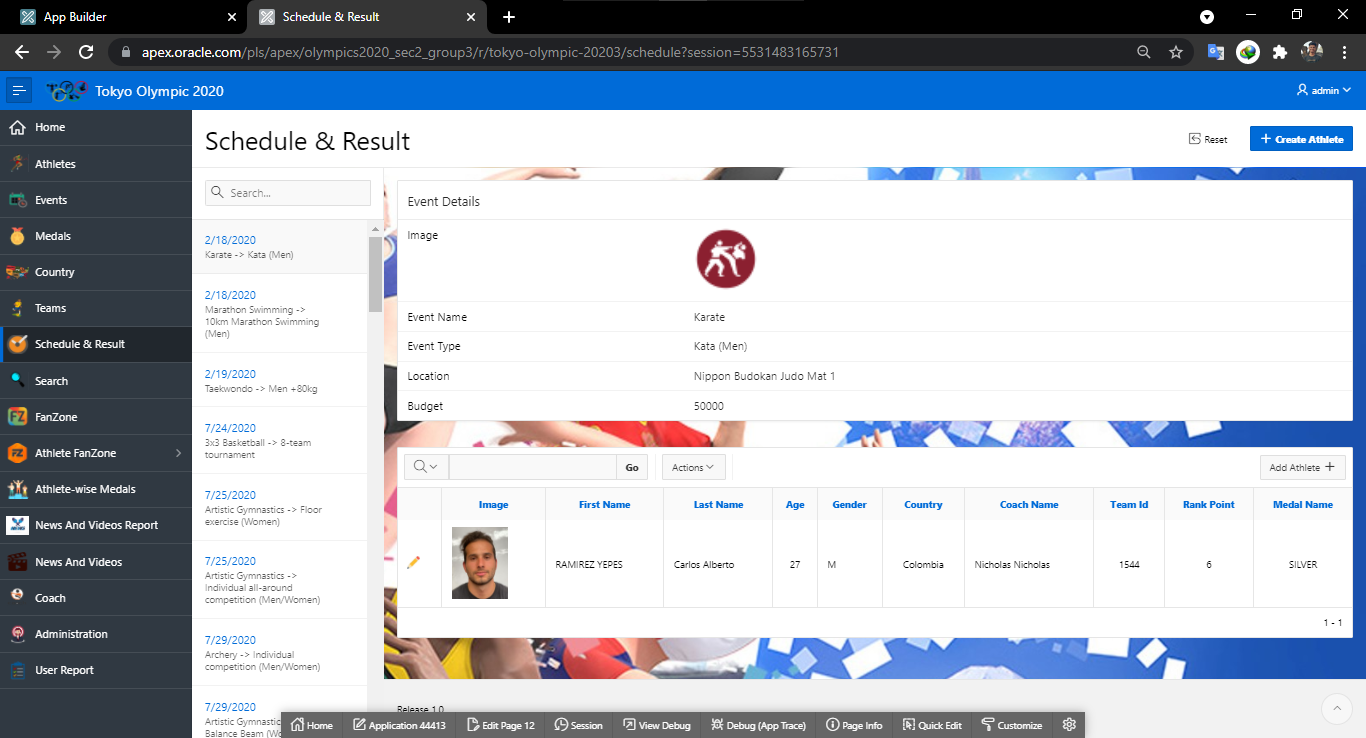


Figure 5.2: Schedule & Result

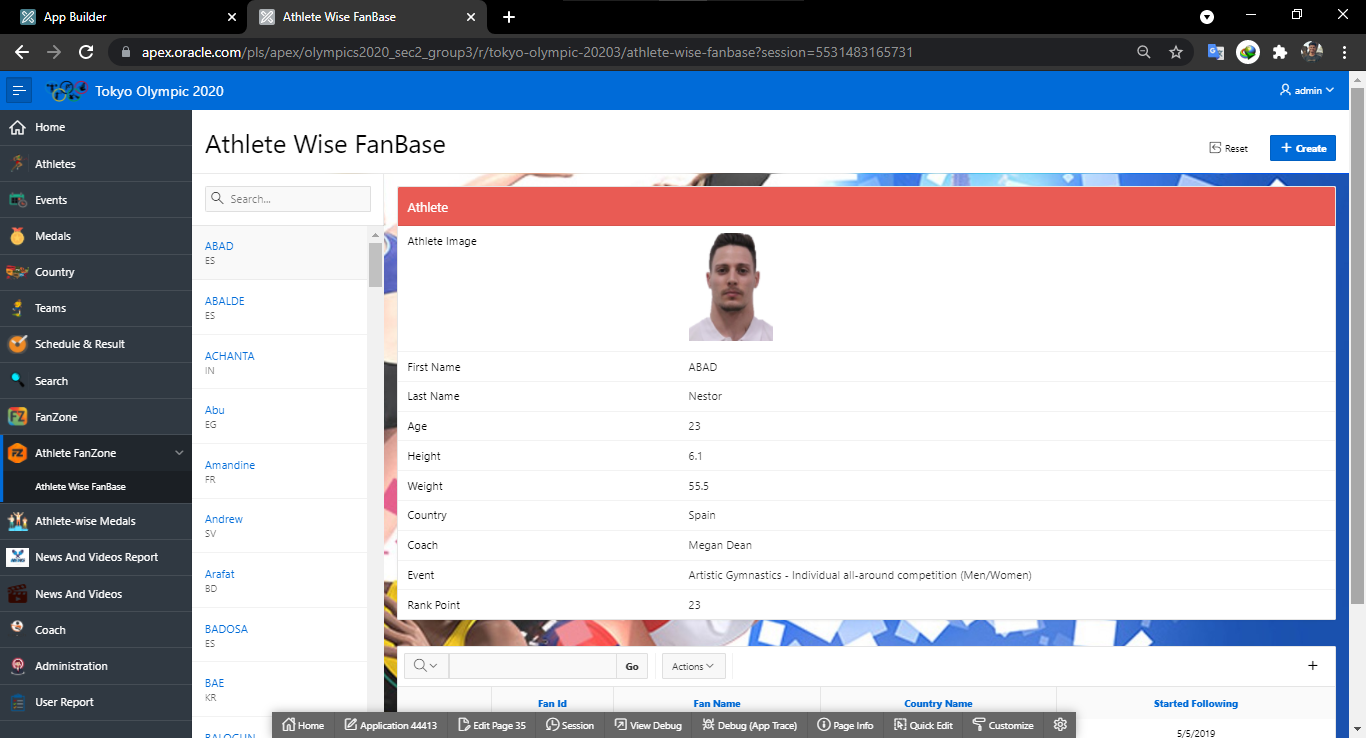


Figure 5.3: Athlete Wise FanBase

# Reports based on Multi-Table and Aggregate Queries

|  |  |  |
| --- | --- | --- |
| Page Number and Name | Query Type | Report description |
| Page Number: 1  Page Name: Home | Multi-Table and Aggregate | This report shows the total number of athletes, teams, medals and participated countries |
| Page Number: 1  Page Name: Home | View and Aggregate | This report shows the maximum number of medals (All) won by region |
| Page Number: 1  Page Name: Home | View and Aggregate | This report shows the maximum number of gold medals won by region |
| Page Number: 1  Page Name: Home | View and Aggregate | This report shows the maximum number of silver medals won by region |
| Page Number: 1  Page Name: Home | View and Aggregate | This report shows the maximum number of bronze medals won by region |
| Page Number: 2  Page Name: Athlete | Aggregate | This report shows the total number of athletes, participated countries, participated event and teams |
| Page Number: 4  Page Name: Events | Aggregate | This report shows the total number of events, location and budget |
| Page Number: 6  Page Name: Medals | View and Aggregate | This report shows the highest medals winner country and its medals |
| Page Number: 6  Page Name: Medals | View and Aggregate | This report shows the category-wise number of medals won by countries |
| Page Number: 6  Page Name: Medals | View and Aggregate | This report shows the total number of medals category-wise |
| Page Number: 6  Page Name: Medals | View and Aggregate | This report shows the number of gold medals won by countries in descending order |
| Page Number: 6  Page Name: Medals | View and Aggregate | This report shows the number of silver medals won by countries in descending order |
| Page Number: 6  Page Name: Medals | View and Aggregate | This report shows the number of bronze medals won by countries in descending order |
| Page Number: 7  Page Name: Country | Aggregate | This report shows the total number of country and region |

Screenshots:

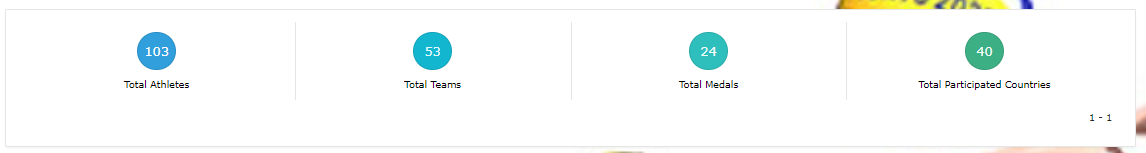


Figure 6.1: the total number of athletes, teams, medals and participated countries

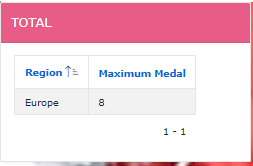


Figure 6.2: the maximum number of medals (All) won by region

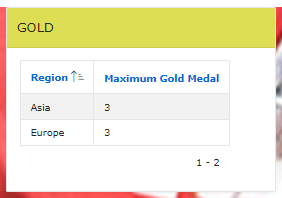


Figure 6.3: the maximum number of gold medals won by region

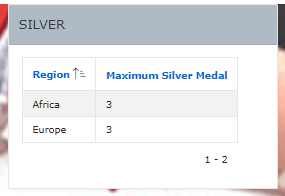


Figure 6.4: the maximum number of silver medals won by region



Figure 6.5: the maximum number of bronze medals won by region



Figure 6.6: the total number of athletes, participated countries, participated event and teams

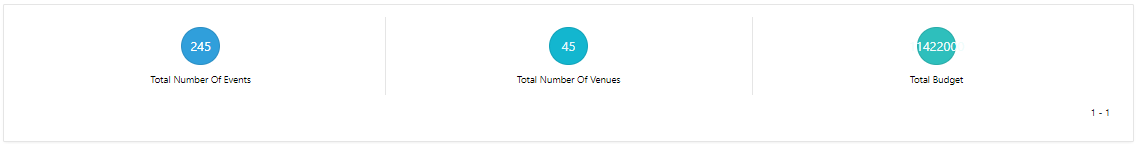


Figure 6.7: the total number of events, location and budget

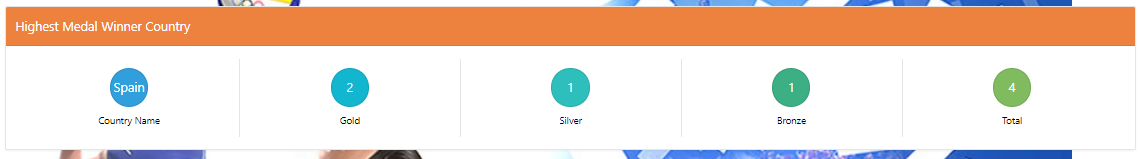


Figure 6.8: the highest medals winner country and its medals



Figure 6.9: the category-wise number of medals won by countries

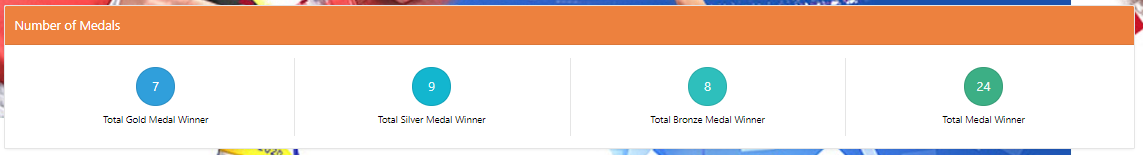


Figure 6.10: the total number of medals category-wise



Figure 6.11: the number of gold medals won by countries in descending order



Figure 6.12: the number of silver medals won by countries in descending order

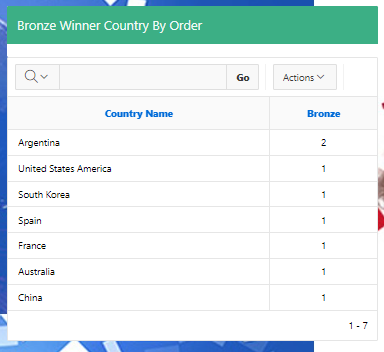


Figure 6.13: the number of bronze medals won by countries in descending order

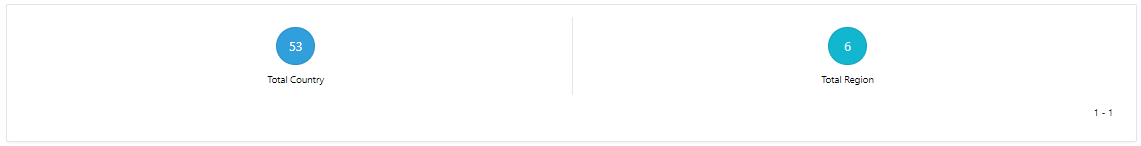


Figure 6.14: the total number of country and region

# Parameterized Reports

|  |  |  |
| --- | --- | --- |
| Page Number and Name | Given Input | Report description |
| Page Number: 26  Page Name: Search | Athlete\_ID, Country\_ID | This report shows the athletes information by the given athlete id or country id |
| Page Number: 26  Page Name: Search | Event\_ID,  Event \_Date,  Location | This report shows the events information by the given event id or event date or location of that event |
| Page Number: 17  Page Name: Search | Event\_Name, Event\_Type, News\_Date | This report shows the news of events by the given event name, type and news date of that event |

Screenshots:

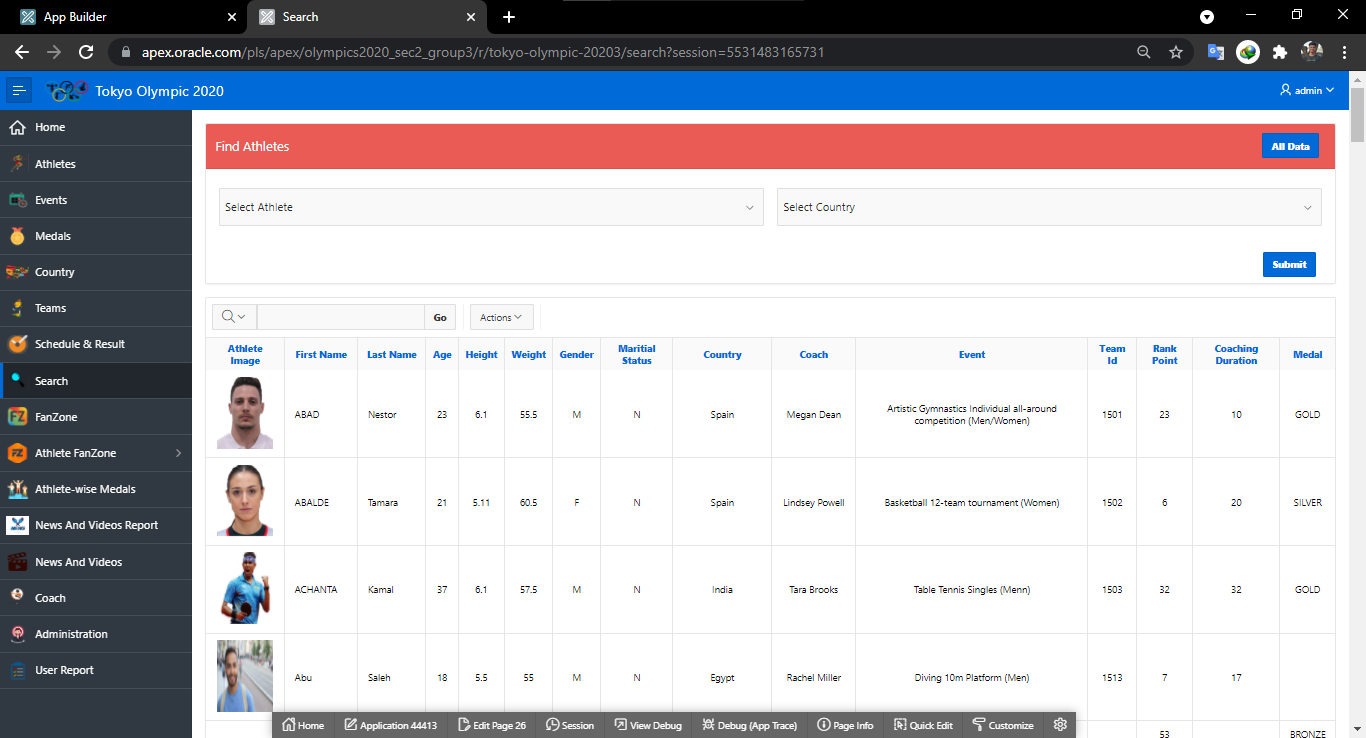


Figure 7.1: Parameterized Report on athlete

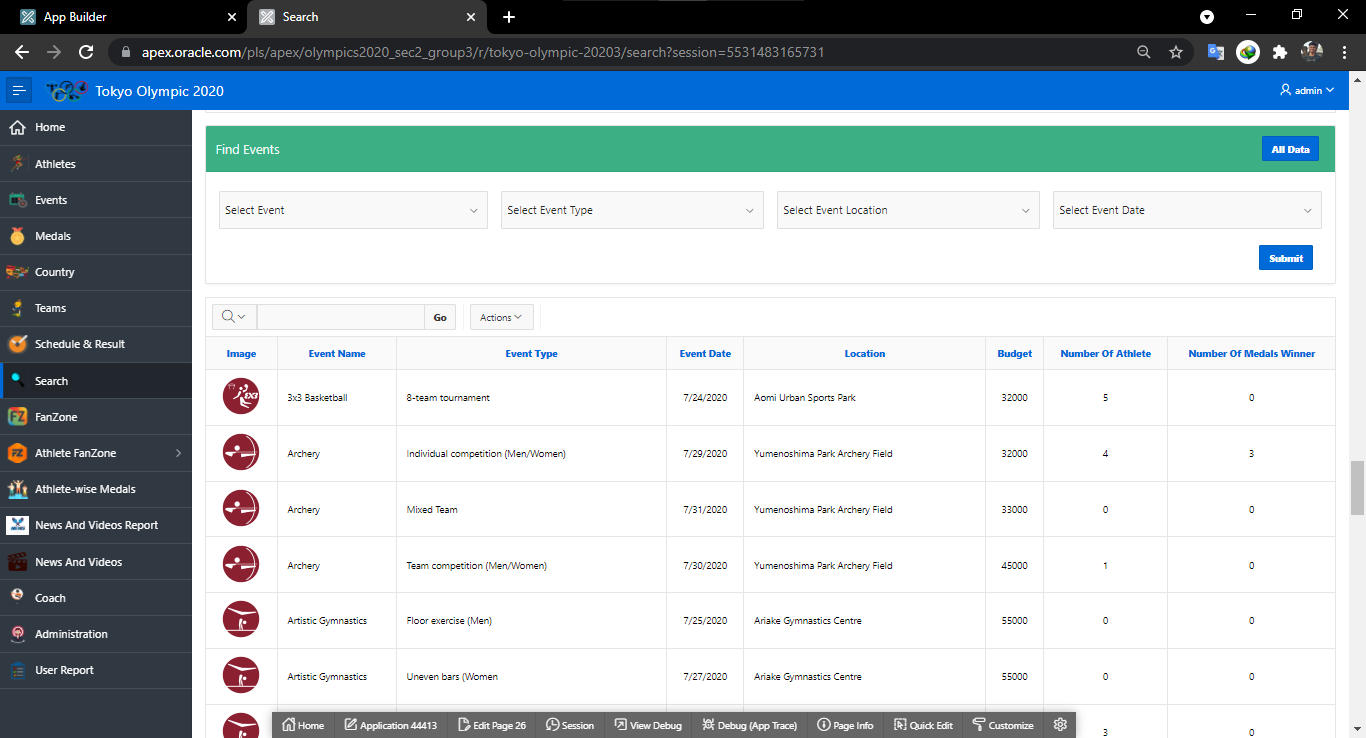


Figure 7.2: Parameterized Report on event

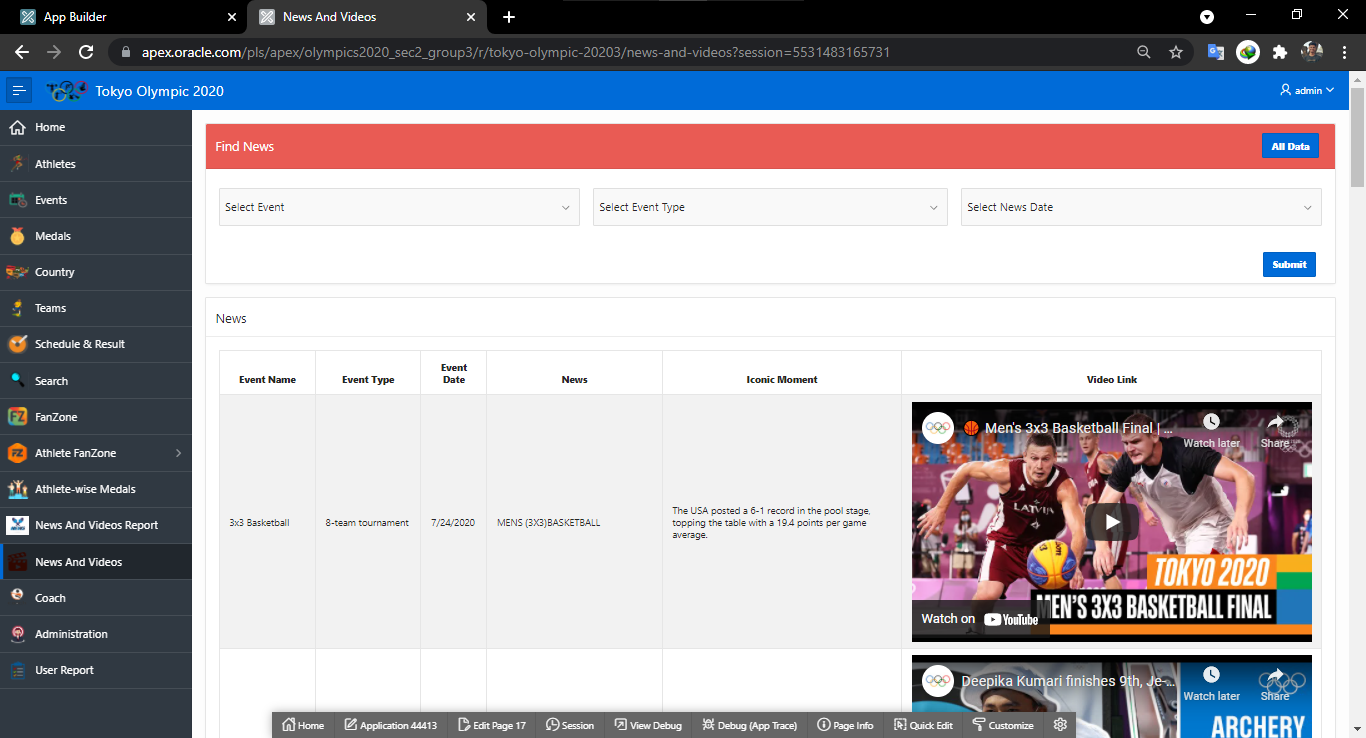


Figure 7.3: Parameterized Report on news

# Charts

|  |  |
| --- | --- |
| Page Number and Name | Chart description |
| Page Number: 1  Page Name: Home | This chart shows the country-wise number of total medals. We have also shown this chart in the medals page. |
| Page Number: 33  Page Name: Athlete FanZone | This chart shows the athlete-wise number of fans in descending order. |

Screenshot:

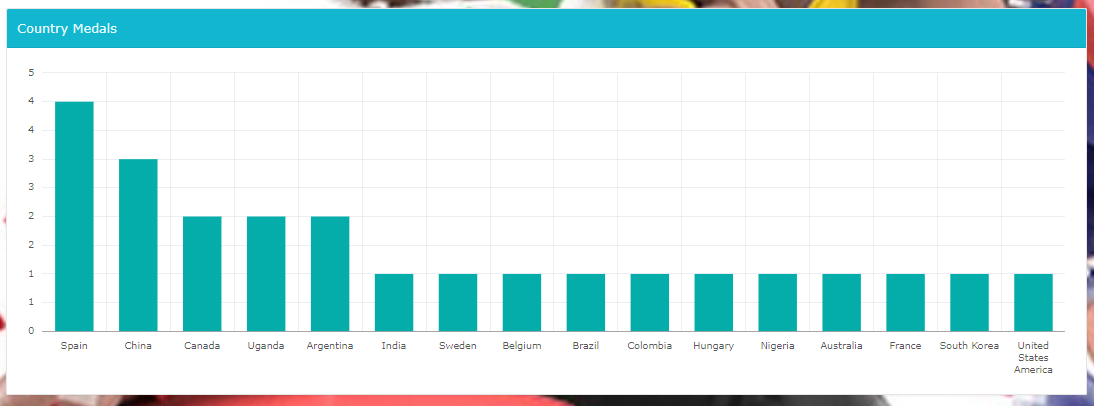


Figure 8.1: Bar chart on number of medals won by countries



Figure 8.2: Bar chart on number of fans by athletes

# Authorization and User Role Assignment

**User Role Assignment**

|  |  |  |
| --- | --- | --- |
| User name | Password | Role |
| admin | admin123 | Administrator |
| contributor | con123 | Contributor |
| reader | reader123 | Viewer |
| Anik | anik1234 | Contributor |

**Page-wise Authorization Information**

|  |  |
| --- | --- |
| Page number and name | Authorization Level |
| P1: Home | - |
| P2: Athletes | - |
| P3: Athletes Form | Contribution Rights |
| P4: Events | - |
| P5: Events Form | Contribution Rights |
| P6: Medals | - |
| P7: Country | Contribution Rights |
| P8: Country Form | Contribution Rights |
| P9: Teams | - |
| P11: Teams From | Contribution Rights |
| P12: Schedule & Result | - |
| P13: Athlete-wise Medals Report | - |
| P14: Athlete-wise Medals Form | Contribution Rights |
| P15: NewsAndVideos Report | Contribution Rights |
| P16: NewsAndVideos Form | Contribution Rights |
| P17: NewsAndVideos | - |
| P18: Coach Report | - |
| P19: Coach Form | Contribution Rights |
| P20: User Report | Administration Rights |
| P21: User Form | Administration Rights |
| P26: Search | - |
| P27: FanZone | - |
| P28: FanZone Form | - |
| P33: Athlete FanZone | - |
| P34: Athlete FanZone Form | - |
| P35: Athlete Wise FanBase | - |
| P10000: Administration | Administration Rights |

# 10. Concluding Remarks

Based on this project, we learned about back-end and front-end of a web-based application using oracle apex. By Implementing proper query and styling properties we were able to carry out a fully functional application. It helped us learning and discovering a lot new features such as logo, background image, badges, adding videos etc. We also used a little bit of CSS and HTML for designing the project. It will also help us in our career development.