**Multisport**

The platform allows users to order a card that gives them access to plenty of the clubs and its activities using only their application.

**Description of application** entities, *attributes,* processes

1. **Guest** is any visitor of the platform who has not yet been authorized. **Guest** can’t use the platform without registration and authorization. **Guest** has the following attributes: *ip*, *device*, *browser*, *time*.
2. **User** is any visitor registered on the platform as user. **User** has the following attributes: *email*, *name*, *surname*, *password.*
3. **User** registration requires all user attributes and **User contacts**.
4. **User contacts** should contain: *city*, *street*, *building*, *apartment, phone number, user*. Where everything except the *apartment* is required.
5. **User** can edit user contact information and change all his entity attributes or only chosen ones.
6. **Sportclub** is any visitor registered on the platform as sportclub. **Sportclub** has the following attributes: *email*, *name*, *password.*
7. **Sportclub** registration requires: all sportclub attributes, **sportclub contacts, activities** of a new club and a list of **card types** that will allow users to access the activities of this sportclub.
8. **Sportclub contacts** should contain: *working hours, phone number, sportclub*. Where everything is required.
9. **Sportclub** can edit sportclub contact information and change all his entity attributes or only chosen ones.
10. **Sportclub** has the possibility to remove or add its **activities** with its *duration time*.
11. **Activity** is one of **Sportclub** services, which is available to each **User** who has access to this **Sportclub. Activities** contain *name*.
12. In order to access platform functionality, **User** or **Sportclub** must be authorized if already registered. To login, user must enter an *email* and *password*.
13. **User** can create order with the chosen **Card type**. **Order** gets **Order status** ‘*created’*. Order has the following attributes: *date, card type, order status*.
14. **Card type** gives its owner access to certain **Sportclubs** and their **Activities**. *Price* of each card type depends on available sportclubs and amount of daily access to this sportclubs. **Sportclub** can be accessed by several **Card types**. **Card type** contains the following attributes: *type*, *price*, *max number* *of daily visits*.
15. **Order** should be paid by **User** to get the **Card** with chosen **Card Type**. After **Payment** creation **Order status** is changed to *‘’paid’’*. Each **Payment** is described by the attributes: *user* (who pays for his order), *order* (which is paid)*,* *time* and *payment method*.
16. Possible **Order status** *status* are: created and paid.
17. **Users** can have only one **Card** monthly. Card is valid for the calendar month. Users should order a card not later than a week before the start of the month. Card should be saved at the end of its term. **Card** contains information about *start date, card type, payment* and *number*. Each *number* is unique and is generated after the user's payment. One payment = one card.
18. Each **User** can visit different **Sportclubs** according to their **Card type** in his active **Card** and choose any **Activity** from available **Sportclub**. One **visit** = one **Activity** of one **Sportclub**. To get access to the available **Sportclub User** should show his **Card** and passport where administration could check his *name, surname, Card type*. User can’t share his card with another person.
19. *Each* **User** can rate each **Sportclub**. **Rating** must include *user name*, who created feedback, sportclub name, which is assessed, *rate* and can include *comment*. Each user can add each sportclub only once.

**Analytics**

1. Platform provides functionality to create a report, showing one top activity in each sportclub based on the most visited activity of users in each club ordered in descending order of visits.

Procedure ***usp\_get\_most\_popular\_activity\_in\_each\_sportclub*** without parameters.

Call usp\_get\_most\_popular\_activity\_in\_each\_sportclub();

|  | sportclub\_name | most\_popular\_activity | visits |
| --- | --- | --- | --- |
| 1 | Gym24 | gym | 19 |
| 2 | Xfit | aerobic | 11 |
| 3 | Swimming pool | swimming pool | 6 |

1. Platform provides functionality to create a report, showing *N* most popular sportclubs (where *N* is parameter set by customer), which was visited by *‘card\_type\_name’* (where *card\_type\_name* is parameter set by customer),sportclub rate count based on the rating left by users, visits count ordered in descending order of average rating .

Procedure ***usp\_get\_most\_popular\_sportclub\_by\_rating*** with parameter N (tinyint), card\_type\_name(varchar(30))

CALL usp\_get\_most\_popular\_sportclub\_by\_rating(3, ‘Multisport light’);

|  | Sportclub name | Average sportclub rate | Rate count | Visits count | Card type |
| --- | --- | --- | --- | --- | --- |
| 1 | Gym24, Minsk, Pobediteley, 7 | 7.50 | 2 | 3 | Multisport light |
| 2 | Xfit, Minsk, Chapaeva, 5 | 5.70 | 3 | 5 | Multisport light |
| 3 | Swimming pool, Minsk, Olshevskogo, 1 | 2.00 | 1 | 1 | Multisport light |

1. Platform provides functionality to create a report, showing the percentage of visits sportclub by card type based on users visits in a specific month.

Procedure ***usp\_get\_card\_types\_percentage\_for\_each\_sportclub*** with parameter month\_number(tinyint), year\_number(smallint)

CALL usp\_get\_card\_types\_percentage\_for\_each\_sportclub(9,2022);

|  | Sportclub name | Card type | Number of visits | Percentage |
| --- | --- | --- | --- | --- |
| 1 | gym24 | Multisport light | 2 | 100.00 |
| 2 | Xfit | Multisport classic | 5 | 45.45 |
| 3 | Xfit | Multisport plus | 3 | 27.27 |
| 4 | Xfit | Multisport light | 3 | 27.27 |

1. Platform provides functionality to create a report, showing percentage of paid orders for each card type in the specified month and in previous to the specified, and shows difference in percentage between values of previous and current month.

Procedure **usp\_get\_card\_types\_orders\_percentage** with parameter month\_number(tinyint), year\_number(smallint)

CALL usp\_get\_card\_types\_orders\_percentage(9,2022)

|  | Card type | Orders in previous month | Previous month percentage | Orders in current  month | Current month percentage | Difference |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | Multisport classic | 2 | 28.57 | 2 | 20.00 | -8.57 |
| 2 | Multisport light | 2 | 28.57 | 5 | 50.00 | 21.43 |
| 3 | Multisport plus | 3 | 42.86 | 3 | 30.00 | -12.86 |