## Міністерство освіти і науки України Національний університет «Львівська політехніка» Інститут комп'ютерних наук та інформаційних технологій Кафедра «Системи штучного інтелекту»



## Лабораторна робота №2 з дисципліни: «ОБДЗ»

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## Створюємо нову базу даних та таблички, по попередній моделі за допомогою таких команд.

```
CREATE database internet_shop_1;
USE internet shop 1;
CREATE TABLE `user` (
        `user id` INT NOT NULL AUTO INCREMENT UNIQUE,
        `user_password` varchar(25) NOT NULL,
        `user login` varchar(25) NOT NULL,
        `user email` varchar(30),
        `user about` varchar(1000),
        `user_first_name` varchar(10) NOT NULL,
        `user second name` varchar(20) NOT NULL,
        PRIMARY KEY (`user id`)
);
CREATE TABLE `storage` (
        `storage id` INT NOT NULL AUTO INCREMENT,
        `storage_adress_city` VARCHAR(50) NOT NULL,
        `storage_rental_price` INT NOT NULL,
        `storage adress street` VARCHAR(50) NOT NULL,
        `storage adress house` VARCHAR(50) NOT NULL,
        PRIMARY KEY (`storage id`)
);
CREATE TABLE `comment` (
        `comment id` INT NOT NULL,
        `comment text` varchar(1000),
        `comment time` DATETIME NOT NULL,
        `comment mark` INT,
        PRIMARY KEY (`comment id`)
);
CREATE TABLE `delivery service` (
        `delivery service id` INT NOT NULL AUTO INCREMENT,
        `delivery_service_prices` INT NOT NULL,
`delivery_service_about` VARCHAR(1000) NOT NULL,
        PRIMARY KEY (`delivery service id`)
);
CREATE TABLE `product` (
        `product_id` INT NOT NULL AUTO_INCREMENT,
`storage_id` INT NOT NULL,
        `product info` varchar(1000) NOT NULL,
        `product price` INT NOT NULL,
        `product theme` varchar(255),
        PRIMARY KEY (`product id`),
    CONSTRAINT `product_fk0` FOREIGN KEY (`storage id`) REFERENCES
`storage`(`storage id`) ON DELETE CASCADE ON UPDATE CASCADE
);
CREATE TABLE `active goods` (
        `active goods id` INT NOT NULL AUTO INCREMENT,
        `product id` INT NOT NULL,
        `delivery service id` INT NOT NULL,
        `sell/buy` BINARY NOT NULL,
        `comment id` INT unique,
        `activate time` DATETIME NOT NULL,
```

```
`arrive address city` varchar(20) NOT NULL,
       `arrive address street` varchar(20) NOT NULL,
       `arrive address house` varchar(20) NOT NULL,
       PRIMARY KEY (`active goods id`),
       CONSTRAINT `active_goods_fk2` FOREIGN KEY (`comment_id`) REFERENCES
`comment`(`comment_id`) ON DELETE CASCADE ON UPDATE CASCADE,
      CONSTRAINT `active_goods_fk1` FOREIGN KEY (`delivery_service_id`)
REFERENCES `delivery service`(`delivery service id`) ON DELETE CASCADE ON
UPDATE CASCADE,
       CONSTRAINT `active goods fk0` FOREIGN KEY (`product id`) REFERENCES
`product`(`product id`) ON DELETE CASCADE ON UPDATE CASCADE
CREATE TABLE `basket` (
       `user id` INT NOT NULL,
       `product id` INT NOT NULL,
        `product_amount` INT,
       `basket name` varchar(20) NOT NULL,
    CONSTRAINT `basket fk0` FOREIGN KEY (`user id`) REFERENCES
`user`(`user id`) ON DELETE CASCADE ON UPDATE CASCADE,
       CONSTRAINT `basket fk1` FOREIGN KEY (`product id`) REFERENCES
`product`(`product id`) ON DELETE CASCADE ON UPDATE CASCADE
CREATE TABLE `list active goods` (
       `user id` INT NOT NULL,
       `active_goods_id` INT NOT NULL,
    CONSTRAINT `list_active_goods_fk0` FOREIGN KEY (`user_id`) REFERENCES
`user`(`user id`) ON DELETE CASCADE ON UPDATE CASCADE,
      CONSTRAINT `list active goods_fk1` FOREIGN KEY (`active_goods_id`)
REFERENCES `active goods`(`active goods id`) ON DELETE CASCADE ON UPDATE
CASCADE
);
```

## Переглянемо як виглядає наша база даних, та таблички у ній.

```
mysql> USE internet shop 1;
Database changed
mysql> SHOW TABLES;
+----+
| Tables in internet shop 1 |
+----+
| active goods
| basket
comment
| delivery_service
| list active goods
| product
| storage
user
8 rows in set (0.00 sec)
mysql> DESC active goods;
```

```
-+
| Field
          Type
                | Null | Key | Default | Extra
+----+
| int | NO | MUL | NULL |
| product id
| sell/buy
| comment id
          | int | YES | UNI | NULL
| activate time
          | datetime | NO
                   | | NULL
| arrive address_city | varchar(20) | NO | | NULL |
| arrive_address_street | varchar(20) | NO | | NULL |
| arrive address house | varchar(20) | NO | | NULL |
+----+
9 rows in set (0.00 sec)
mysql> DESC basket;
+----+
| Field | Type
           | Null | Key | Default | Extra |
+----+
| basket name | varchar(20) | NO |
                  NULL
+----+
4 rows in set (0.00 sec)
mysql> DESC comment;
+----+
| Field | Type | Null | Key | Default | Extra |
+----+
comment id | int | NO | PRI | NULL | |
comment_text | varchar(1000) | YES | | NULL
                       | comment_time | datetime | NO |
                  | NULL |
             | YES | NULL
| comment mark | int
                       +----+
4 rows in set (0.00 sec)
mysql> DESC delivery service;
----+
                | Null | Key | Default | Extra
           | Type
auto increment |
```

+----+

```
| delivery service about | varchar(1000) | NO |
                    | NULL
+-----
3 rows in set (0.00 sec)
mysql> DESC list active goods;
+----+
   | Type | Null | Key | Default | Extra |
+----+
| active_goods_id | int | NO | MUL | NULL
+----+
2 rows in set (0.00 sec)
mysql> DESC product;
+----+
| Field | Type | Null | Key | Default | Extra
+----+
| product_info | varchar(1000) | NO | NULL
NULL
| product_theme | varchar(255) | YES | NULL
                    +----+
5 rows in set (0.00 sec)
mysql> DESC storage;
+----+
| Field
        | Type | Null | Key | Default | Extra
| storage id
| storage adress city | varchar(50) | NO | | NULL
| storage adress street | varchar(50) | NO | | NULL |
| storage adress house | varchar(50) | NO | | NULL |
+----+
5 rows in set (0.00 sec)
mysql> DESC user;
+----+
   | Type | Null | Key | Default | Extra
+----+
```

user_first_name   varchar(10)	NO		NULL	1	
user_second_name   varchar(20)	NO		NULL	I	
+	+	+	+	+	+
7 rows in set (0.00 sec)					

**Висновок:** на цій лабораторній роботі було завершено моделювання і засобами SQL створено базу даних, що складається з восьми таблиць.