

УО «Белорусский государственный университет информатики и
радиоэлектроники»
Кафедра ПОИТ

Отчёт по лабораторной работе №5
По предмету
Базы данных

Выполнил:
Гладкий М.Г.

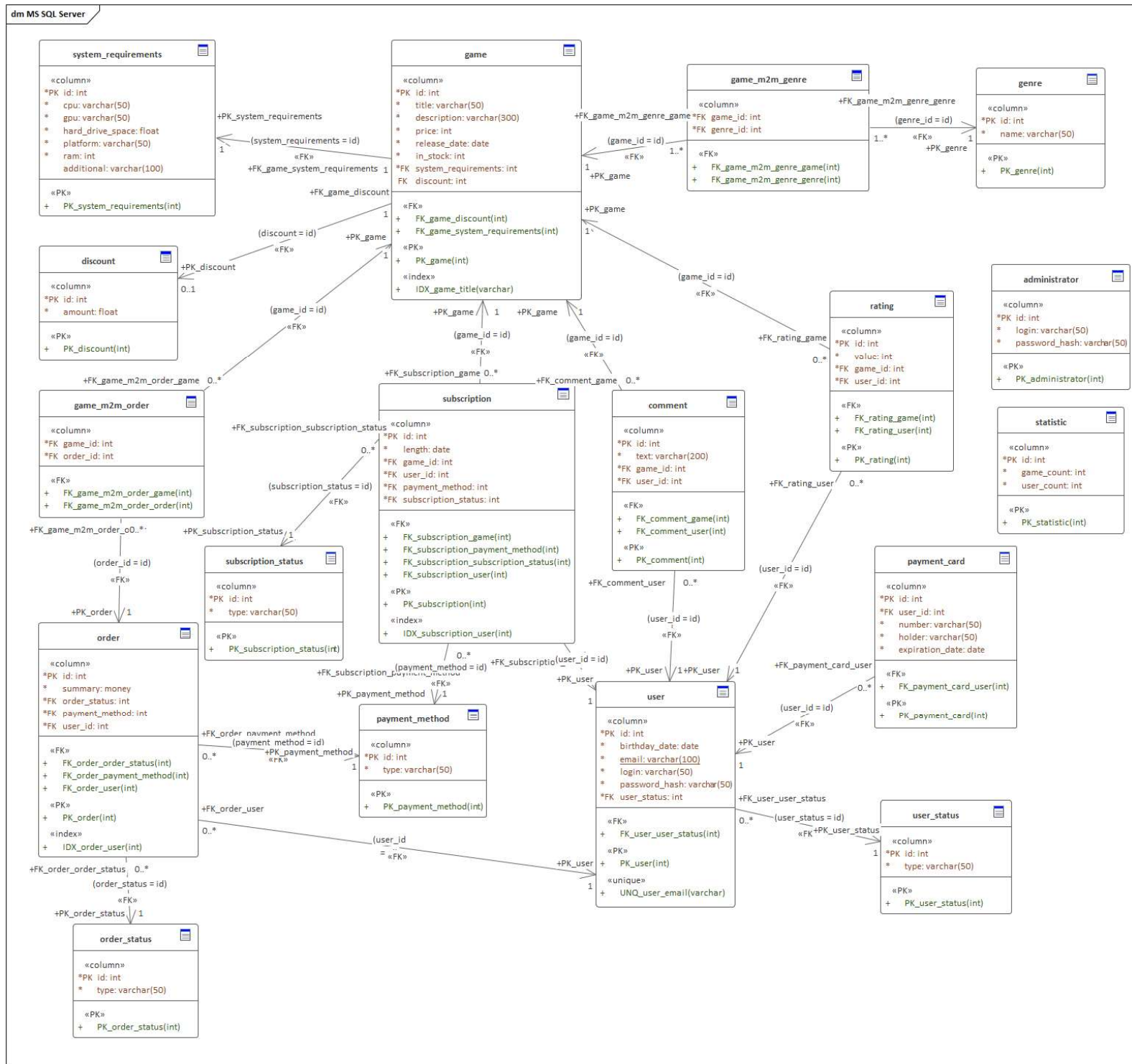
Проверил:
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Группа 851005

Минск 2021

Предметная область: Интернет-магазин компьютерных игр

Даталогическая модель:



1) Права доступа:

Были созданы следующие роли: Администратор, Модератор, Пользователь, Гость. Далее прилагается SQL-код для настройки:

--Administrator

```
DROP USER IF EXIST `administrator`@`localhost`;  
CREATE USER `administrator`@`localhost` IDENTIFIED BY <complex password>;
```

```
GRANT ALL PRIVILEGES ON * TO `administrator`@`localhost`;
```

--Moderator

```
DROP USER IF EXIST `moderator`@`localhost`;  
CREATE USER `moderator`@`localhost` IDENTIFIED BY <complex password>
```

```
GRANT INSERT, SELECT, UPDATE, DELETE ON `comment` TO  
'moderator'@'localhost';  
GRANT SELECT ON `rating` TO 'moderator'@'localhost';  
GRANT SELECT ON `subscription` TO 'moderator'@'localhost';  
GRANT SELECT, UPDATE ON `subscription_status` TO 'moderator'@'localhost';  
GRANT SELECT ON `order` TO 'moderator'@'localhost';  
GRANT SELECT, UPDATE ON `order_status` TO 'moderator'@'localhost';  
GRANT INSERT, SELECT, UPDATE, DELETE ON `game` TO 'moderator'@'localhost';  
GRANT SELECT, UPDATE ON `game_m2m_order` TO 'moderator'@'localhost';  
GRANT SELECT, UPDATE ON `system_requirements` TO 'moderator'@'localhost';  
GRANT INSERT, SELECT, UPDATE, DELETE ON `genre` TO 'moderator'@'localhost';  
GRANT SELECT, UPDATE ON `game_m2m_genre` TO 'moderator'@'localhost';  
GRANT INSERT, SELECT, UPDATE, DELETE ON `discount` TO  
'moderator'@'localhost';  
GRANT SELECT ON `payment_method` TO 'moderator'@'localhost';  
GRANT SELECT ON `user` TO 'moderator'@'localhost';  
GRANT SELECT, UPDATE ON `user_status` TO 'moderator'@'localhost';  
GRANT INSERT, SELECT, UPDATE, DELETE ON `statistic` TO 'moderator'@'localhost';
```

--User

```
DROP USER IF EXISTS 'user'@'localhost';  
CREATE USER 'user'@'localhost' IDENTIFIED BY '<complex password>';
```

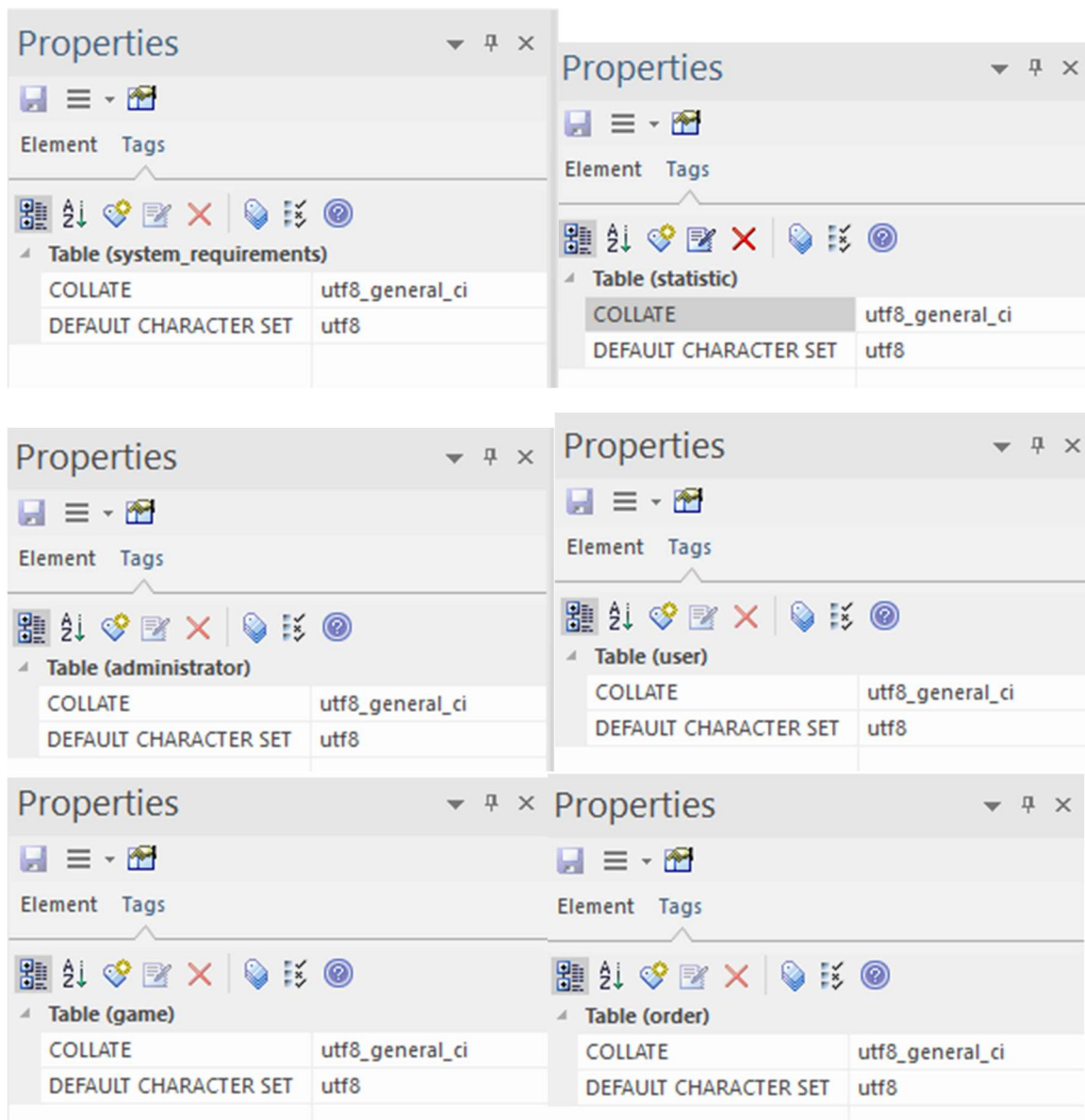
```
GRANT SELECT ON `comment` TO 'user'@'localhost';  
GRANT SELECT ON `rating` TO 'user'@'localhost';  
GRANT SELECT ON `subscription` TO 'user'@'localhost';  
GRANT SELECT ON `subscription_status` TO 'user'@'localhost';  
GRANT SELECT ON `order` TO 'user'@'localhost';  
GRANT SELECT ON `order_status` TO 'user'@'localhost';  
GRANT SELECT ON `game` TO 'user'@'localhost';  
GRANT SELECT ON `game_m2m_order` TO 'user'@'localhost';  
GRANT SELECT ON `system_requirements` TO 'user'@'localhost';  
GRANT SELECT ON `genre` TO 'user'@'localhost';  
GRANT SELECT ON `game_m2m_genre` TO 'user'@'localhost';  
GRANT SELECT ON `discount` TO 'user'@'localhost';  
GRANT SELECT ON `payment_method` TO 'user'@'localhost';  
GRANT SELECT ON `user` TO 'user'@'localhost';  
GRANT SELECT ON `user_status` TO 'user'@'localhost';  
GRANT SELECT ON `statistic` TO 'user'@'localhost';
```

```
--Guest
DROP USER IF EXISTS 'guest'@'localhost';
CREATE USER 'guest'@'localhost' IDENTIFIED BY '<complex password>';
```

```
GRANT SELECT ON `comment` TO 'guest'@'localhost';
GRANT SELECT ON `rating` TO 'guest'@'localhost';
GRANT SELECT ON `subscription` TO 'guest'@'localhost';
GRANT SELECT ON `subscription_status` TO 'guest'@'localhost';
GRANT SELECT ON `order` TO 'guest'@'localhost';
GRANT SELECT ON `order_status` TO 'guest'@'localhost';
GRANT SELECT ON `game` TO 'guest'@'localhost';
GRANT SELECT ON `game_m2m_order` TO 'guest'@'localhost';
GRANT SELECT ON `system_requirements` TO 'guest'@'localhost';
GRANT SELECT ON `genre` TO 'guest'@'localhost';
GRANT SELECT ON `game_m2m_genre` TO 'guest'@'localhost';
GRANT SELECT ON `discount` TO 'guest'@'localhost';
GRANT SELECT ON `payment_method` TO 'guest'@'localhost';
GRANT SELECT ON `user` TO 'guest'@'localhost';
GRANT SELECT ON `user_status` TO 'guest'@'localhost';
GRANT SELECT ON `statistic` TO 'guest'@'localhost';
```

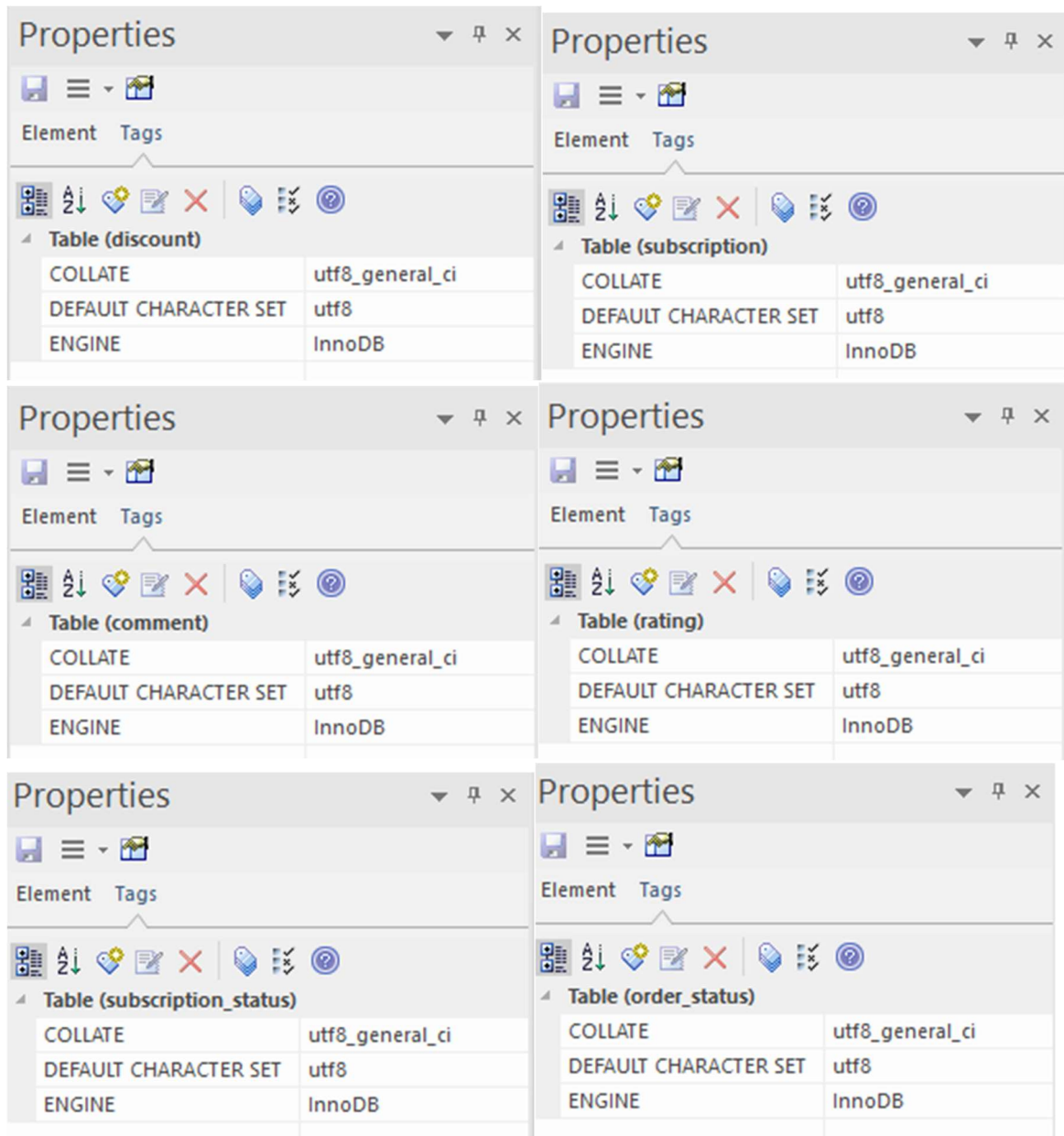
2) Кодировки:

Для всех отношений на диаграмме были добавлены тэги DEFAULT CHARACTER SET и COLLATE:



3) Метод доступа:

Для всех отношений на диаграмме был добавлен тэг ENGINE:



4) Индексы:

IDX_game_title – название игры у отношения game

IDX_order_user – id пользователя у отношения order

IDX_subscription_user – id пользователя у отношения subscription

UNQ_user_email – email пользователя у отношения user