Министерство образования и науки Российской Федерации

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МОСКОВСКИЙ ПОЛИТЕХНИЧЕСКИЙ УНИВЕРСИТЕТ

(МОСКОВСКИЙ ПОЛИТЕХ)

Лабораторная работа «Реализация структуры Data Vault»

По дисциплине

«Хранилища данных»

Факультет «Информационные технологии»

Кафедра «Прикладная информатика»

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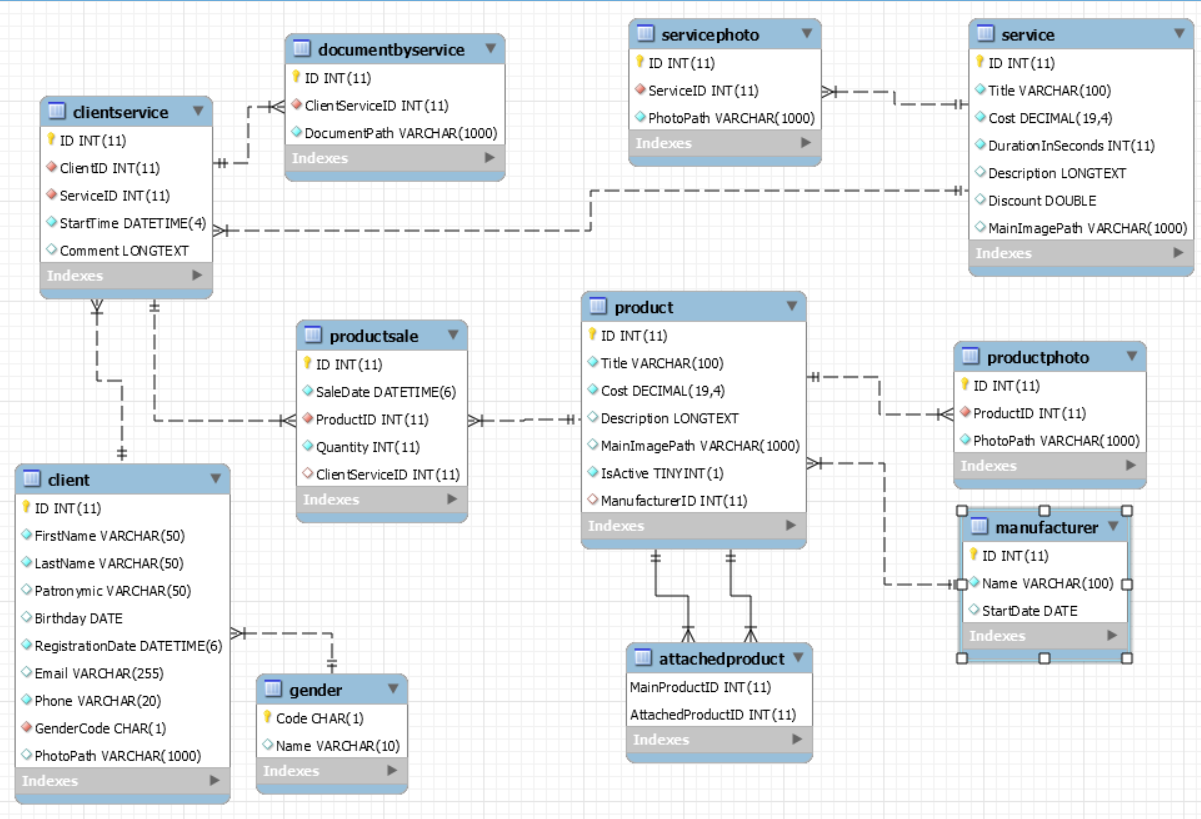


Рис.1 структура базы данных

Для реализации на сайте я создала таблицы с помощью MySQL Workbench (с листингом):

CREATE DATABASE `beautysaloon`;

USE `beautysaloon`;

CREATE TABLE `attachedproduct` (

`MainProductID` int(11) NOT NULL,

`AttachedProductID` int(11) NOT NULL,

PRIMARY KEY (`MainProductID`,`AttachedProductID`),

KEY `FK\_AttachedProduct\_Product1` (`AttachedProductID`),

CONSTRAINT `FK\_AttachedProduct\_Product` FOREIGN KEY (`MainProductID`) REFERENCES `product` (`ID`),

CONSTRAINT `FK\_AttachedProduct\_Product1` FOREIGN KEY (`AttachedProductID`) REFERENCES `product` (`ID`)

) ;

CREATE TABLE `client` (

`ID` int(11) NOT NULL AUTO\_INCREMENT,

`FirstName` varchar(50) NOT NULL,

`LastName` varchar(50) CHARACTER SET utf8 COLLATE utf8\_unicode\_ci NOT NULL,

`Patronymic` varchar(50) DEFAULT NULL,

`Birthday` date DEFAULT NULL,

`RegistrationDate` datetime(6) NOT NULL,

`Email` varchar(255) DEFAULT NULL,

`Phone` varchar(20) NOT NULL,

`GenderCode` char(1) NOT NULL,

`PhotoPath` varchar(1000) DEFAULT NULL,

PRIMARY KEY (`ID`),

KEY `FK\_Client\_Gender` (`GenderCode`),

CONSTRAINT `FK\_Client\_Gender` FOREIGN KEY (`GenderCode`) REFERENCES `gender` (`Code`)

);

CREATE TABLE `clientservice` (

`ID` int(11) NOT NULL AUTO\_INCREMENT,

`ClientID` int(11) NOT NULL,

`ServiceID` int(11) NOT NULL,

`StartTime` datetime(4) NOT NULL,

`Comment` longtext DEFAULT NULL,

PRIMARY KEY (`ID`),

KEY `FK\_ClientService\_Client` (`ClientID`),

KEY `FK\_ClientService\_Service` (`ServiceID`),

CONSTRAINT `FK\_ClientService\_Client` FOREIGN KEY (`ClientID`) REFERENCES `client` (`ID`),

CONSTRAINT `FK\_ClientService\_Service` FOREIGN KEY (`ServiceID`) REFERENCES `service` (`ID`)

);

CREATE TABLE `documentbyservice` (

`ID` int(11) NOT NULL AUTO\_INCREMENT,

`ClientServiceID` int(11) NOT NULL,

`DocumentPath` varchar(1000) NOT NULL,

PRIMARY KEY (`ID`),

KEY `FK\_DocumentByService\_ClientService` (`ClientServiceID`),

CONSTRAINT `FK\_DocumentByService\_ClientService` FOREIGN KEY (`ClientServiceID`) REFERENCES `clientservice` (`ID`)

);

CREATE TABLE `gender` (

`Code` char(1) NOT NULL,

`Name` varchar(10) DEFAULT NULL,

PRIMARY KEY (`Code`)

);

CREATE TABLE `manufacturer` (

`ID` int(11) NOT NULL AUTO\_INCREMENT,

`Name` varchar(100) NOT NULL,

`StartDate` date DEFAULT NULL,

PRIMARY KEY (`ID`)

);

CREATE TABLE `product` (

`ID` int(11) NOT NULL AUTO\_INCREMENT,

`Title` varchar(100) NOT NULL,

`Cost` decimal(19,4) NOT NULL,

`Description` longtext DEFAULT NULL,

`MainImagePath` varchar(1000) DEFAULT NULL,

`IsActive` tinyint(1) NOT NULL,

`ManufacturerID` int(11) DEFAULT NULL,

PRIMARY KEY (`ID`),

KEY `FK\_Product\_Manufacturer` (`ManufacturerID`),

CONSTRAINT `FK\_Product\_Manufacturer` FOREIGN KEY (`ManufacturerID`) REFERENCES `manufacturer` (`ID`)

);

CREATE TABLE `productphoto` (

`ID` int(11) NOT NULL AUTO\_INCREMENT,

`ProductID` int(11) NOT NULL,

`PhotoPath` varchar(1000) NOT NULL,

PRIMARY KEY (`ID`),

KEY `FK\_ProductPhoto\_Product` (`ProductID`),

CONSTRAINT `FK\_ProductPhoto\_Product` FOREIGN KEY (`ProductID`) REFERENCES `product` (`ID`)

);

CREATE TABLE `productsale` (

`ID` int(11) NOT NULL AUTO\_INCREMENT,

`SaleDate` datetime(6) NOT NULL,

`ProductID` int(11) NOT NULL,

`Quantity` int(11) NOT NULL,

`ClientServiceID` int(11) DEFAULT NULL,

PRIMARY KEY (`ID`),

KEY `FK\_ProductSale\_Product` (`ProductID`),

KEY `FK\_ProductSale\_ClientService` (`ClientServiceID`),

CONSTRAINT `FK\_ProductSale\_ClientService` FOREIGN KEY (`ClientServiceID`) REFERENCES `clientservice` (`ID`),

CONSTRAINT `FK\_ProductSale\_Product` FOREIGN KEY (`ProductID`) REFERENCES `product` (`ID`)

);

CREATE TABLE `service` (

`ID` int(11) NOT NULL AUTO\_INCREMENT,

`Title` varchar(100) NOT NULL,

`Cost` decimal(19,4) NOT NULL,

`DurationInSeconds` int(11) NOT NULL,

`Description` longtext DEFAULT NULL,

`Discount` double DEFAULT NULL,

`MainImagePath` varchar(1000) DEFAULT NULL,

PRIMARY KEY (`ID`)

);

CREATE TABLE `servicephoto` (

`ID` int(11) NOT NULL AUTO\_INCREMENT,

`ServiceID` int(11) NOT NULL,

`PhotoPath` varchar(1000) NOT NULL,

PRIMARY KEY (`ID`),

KEY `FK\_ServicePhoto\_Service` (`ServiceID`),

CONSTRAINT `FK\_ServicePhoto\_Service` FOREIGN KEY (`ServiceID`) REFERENCES `service` (`ID`)

);