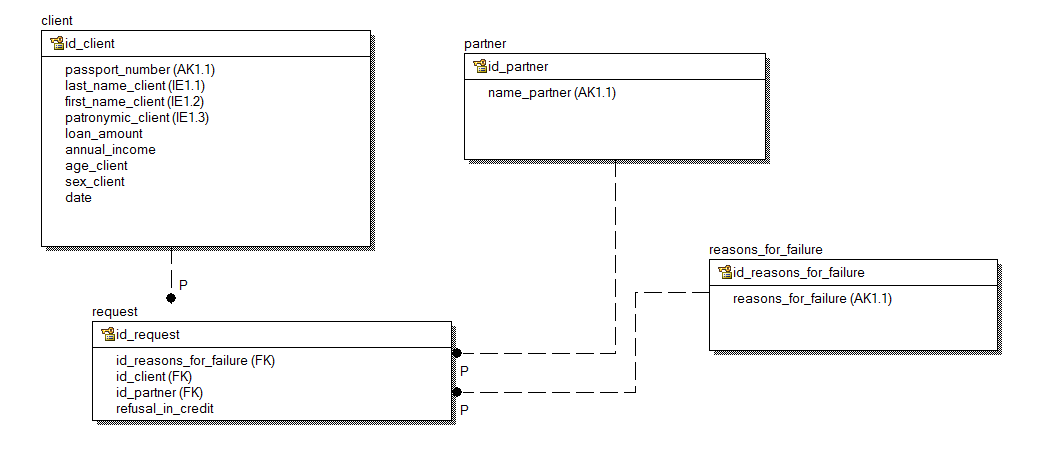
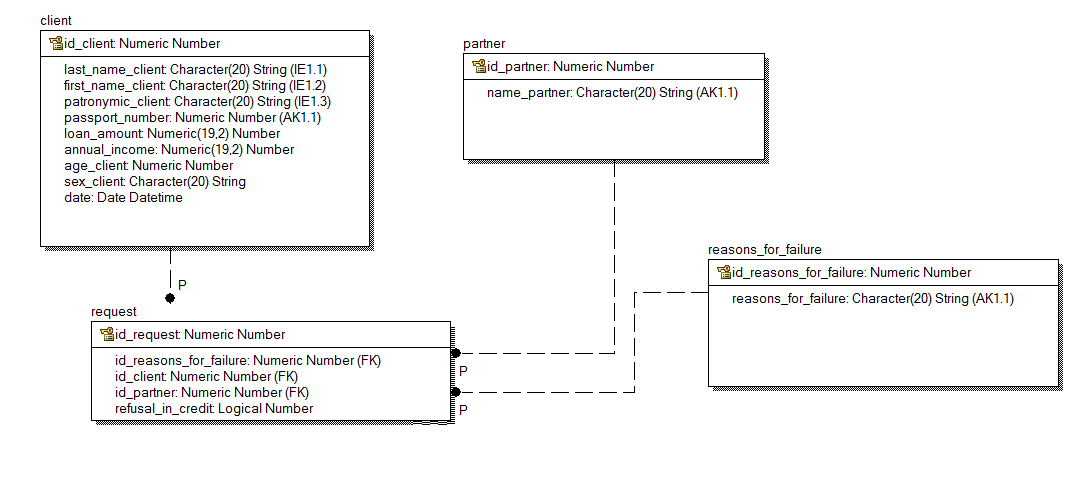
1. ER-модель схемы базы данных системы кредитного скоринга.

Логическая схема:

Физическая схема:



2. Запросы SQL.

1. Отображает статистику по партнерам: партнер, общее количество заявок, количество одобренных заявок, количество отказов, количество выданных денег.

WITH allowed AS

( SELECT COUNT(Request.id\_request)

FROM client

INNER JOIN data1!request

ON Client.id\_client = Request.id\_client

INNER JOIN data1!partner

ON Partner.id\_partner = Request.id\_partner

WHERE NOT (Request.refusal\_in\_credit )

GROUP BY Partner.name\_partner ),

AmountSUM AS

(

SELECT SUM(Client.loan\_amount)

FROM

data1!client

INNER JOIN data1!request

ON Client.id\_client = Request.id\_client

INNER JOIN data1!partner

ON Partner.id\_partner = Request.id\_partner

WHERE NOT (Request.refusal\_in\_credit )

GROUP BY Partner.name\_partner )

),

Refusal AS

( SELECT COUNT(Request.id\_request)

FROM

data1!client

INNER JOIN data1!request

ON Client.id\_client = Request.id\_client

INNER JOIN data1!partner

ON Partner.id\_partner = Request.id\_partner

WHERE Request.refusal\_in\_credit

GROUP BY Partner.name\_partner

)

SELECT Partner.name\_partner, allowed, AmountSUM,Refusal

FROM

data1!partner

INNER JOIN data1!request

ON Partner.id\_partner = Request.id\_partner

INNER JOIN data1!client

ON Client.id\_client = Request.id\_client

1. Отображает все заявки по конкретному партнеру с указанием параметров заявки и ее текущего статуса, причину отказа в кредите.

SELECT Client.\*, Request.refusal\_in\_credit,;

Reasons\_for\_failure.reasons\_for\_failure;

FROM ;

data1!client ;

INNER JOIN data1!request ;

ON Client.id\_client = Request.id\_client ;

INNER JOIN data1!partner ;

ON Partner.id\_partner = Request.id\_partner ;

INNER JOIN data1!reasons\_for\_failure ;

ON Reasons\_for\_failure.id\_reasons\_for\_failure = Request.id\_reasons\_forfailure;

WHERE Partner.name\_partner LIKE '<указывается имя партнера>'

3. Возвращает массив клиентов в разрезе причин отказа в выдаче кредита (Map<Enum, Client[]>) за заданный интервал дат.

С#

using MySql.Data.MySqlClient;

static void Main(string[] args)

{

string connStr = "<параметры> ";

MySqlConnection conn = new MySqlConnection(connStr);

conn.Open();

string sql = " SELECT Client.\*, Reasons\_for\_failure.reasons\_for\_failure;

FROM reasons\_for\_failure INNER JOIN request ON Reasons\_for\_failure.id\_reasons\_for\_failure = Request.id\_reasons\_forfailure

INNER JOIN client ON Client.id\_client = Request.id\_client

WHERE Request.refusal\_in\_credit

AND YEAR(Client.date) BETWEEN 2015 AND 2017";

MySqlCommand command = new MySqlCommand(sql, conn);

MySqlDataReader reader = command.ExecuteReader();

while (reader.Read())

{

Console.WriteLine(reader[0].ToString() + " " + reader[1].ToString()+ " " + reader[2].ToString()+ " " + reader[3].ToString()+ " " + reader[4].ToString()+ " " + reader[5].ToString()+ " " + reader[6].ToString()+ " " + reader[7].ToString()+ " " + reader[8].ToString()+ " " + reader[9].ToString()+ " " + reader[10].ToString());

}

reader.Close();

conn.Clone();

}