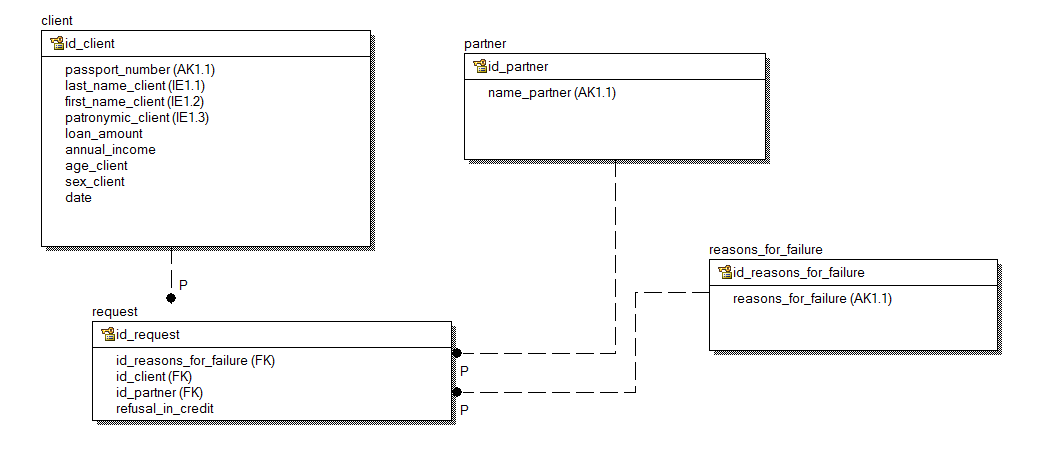
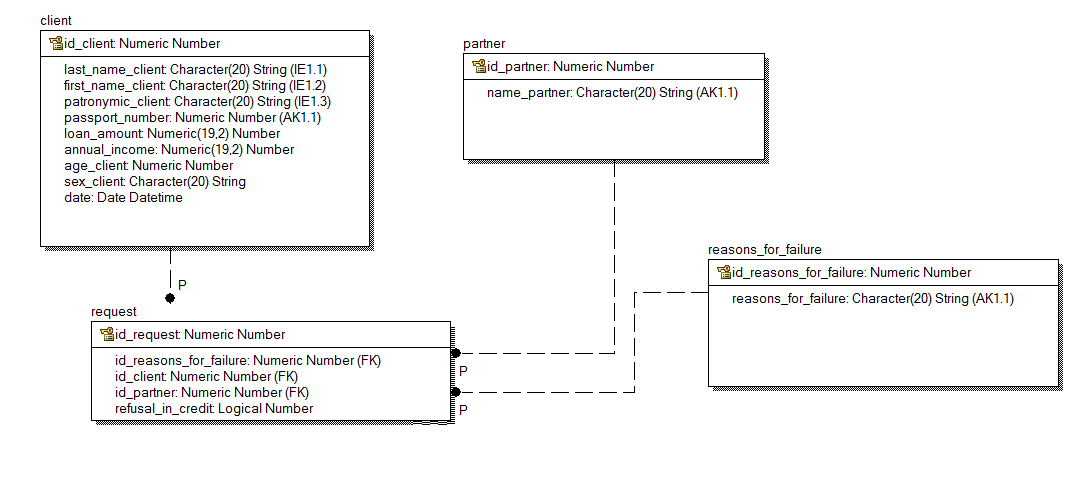
1. ER-модель схемы базы данных системы кредитного скоринга.

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();

}

RPG

\*\*FREE

Dcl-DS CLIENT\_TEMP Qualified Template;

CLIEN\_ID Uns(10);

CLIEN\_PAS Uns(10);

CLIEN\_LAST\_NAME Char(25);

CLIEN\_FIST\_NAME Char(25);

CLIEN\_PATR Char(25)

CLIEN\_LOAN\_AMOUN Packed(11:2);

CLIEN\_ANNUAL\_INCOM Packed(11:2);

CLIEN\_AGE Uns(3);

CLIEN\_SEX Char(4);

CLIEN\_DATA;

End\_Ds;

Dcl-DS REQUEST\_TEMP Qualified Template;

REQUEST\_ID Uns(10);

REQUEST\_CLIEN Uns(10);

REQUEST\_PARTNER Uns(10);

REQUES\_REASON\_FOR\_FAILURE Uns(10);

REQUEST\_REFUSAL\_IN\_CREDIT LOG();

End\_Ds;

Dcl-DS PARTNER \_TEMP Qualified Template;

PARTNER \_ID Uns(10);

PARTNER \_NAME Char(25);

End\_Ds;

Dcl-DS REASON\_FOR\_FAILURE \_TEMP Qualified Template;

REASON\_FOR\_FAILURE \_ID Uns(10);

REASON\_FOR\_FAILURE\_NAME Char(25);

End\_Ds;

Dcl-DS CLIENT LikeDS(CLIENT\_TEMP);

Dcl-DS REQUEST LikeDS(REQUEST\_TEMP);

Dcl-DS PARTNER LikeDS(PARTNER \_TEMP);

Dcl-DS REASON\_FOR\_FAILURE LikeDS(REASON\_FOR\_FAILURE \_TEMP);

Exec SQL SELECT CLIEN\_ID,

CLIEN\_PAS,

CLIEN\_LAST\_NAME,

CLIEN\_FIST\_NAME,

CLIEN\_PATR,

CLIEN\_LOAN\_AMOUN,

CLIEN\_ANNUAL\_INCOM,

CLIEN\_AGE,

CLIEN\_SEX,

CLIEN\_DATA,

REASON\_FOR\_FAILURE\_NAME

INTO :CLIENT.CLIEN\_ID,

:CLIENT.CLIEN\_PAS,

:CLIENT.CLIEN\_LAST\_NAME,

:CLIENT.CLIEN\_FIST\_NAME,

:CLIENT.CLIEN\_PATR,

:CLIENT.CLIEN\_LOAN\_AMOUN,

:CLIENT.CLIEN\_ANNUAL\_INCOM,

:CLIENT.CLIEN\_AGE,

:CLIENT.CLIEN\_SEX,

:CLIENT.CLIEN\_DATA,

:REASON\_FOR\_FAILURE.REASON\_FOR\_FAILURE

FROM CLIENT,

REQUEST,

REASON\_FOR\_FAILURE

WHERE REQUEST\_REFUSAL\_IN\_CREDIT IS TRUE AND

CLIEN\_DATA BETWEEN <параметр> AND <параметр>;

\*InLR = \*on;

Return;