#### Architecture of e-shop.

1.

## 1. Registration:

User types information about itself to the form. After that this information is sent to the server. Server processes data and inserts it into the database. Then server redirects user to the page, which notifies about successful registration.

#### 2. Authentication:

User types login and password and submits it to the server. Server quires database for this user. If server finds information corresponding to the user in the database, he redirects client to the page where authentication was been made, otherwise server redirects to the page, which notifies about wrong login and/or password.

## 3. Shop

## 1) View products:

On the home page user can chose one category of products. After he clicks on the button which corresponds to some category, client sends id of the category to the server. Server quires database for products of the category. Database returns information about all products of the category. Server generates page with products and sends it to client.

#### 2) Adding to cart:

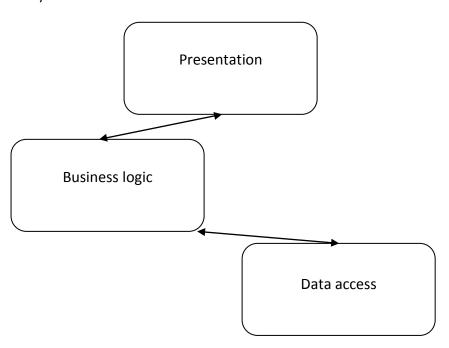
User clicks on button "add to cart" on some product, and client sends product id, session and action to the server. Server query database by "insert into" some table, where stored information about orders. After that server sends answer to client.

#### 3) Payment:

Server uses external transaction service for payment for products.

2.

# 3-layer architecture.



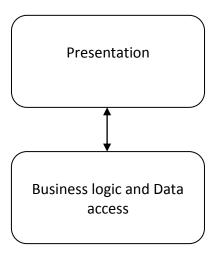
1<sup>st</sup> layer. Presentation. This layer provides user interface. It only generates web pages.

So, for example, it makes forms for registration and authorization, creates list of products.

2<sup>nd</sup> layer. Business logic. This layer makes validations and analyzes requests of client. For example, it determines by category which products user wants to see.

3<sup>rd</sup> layer. Data access. This layer works with a database. It has connection to the data storage, methods for querying and processing answers from it.

## 2-layer architecture.



1<sup>st</sup> layer. Presentation. This layer provides user interface. It only generates web pages.

So, for example, it makes forms for registration and authorization, create list of products.

2<sup>nd</sup> layer. Business logic and Data access. This layer makes validations and analyzes requests of client. It also has connections to database. And almost all methods work with database directly by SQL. For example, it determines by category which products client wants to see.

1-layer architecture.

Presentation, Business logic and Data access

1<sup>st</sup> layer. Presentation, Business logic and Data access. This layer makes validations, analyzes requests of client and generates pages. It also has connections to database. And almost all

methods work with database directly by SQL. For example, it determines products by category and generates web page with list of them.