**Title:** SYSTEM AND METHOD FOR LINK OF UPPER SHOPPING MALL AND INDEPENDENT SHOPPING MALL USING API METHOD

**Abstract:** The present invention relates to a link system and link method of an upper shopping mall and an independent shopping mall of API (application programming interface) link method, in particular, to a technology that builds and manages an independent shopping mall having an independent domain address and an interface besides the upper shopping mall which is registered together with the other sellers. According to the present invention, provided is a link system of an upper shopping mall having a plurality of sellers and an independent shopping mall operated independently by one person among the sellers, of API link method, which comprises a shopping mall database that stores a goods information, a member information, and a payment and delivery information; an independent shopping mall web server receives a goods inquiry or a purchase request from a user to output a factor for extracting data of the shopping mall database, and receives a necessary data from the shopping mall database; and an API server receives a factor from the independent shopping mall web server to analyze, and accesses to the shopping mall database so as to request that the necessary data should be sent to the independent shopping mall web server.
For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
Description

SYSTEM AND METHOD FOR LINK OF UPPER SHOPPING MALL AND INDEPENDENT SHOPPING MALL USING API METHOD

Technical Field

[1] The present invention relates to a link system and link method of an upper shopping mall and an independent shopping mall of API (application programming interface) link method, in particular, to a technology that builds and manages an independent shopping mall having an independent domain address and an user interface besides the upper shopping mall which is registered together with the other sellers.

[2]

Background Art

[3] Conventionally, there has been a technology of method and system for generating and parceling-out a lower shopping mall in an upper shopping mall, however, such technology had many problems (refer to Korea Published Patent NO. 2005-0112015, Korea Published Patent NO. 2003-0071732).

[4] The related art reproduced a goods database that the upper shopping mall already has, or adopted a mode that builds the lower shopping mall by directly approaching to the upper shopping mall database.

[5] However, in case of the mode of reproducing the goods database, the synchronization with the other side was not performed on a real time basis when the database of one side was updated, but the task for the synchronization has to be separately worked in a constant cycle. Therefore, there has been a problem in that the side effect including a temporary data omission or the waste of system resources can not be evaded.

[6] Additionally, in case of the mode of directly approaching to the database of the upper shopping mall, there has been a problem in that the danger of the security has to be accepted due to the database access of the lower shopping malls, or the lower shopping mall configuration and the self-control of an operation are seriously trespassed on by considerably blocking the access of the lower shopping mall account in order to avoid that.

[7] Additionally, in the other shopping mall parceling-out solution, the mode that forms a unique database of the lower shopping mall is adopted without the link of the lower shopping mall and the upper shopping mall. However, such mode has a problem that it cannot help accepting a considerable burden of cost in that sellers have to separately manage both the upper shopping mall and the lower shopping mall.

[8]
Disclosure of Invention

Technical Problem

Accordingly, an object of the present invention is to solve at least the problems and disadvantages of the related art. An object of the present invention is to provide a link system and link method of an upper shopping mall and an independent shopping mall capable of solving the security problem according to the common database by using the API link method and intensifying the individuality of the lower shopping mall.

Technical Solution

In order to accomplish the object, according to the present invention, provided is a link system of an upper shopping mall having a plurality of sellers and an independent shopping mall operated independently by one person among the sellers, of API link method, which comprises a shopping mall database that stores a goods information, a member information, and a payment and delivery information; an independent shopping mall web server receives a goods inquiry or a purchase request from a user to output a factor for extracting data of the shopping mall database, and receives a necessary data from the shopping mall database; and an API server receives a factor from the independent shopping mall web server to analyze, and accesses to the shopping mall database so as to request that the necessary data should be sent to the independent shopping mall web server.

Additionally, provided is a link method of an upper shopping mall and an independent shopping mall of the API link method, which comprises performing a seller registration, and performing a goods registration in an upper shopping mall web server; receiving an independent shopping mall construction application from the registered seller; establishing an independent shopping mall according to the independent shopping mall construction application; receiving a goods inquiry or a purchase request from a user in an independent shopping mall web server, and outputting a factor for extracting the data of a shopping mall database; requesting the sending of a necessary data by accessing to the shopping mall database, after receiving and analyzing the factor from the independent shopping mall web server in an API server; and receiving the necessary data from the shopping mall database in the independent shopping mall web server.

Brief Description of the Drawings

Fig. 1 is a block diagram showing a system for linking an upper shopping mall and an independent shopping mall according to an embodiment of the present invention.

Fig. 2 is a flowchart showing a method for linking an upper shopping mall and an
dependent shopping mall according to an embodiment of the present invention.

- Description of reference characters of principal elements

10: upper shopping mall web server.

20: shopping mall database.

21: goods database.

22: member information database.

23: payment and delivery information database.

30: independent shopping mall web server.

40: API server.

Best Mode for Carrying Out the Invention

Fig. 1 is a block diagram showing a system for linking an upper shopping mall and an independent shopping mall according to an embodiment of the present invention.

Referring to Fig. 1, the system for linking the upper shopping mall and the independent shopping mall is comprised of an upper shopping mall web server 10, a shopping mall database 20, an independent shopping mall web server 30, and an API server 40.

The upper shopping mall web server 10 receives the seller registration, the goods registration and receives an independent shopping mall construction application from a registered seller.

The shopping mall database 20 includes a goods database 21 which stores a goods information, a member information database 22 which stores a member information, and a payment and delivery information database 23 which stores a payment and delivery information.

The shopping mall database 20 can manage the member information while a user who became a member through the independent shopping mall is indicated with a separate identifier. Through this, a discriminated marketing method can be applied to the user who became a member through the independent shopping mall after a filtering.

The shopping mall database 20 can manage the payment information for the payment generated through the independent shopping mall with a separate identifier for indicating. Through this, it can be utilized as a basic material for an inflow path analysis or a visitor behavior analysis.

The independent shopping mall web server 30 receives a goods inquiry or a purchase request from a user and outputs a factor for extracting data of the shopping mall database 20 to the API server 40, while a necessary data is delivered from the shopping mall database 20.

The factor can include a corresponding seller ID, a field data for goods information
searching, and a member information ID.

[32] The independent shopping mall web server 30 can perform the generic functionality of an internet shopping mall including user membership join.

[33] The independent shopping mall web server 30 can receive data from the shopping mall database 20 with XML or HTML format, and can convert it into an output form which is suitable for the interface of the independent shopping mall for output. Through this, datasets are relocated with a desired form after receiving necessary data and can output them. In that way, the unique user interface of the independent shopping mall can be built through a skin editing.

[34] The independent shopping mall web server 30 can apply a separate discount rate to the price information of goods information data delivered from the shopping mall database 20 or can issue a separate discount coupon. Through this, the unique price policy of the independent shopping mall can be organized.

[35] The API server 40, after receiving and analyzing the factor from the independent shopping mall web server 30, accesses to the shopping mall database 20 and requests the transmission of necessary data.

[36] The independent shopping mall web server 30 can obtain only the information relates to the corresponding seller or user by using the API server 40, thereby, the security problem according to the common database can be solved.

[37] Fig. 2 is a flowchart showing a method for linking an upper shopping mall and an independent shopping mall according to an embodiment of the present invention.

[38] Referring to Fig. 2, in the upper shopping mall web server 10, the seller registration and the goods registration are performed S100.

[39] An independent shopping mall construction application is received from the registered seller S110.

[40] According to the independent shopping mall construction application, the independent shopping mall is built S120.

[41] The independent shopping mall construction can be made by setting up an independence account, and by copying a file required for the shopping mall construction into the corresponding accounts.

[42] The independent shopping mall web server 30 receives a goods inquiry or a purchase request from a user S130.

[43] The independent shopping mall web server 30 outputs a factor for extracting data of the shopping mall database 20 to API server 40 S140.

[44] The factor can include a corresponding seller ID, a field data for goods information searching, and a member information ID.

[45] After receiving and analyzing the factor from the independent shopping mall web server 30, API server 40 accesses to the shopping mall database 20 and requests the
transmission of necessary data S150.

Necessary data are delivered to the independent shopping mall web server 30 from the shopping mall database 20 S160. The independent shopping mall web server 30 can receive data from the shopping mall database 20 with XML or HTML format.

Data that the independent shopping mall web server 30 is delivered from the shopping mall database 20 is converted into an output form which is suitable for the interface of the independent shopping mall to output S170.

The independent shopping mall web server 30 applies a separate discount rate to the price information of goods information data delivered from the shopping mall database 20 S180.

It will be apparent to those skilled in the art that various modifications and variation can be made in the present invention without departing from the spirit or scope of the invention. Thus, it is intended that the present invention cover the modifications and variations of this invention provided they come within the scope of the appended claims and their equivalents.

Industrial Applicability

According to the present invention, the effect of a link system and link method of an upper shopping mall and an independent shopping mall of API link method is as follows:

First, the independent shopping mall web server can obtain only the information relates to the corresponding seller by using API link method, thereby, the security problem according to the common database can be solved.

Second, data that the independent shopping mall web server is delivered from the shopping mall database can be freely converted such that various user interfaces can be provided.

Third, in case of the information relating to the independent shopping mall, a separate identifier is provided when storing data in the shopping mall database, thereby, a marketing method for only the independent shopping mall can be implemented through the filtering method. Accordingly, the individuality of the independent shopping mall can be more strengthened.
Claims

[1] A link system of an upper shopping mall having a plurality of sellers and an independent shopping mall operated independently by one person among the sellers, of API link method, the method comprising:
   a shopping mall database that stores a goods information, a member information, and a payment and delivery information;
   an independent shopping mall web server receives a goods inquiry or a purchase request from a user to output a factor for extracting data of the shopping mall database, and receives a necessary data from the shopping mall database; and
   an API server receives a factor from the independent shopping mall web server to analyze, and accesses to the shopping mall database so as to request that the necessary data should be sent to the independent shopping mall web server.

[2] The method of claim 1, further comprising an upper shopping mall web server that receives the seller registration, receives the goods registration and an independent shopping mall construction application from a registered seller.

[3] The method of claim 1, wherein the factor includes a corresponding seller ID, and a field data for goods information searching.

[4] The method of claim 1, wherein the independent shopping mall web server receives a data from the shopping mall database with XML or HTML format, and converts it into an output form which is suitable for the interface of the independent shopping mall to output.

[5] The method of claim 1, wherein the independent shopping mall web server applies a separate discount rate to the price information of goods information data delivered from the shopping mall database.

[6] The method of claim 1, wherein the shopping mall database indicates a user who became a member through the independent shopping mall with a separate identifier to manage the member information.

[7] The method of claim 1, wherein the shopping mall database indicates a payment that is generated through the independent shopping mall with a separate identifier to manage the payment information.

[8] A link method of an upper shopping mall and an independent shopping mall of the API link method, the method comprising:
   performing a seller registration, and performing a goods registration in an upper shopping mall web server;
   receiving an independent shopping mall construction application from the registered seller;
   establishing an independent shopping mall according to the independent
shopping mall construction application;
receiving a goods inquiry or a purchase request from a user in an independent
shopping mall web server, and outputting a factor for extracting the data of a
shopping mall database;
requesting the sending of a necessary data by accessing to the shopping mall
data base, after receiving and analyzing the factor from the independent shopping
mall web server in an API server; and
receiving the necessary data from the shopping mall database in the independent
shopping mall web server.

[9] The method of claim 8, wherein the factor includes a corresponding seller ID,
and a field data for goods information searching.

[10] The method of claim 8, wherein the independent shopping mall web server
receives a data from the shopping mall database with XML or HTML format.

[11] The method of claim 8, further comprising the step of converting a data which is
delivered from the shopping mall database into an output form which is suitable
for the interface of the independent shopping mall to output in the independent
shopping mall web server.

[12] The method of claim 8, further comprising the step of applying a separate
discount rate to the price information of goods information data delivered from
the shopping mall database in the independent shopping mall web server.
[Fig. 1]

User

Independent Shopping Mall Web Server

API Server

Shopping Mall Database

Goods DB
Member Information DB
Payment & Delivery Information DB

[Fig. 2]

Start

S100 Register seller and goods in the upper shopping mall web server

S110 Receives independent shopping mall construction application from registered sellers

S120 Builds independent shopping mall according to the independent shopping mall construction application

S130 Receives goods inquiry or purchase request from a user

S140 Outputs a factor for extracting date of the shopping mall DB to API server

S150 API server receives and analyze the factor, and accesses to the shopping mall DB to request transmission of necessary data

S160 The necessary date is delivered to the independent shopping mall web server from shopping mall DB

S170 The delivered data is outputted after being converted into a suitable output format for the interface of the independent shopping mall

S180 Applies a separate discount rate to the price information of goods information data delivered from the shopping mall DB

End
A. CLASSIFICATION OF SUBJECT MATTER

**G06Q 30/00(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC8 G06Q 30/00A0

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

- Korean utility models and applications for utility models since 1975
- Japanese utility models and applications for utility models since 1975

Electronic database consulted during the international search (name of database and where practicable, search terms used)

- e-KIPASS "upper, shopping mall, database, server, payment, independent"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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☑ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents:
  - "A" document defining the general state of the art which is not considered to be of particular relevance
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Date of the actual completion of the international search

01 OCTOBER 2007 (01.10.2007)

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Name and mailing address of the ISA/KR

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