

SupplierDB System Description Document

This documents will illustrate how this system is designed to help users to have some further improvements based on current work.

This data management system is used for managing supplier information and research data information for trading business. The description of design will contain two parts. (1) Database design (2) Back end logic design and its document structure.

Part 1: Database design:

Table 1: competitor_analysis

This table is used for storing the information of competitors, to help analyse competitors' product. For each research data of one product, it may contain several competitors' information. The "ResultId" attribute in this table is used to build connection with research data record.

1 competitor_analysis

Creation: Oct 18, 2017 at 12:31 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Id	int(11)		No		auto_increment		ID of competitor's record, unique	
BrandName	varchar(200)		No				Name of the competitor brand	
BSR	varchar(10)		No				BSR of competitor	
Sales	varchar(20)		No				Sales of Competitor	
Price	varchar(10)		No				Price of competitor	
Size	varchar(10)		No				Size of Competitor's product	
LaunchDay	varchar(10)		No				Launch day of competitor's product	
Link	varchar(200)		No				Link of competitor	
Review	varchar(10)		No				Review num of competitor's product	
Pros	varchar(300)		No				Strengths of this competitor	
Cons	varchar(300)		No				Weakness of competitor	
ResultId	int(11)		No			-> research_result.ResultId ON UPDATE RESTRICT ON DELETE RESTRICT	Research data id	
Create_time	datetime		No				Create time of this record	
Update_time	timestamp		No	CURRENT_TIMESTAMP			last update time	
Creator	varchar(20)		No				creator	

Table 2: - Keyword

This table stores the information of keyword.

2 keyword

Creation: Oct 18, 2017 at 12:27 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Kwid	int(11)		No		auto_increment		id of keyword,unique	
Keyword	varchar(50)		No				name of the keyword	

Table 3 – main_kw

This table contains the main keyword relationship between products and keyword.

3 main_kw

Creation: Oct 18, 2017 at 12:22 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
id	int(11)		No		auto_increment		id of the main keyword relationship record	
Productid	int(11)		No			-> product.id ON UPDATE RESTRICT ON DELETE RESTRICT	id of the product, link to the product table	
Kw_id	int(11)		No			-> keyword.Kwid ON UPDATE RESTRICT ON DELETE RESTRICT	keyword id, link to the keyword table	

Table 4 – Other_kw

This table is similar to table 3, it stores the other keyword relationship between products and keyword.

4 other_kw

Creation: Oct 18, 2017 at 12:16 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
id	int(11)		No		auto_increment		id of the other keyword relationship	
Product_id	int(11)		No			-> product.id ON UPDATE RESTRICT ON DELETE RESTRICT		
Kw_id	int(11)		No			-> keyword.Kwid ON UPDATE RESTRICT ON DELETE RESTRICT		

Table 5 – product

This table contains the name of all the product. (Not only the products from quotation files, but also from research data) This table can be helpful when implement the name hint function.

5 product

Creation: Oct 18, 2017 at 12:01 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
id	int(11)		No		auto_increment		Id of product list, unique, contain the id of the product in quotation and research data	
ProductName	varchar(100)		No				The name of this product	

Table 6 – product_info

This table contains the information of products supplied by the suppliers, it is actually the one row in the quotation file provided by the suppliers. “SupplierId” attribute indicates that this product’s quotation record is provided by which supplier.

6 product_info

Creation: Oct 18, 2017 at 12:08 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Productid	int(11)		No			-> product.id ON UPDATE RESTRICT ON DELETE RESTRICT	Id of this product, consistent with ID in product table	
ProductName	varchar(50)		No				name of this product	
Craft	varchar(20)		No				Craft of this product	
ProductSize	varchar(20)		No				The size of this product	
Price	varchar(10)		No				The price of this product	
Size	varchar(100)		No				The size of this product	
ProductionLt	varchar(20)		No				Limitation time of production	
Otherinfo	varchar(300)		No				Comments about this product	
SampleLt	varchar(20)		No				Time need for Sample	
CartonSize	varchar(20)		No				size of carton	
Model	varchar(20)		No				Model No	
Supplierid	int(11)		No			-> supplier.Supplierid ON UPDATE CASCADE ON DELETE CASCADE	Supplier id, indicating who offers this product	
QTY	varchar(20)		No				QTY of this product	
Packing	varchar(30)		No				Packing of this product	
Res_Mark	tinyint(1)		No					
imgUrl	varchar(100)		No					
imgNum	int(11)		No				Number of image uploaded	
Creator	varchar(10)		No				creator	
Create_time	datetime		No				Create time of this record	

Table 7 – research_result

This table keeps the information of research data. The research data will connect to quotation information by the keyword or name.

7 research_result

Creation: Oct 18, 2017 at 12:34 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Resultid	int(11)		No		auto_increment	-> product.id ON UPDATE RESTRICT ON DELETE RESTRICT	Id of research record,unique	
productName	varchar(100)		No				name of this research product	
AllBusinessCard	varchar(200)		No				alibaba business card	
Seller	varchar(500)		No				seller business card	
sellerPrice	float		No				seller's price	
AllPrice	float		No				Price in alibaba	
Otherinfo	varchar(300)		No				comments of this product	
FBA_fees	float		No				fba fees of this product	
estProfit	float		No				estimate profit of this research product	

Table 8 –Source

This table contains the information of source of suppliers or research data.

8 source

Creation: Oct 18, 2017 at 12:01 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
Id	int(11)		No		auto_increment		ID of source record	
SourceName	varchar(10)		No				Name of this source	
Creator	varchar(10)		No				Creator of this record	
UpdateTime	timestamp		No	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP		last update time	

Table 9 – Supplier

This table has the information of a supplier, including its address, name and etc. Also, for each supplier, it will store its role. Such as: manufacture/ trading / both.

9 supplier

Creation: Oct 18, 2017 at 12:01 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
SupplierId	int(11)		No		auto_increment		Id of supplier	
ComName	varchar(50)		No				name of the company	
Address	varchar(150)		No				address of company	
ContactPerson	varchar(20)		No				contact person	
Email	varchar(50)		No				email address of company	
AlibabaSite	varchar(50)		No				alibaba site of this company	
Ebsite	varchar(50)		No				website of this company	
Skype	varchar(20)		No				skype of this company	
Fax	varchar(20)		No				Fax number of this company	
Phone	varchar(50)		No				phone number of this company	
OtherInfo	varchar(200)		No				Comments about this company	
Creator	varchar(20)		No				Creator of this record	
Create_time	datetime		No				Create time of this record	
Update_time	timestamp		No	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP		last update time	
Role	enum('Trading', 'Manufacture', 'Both', '')		No				role of this company	

Table 10 – user

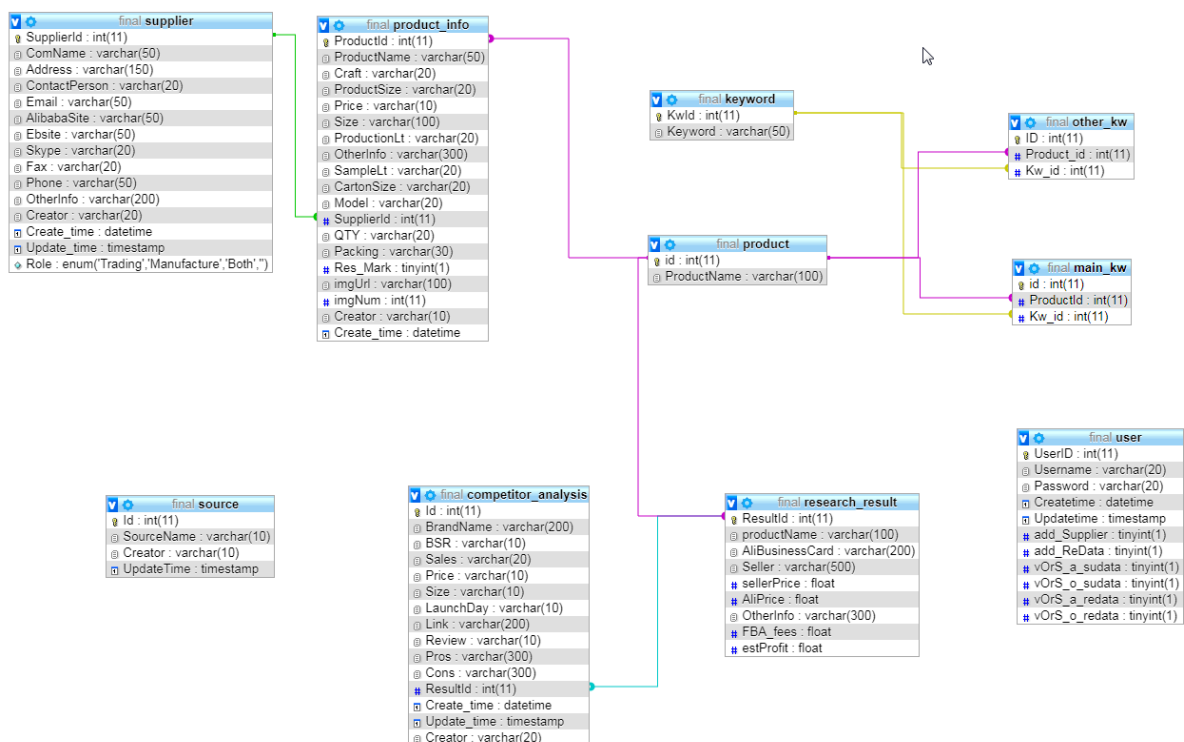
This table contains the information of this system's user. Including username and password which can be used for logging the system. Only administer has the privilege to add and update. Each user will be set different levels permission to access the data stored in this system.

10 user

Creation: Oct 18, 2017 at 12:21 PM

Column	Type	Attributes	Null	Default	Extra	Links to	Comments	MIME
UserID	int(11)		No		auto_increment		id of user, unique	
Username	varchar(20)		No				name of user	
Password	varchar(20)		No				password of user	
Createtime	datetime		No				Create time of this record	
Uptime	timestamp		No	CURRENT_TIMESTAMP	on update CURRENT_TIMESTAMP		last update time	
add_Supplier	tinyint(1)		No	0			permission of user, 0: do not have permission to add supplier; 1: have permission	
add_ReData	tinyint(1)		No	0			permission to add research data, 0:no 1:yes	
vOrS_a_sudata	tinyint(1)		No	0			permission to view or search all supplier data	
vOrS_o_sudata	tinyint(1)		No	0			permission to view or see own supplier	
vOrS_a_redata	tinyint(1)		No	0			permission to view or search all research data	
vOrS_o_redata	tinyint(1)		No	0			permission to view or search own research data	

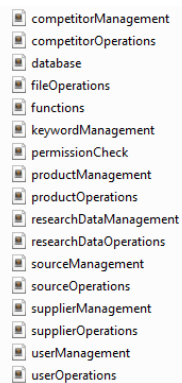
The overall relationship between different tables can be seen in this image:



Part 2: Back-end Logic.

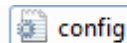
All back-end logic implemented code could be found in the PHP folder.

The file list is shown below:



- competitorManagement
- competitorOperations
- database
- fileOperations
- functions
- keywordManagement
- permissionCheck
- productManagement
- productOperations
- researchDataManagement
- researchDataOperations
- sourceManagement
- sourceOperations
- supplierManagement
- supplierOperations
- userManagement
- userOperations

- (1) “database.php” file indicates the connection to the database, all configurations to connect the database could be found in “config.ini file” under the same folder.



- (2) Files which with a name end with “operation” means this file is used for operations over one table in database. “xxxManagement” files means this file will deal with the requests related to xxx table in the database.
- (3) For example: “userOperations” files will implement some SQL sentences to be run in user table in MySQL. However, “userManagement” file will contains the logic that deals with request from html (Front end) and then, based on the request, it will call the operations in “userOperations” file to solve users’ problem and then return to users. All users management functions are implemented in these two files.
- (4) Similarly, “competitorManagement” and “competitorOperations” will deal with the problems with competitor analysis table in the database. All competitor analysis related work could be found in these two files. Related to competitor_analysis table in the database.
- (5) “sourceManagement” and “sourceOperations” will solve the problems related to source table. Relative to source table in the database.
- (6) “productOperations” and “productManagement” is designed to implement functions which are related to products in quotation record. All operations over product_info table could be found in these two files. “Related to product_info table and
- (7) “supplierOperations” and “supplierManagement” are used for implementing operations related to suppliers.
- (8) “researchDataOperations” and “researchDataManagement” files can be helpful to handle requests relative to research data.
- (9) “keywordManagement” is related to keyword table in the database. Indicates the operation to keyword table in the system.
- (10) “permission”: this file is used for check users’ permission to the information in the system.
- (11) “functions.php”: this file stores some extra functions which may be repeated in different part in this system to reduce redundancy.
- (12) “fileOperation”: this file shows how images uploaded will be stored. Implementing the operations to uploaded images.