CLAIMS

1. A data model developing platform, having a B/S three-tier architecture, and comprising:

a page client in foreground, configured to access an application server through Nginx;

the application server in background, deployed with application services associated with data model development, and

a data storage device, configured to store data using a relational database, and cache data using a key-value database,

wherein the application server in background comprises:

a data standard managing module, configured to maintain a data standard and word-roots;

a data model managing module, configured to design a data model based on the data standard and/or the word-roots;

a project managing module, configured to compare any two versions of a project to generate a difference file, and export the difference file into an SQL file; and

a tenant managing module, configured to provide a multi-tenant environment that isolates projects of different tenants from each other, so that each tenant is allowed to view only an owned project;

wherein the data model managing module comprises:

a data model duplicating sub-module, configured to:

duplicate a data model to form a first replica model, in response to an operation instruction for modifying the data model, wherein only the first replica model is allowed to be modified by a user; and/or

search for an existing data model having a target subject according to a matching condition and duplicate the existing data model to form a second replica model, in response to an operation instruction for forming a data model having the target subject issued by the user, receive a modification operation on the second replica model by the user, and generate

an updated data model having the target subject.

2. The data model developing platform according to claim 1, wherein the data standard managing module comprises:

a data standard maintaining sub-module, configured to maintain the data standard by performing one or more of maintenance operations of adding, deleting, modifying, querying, and synchronizing the data standard, wherein the synchronizing the data standard comprises: synchronously acquiring the data standard from an external database or an external application; and

a word-root maintaining sub-module, configured to maintain the word-roots by performing one or more of maintenance operations of retrieving, adding, modifying, deleting and synchronizing the word-roots, wherein the synchronizing the word-roots comprises: synchronously acquiring the word-roots from an external database or an external application.

3. The data model developing platform according to claim 1, wherein the data model managing module further comprises:

a data model statistics sub-module, configured to track a progress of a current project;

a data model maintaining sub-module, configured to perform one or more of operations of adding a data model, deleting a data model, modifying a data model, and submitting a data model;

a data model import and export sub-module, configured to import and export a model document in a format of Excel; or import a model document in a format of Excel and export a model document in a format of data definition language (DDL); and

a data model releasing sub-module, configured to deliver a final version of a data model to a predetermined environment.

4. The data model developing platform according to claim 1, wherein the project managing module comprises:

a project creating sub-module, configured to create a project to which a data model to be developed belongs, and decompose the project according to a decomposition rule,

wherein the decomposition rule is based on subjects and/or service systems;

a project manager designating sub-module, configured to designate a project manager in response to a selecting instruction or a configuring instruction;

a project member managing sub-module, configured to manage developers in a development team of the project by performing one or more of: adding a developer, deactivating a developer, enabling a developer, and deleting a developer.

5. The data model developing platform according to claim 4, wherein the project managing module further comprises:

a project modifying sub-module, configured to modify basic information of the project;

a service system maintaining sub-module, configured to maintain a service system to which the project belongs;

a model layer maintaining sub-module, configured to maintain a layer to which data models in the project belong;

a data model naming rule sub-module, configured to maintain a naming rule of the data models in the project, so that the data models have a unified style of naming;

a data source managing sub-module, configured to select and determine a database corresponding to physicalization of the data models and a database corresponding to reverse engineering; and

a data model verifying sub-module, configured to verify a designed data model using the data standard and submit the verified data model to a node corresponding to the project manager.

6. The data model developing platform according to claim 5, wherein the project managing module further comprises one or more of:

a project handover sub-module, configured to: in response to replacing a project manager, hand over a project corresponding to the replaced project manager to a node corresponding to a designated person;

a model handover sub-module, configured to: in response to replacing a project developer, hand over a data model designed by the replaced project developer to a node

corresponding to another project developer of the project; and

a reverse engineering sub-module, configured to convert a table in a database into a data model.

7. The data model developing platform according to any one of claims 1 to 6, wherein the tenant managing module comprises one or more of:

a tenant creating sub-module, configured to create a tenant;

a tenant modifying sub-module, configured to modify basic information of the tenant;

a tenant enabling sub-module, configured to enable a disabled tenant;

a tenant disabling sub-module, configured to disable a current tenant;

a tenant deleting sub-module, configured to delete the disabled tenant, and delete all projects, models, private data standards and word-roots belonging to the disabled tenant; and

a tenant handover sub-module, configured to: in response to replacing a tenant administrator, hand over a tenant to a node corresponding to another person.

8. The data model developing platform according to any one of claims 1 to 6, wherein the application server in background further comprises:

a data type managing module, configured to maintain mapping relations between data types of different databases, wherein the mapping relations are used to convert the data model between different databases, wherein the data type managing module comprises:

a data type querying sub-module, configured to retrieve a configured mapping relation between data types of different databases; and

a data type maintaining sub-module, configured to add, modify, and delete a mapping relation between data types of different databases.

9. The data model developing platform according to any one of claims 1 to 6, wherein the relational database comprises a MySQL database, an external database is connected with the MySQL database through an RESTful interface, and the MySQL database acquires the data standard and the word-roots from the external database;

the application server in background further comprises: a log managing sub-module

configured to generate a log record for a sensitive operation, wherein the sensitive operation comprises at least one of: user login, deleting a user, deleting a tenant, and deleting a data model.