P4 Planning Doc - Tessitura Report Catalog

App Title

Tessitura Report Catalog

Description

Tessitura Report Catalog is a web application to manage report documentation for all in-house custom reports developed for Tessitura CRM application.

Tessitura (http://tessituranetwork.com) is the core business application we use in our company for online ticket selling, venue management, fundraising, customer relationship management and other ecommerce related operations. To meet our end users' demand we do lot of inhouse customizations, and created hundreds of custom reports and utilities. The one main challenge our end users and developers face is keeping track of all of these customizations. There are online documentation for all the canned reports and other standard Tessitura functionalities but nothing for the in-house custom solutions. Tessitura Report Catalog web application will meet this demand by creating an online repository for all the in-house reports which then we can hook up with the main Tessitura application so that a user can pull a report documentation on demand using context sensitive help from a Tessitura client application.

This will also help our in-house developers to find the relevant system documentation for troubleshooting and further enhancement purposes.

If there is enough time, the application may also have the features to view all favorite reports by a user; view and save a report detail page as PDF; view and save a searched report listing page as PDF; option to add, edit and view data dictionary/glossary page(s) which will help users & developers to use common lingo; a contact page, and a page to add and update system/reference data without relying on database interface.

Target Audience

The users and developers of Tessitura CRM application. The initial plan is to implement it in my current organization. If it becomes successful and after a couple of months of usage when everything will become streamlined I may share the application with other Tessitura licensee organizations to be locally installed and used if anyone is interested. Currently there are around 600 Tessitura licensees around the globe.

Essential Features

- Add a new report
- View list of reports with elaborated search/filtering options
- View a specific report detail
- Edit an existing report
- Add a report revision history by a developer
- Edit/delete a report revision history by a developer
- Add comments to a report; rate and mark a report as favorite by a user

- Edit/delete comments to a report, update rating and mark/unmark a report as favorite by a user

Non-essential Features

- View “My Favorite” reports by a user
- Add data dictionary/glossary for commonly used terms
- Edit data dictionary/glossary for commonly used terms
- Contact page with send message via email option
- View and save a report list as PDF
- View and save a report detail page as PDF
- Interface to add system or reference data
  - Report Framework (SSRS, InfoMaker, Other)
  - Code Location (SP, Embedded SQL, Other)
  - Report Category
  - User Group/ Roles

To do

```
[ ] Setup
      [ ] Create app
      [ ] Version control in Github
      [ ] Deploy to production (Digital Ocean) server
      [ ] Set up subdomain p4.guddi.ca

[ ] Homepage
      [ ] Welcome/intro note
      [ ] Logo/Company Name/Application Title
      [ ] Link to the “Listing page of reports with elaborated filtering options”
      [ ] Top level menu and submenu with link to other pages
      [ ] Login
      [ ] Register

[ ] Reports
      [ ] Page to search a report/solution
      [ ] Page to view all reports
      [ ] Page to view favorite reports
      [ ] Page to comment on a report
      [ ] Page to view my (logged in user) comments along with edit, delete options
      [ ] Page to rate a report and mark a report as favorite
      [ ] Page to view my (logged in user) ratings along with edit, delete options

[ ] Glossaries
```

```
    [ ] Page to view all glossary terms along with edit, delete options
    [ ] Page to create a new report

[ ] Developers
    [ ] Page to view all reports along with edit, delete options
    [ ] Page to create a new report
    [ ] Page to add revision history to a report
    [ ] Page to view my (logged in user) revisions history along with edit, delete
    options

[ ] Finalize
    [ ] Test all features
    [ ] Observe someone else use the application
    [ ] Validate, spell check
    [ ] Update Github reports
    [ ] Final deployment on live site
```

Route Plan (Essential Features)

Purpose	Method	Route Name	Action	URI
Homepage	GET	page.home	index	/
Contact	GET	page.contact	create	/contact
Contact	POST	page.contactPost	send	/contact
Listing of reports	GET	reports.index	index	`/reports/`
Show a report detail	GET	reports.show	show	`/reports/{reportId?}`
Display favorite reports	GET	reports.my_fave_reports	index	`/my-fav-reports`
Search a report	GET	reports.search	create	`/search`
Display search result	GET	reports.search_result	index	`/search-result`
List reports for developers	GET	reports-dev.index	index	`/reports-dev`
Show form to add a new report	GET	reports-dev.create	create	`/reports-dev/create`

Process form to add the report	POST	reports-dev.store	store	`/reports-dev`
Show a report with technical information for a developers	GET	reports-dev.show	show	`/reports-dev/{id}`
Show form to edit a report	GET	reports-dev.edit	edit	`/reports-dev/{id?}/edit`
Process form to edit the report	PUT	reports.update	update	`/reports-dev/{id?}/edit`
Show form to delete a report	GET		show	`/reports-dev/{id}/delete`
Process form to delete a report	DELETE		delete	`/reports-dev/{id}`
Show all my (logged in user) comments	GET	comments.my_comments	index	`/my-comments`
Show form to create a comment	GET	comments.create	create	`/comments/create`
Process form to create a comment	POST	comments.store	store	`/comments`
Show form to display a comment	GET	comments.show	show	`/comments/{id}`
Show form to edit a comment	GET	comments.edit	edit	`/comments/{id}/edit`
Process form to edit the comment	PUT	comments.update	update	`/comments/{id}`
Show form to delete a comment	GET	comments.delete	delete	`/comments/{id}/delete`
Process form to delete a comment	DELETE	comments.destroy	destroy	`/comments/{id}`
Show all my (logged in user) revisions	GET	revisions.my_revisions	index	`/my-revisions`
Show form to create a revision	GET	revisions.create	create	`/revisions/create`

Process form to create the revision	POST	revisions.store	store	/revisions
Show an individual revision	GET	revisions.show	show	/revisions/{id}
Show form to edit a revision history	GET	revisions.edit	edit	/revisions/{id?}/edit
Process form to edit the revision history	PUT	revisions.update	update	/revisions/{id}/edit
Show form to add a revision history	GET	revisions.delete	delete	/revisions/{id}/delete
Process form to delete a revision history	DELETE	revisions.destroy	destroy	/revisions/{id}
Show all my (logged in user) ratings	GET	ratings.my_ratings	index	/my-ratings
Show form to create a rating	GET	ratings.create	create	/ratings/create
Process form to create a rating	POST	ratings.store	store	/ratings
Show form to display a rating	GET	ratings.show	show	/ratings/{id}
Show form to edit a rating	GET	ratings.edit	edit	/ratings/{id}/edit
Process form to edit the rating	PUT	ratings.update	update	/ratings/{id}
Show form to delete a rating	GET	ratings.delete	delete	/ratings/{id}/delete
Process form to delete a rating	DELETE	ratings.destroy	destroy	/ratings/{id}
Show all glossary terms	GET	glossaries.index	index	/glossaries
Show form to create a glossary	GET	glossaries.create	create	/glossaries/create
Process form to	POST	glossaries.store	store	/glossaries

create the glossary				
Show an individual glossary term	GET	glossaries.show	show	`/glossaries/{id}`
Show form to edit a glossary	GET	glossaries.edit	edit	`/glossaries/{id?}/edit`
Process form to edit the glossary	PUT	glossaries.update	update	`/glossaries/{id}/edit`
Show form to delete a glossary term	GET	glossaries.delete	delete	`/glossaries/{id}/delete`
Process form to delete a glossary term	DELETE	glossaries.destroy	destroy	`/glossaries/{id}`

*(Attention **Kate**: I broke the database object naming conventions suggested in the class here. Had a discussion in Piazza with **Susan** on this. Here is the Piazza discussion link: https://piazza.com/class/iqiwxxw3sex3r2?cid=155. Thanks!*

***Update (Nov 29, 2016):** I thought about it. Since it will be a completely separate DB from our business app, I changed my plan to stick to Laravel convention instead - at least for the duration of this course, so that I can take advantage of some Laravel built-in functionalities.)*

Database Tables

Table name: reports
Description: Will store individual report doc
Fields:

- (int, primary key, auto_increment) **id**
- (varchar(255)) **name**
- (text) **description**
- (varchar(255)) **tess_report_id**
- (varchar(255)) **definition file**
- (text) **sql_proc**
- (varchar(255)) **database**
- (varchar(255)) **keywords**
- (text) **note_general**
- (text) **note_technical**
- (int) **category_id**
- (int) **framework_id**
- (int) **type_id**
- (boolean) **schedulable**
- (boolean) **inhouse**
- (boolean) **verified**

- (boolean) **published**
- (datetime) **first_implemnetation_dt**
- (datetime) **last_update_dt**
- (boolean) **discontinued**
- (boolean) **active**
- (timestamp) **created_at**
- (timestamp) **updated_at**
- (int) **created_by**
- (int) **updated_by**

Table name: screenshots
Description: Will store screenshot file names for a report
Fields:
- (int, primary key, auto_increment) **id**
- (int) **report_id**
- (varchar(255)) **file_name**
- (varchar(255)) **file_type**
- (varchar(255)) **caption**
- (varchar(255)) **description**
- (boolean) **active**
- (timestamp) **created_at**
- (timestamp) **updated_at**

Table name: categories
Description: Will store report category names
Fields:
- (int, primary key, auto_increment) **id**
- (varchar(255)) **name**
- (varchar(255)) **description**
- (boolean) **default**
- (boolean) **active**
- (timestamp) **created_at**
- (timestamp) **updated_at**

Table name: frameworks
Description: Will store report frameworks
Fields:
- (int, primary key, auto_increment) **id**
- (varchar(255)) **name**
- (varchar(255)) **description**
- (boolean) **default**
- (boolean) **active**
- (timestamp) **created_at**
- (timestamp) **updated_at**

Table name: types
Description: Will store report types
Fields:

- (int, primary key, auto_increment) **id**
- (varchar(255)) **name**
- (varchar(255)) **description**
- (boolean) **default**
- (boolean) **active**
- (timestamp) **created_at**
- (timestamp) **updated_at**

Table name: tessareas
Description: Will store Tessitura area for reports
Fields:
- (int, primary key, auto_increment) **id**
- (varchar(255)) **name**
- (text) **description**
- (boolean) **default**
- (boolean) **active**
- (timestamp) **created_at**
- (timestamp) **updated_at**

Table name: report_tessarea
Description: Pivot table between reports and tessareas
Fields:
- (int, primary key, auto_increment) **id**
- (int) **report_id**
- (int) **tessarea_id**
- (boolean) **active**
- (timestamp) **created_at**
- (timestamp) **updated_at**

Table name: comments
Description: Table to store a user comments.
Fields:
- (int, primary key, auto_increment) **id**
- (int) **report_id**
- (int) **user_id**
- (varchar(255)) **description**
- (datetime) **comment_dt**
- (boolean) **active**
- (timestamp) **created_at**
- (timestamp) **updated_at**
- (timestamp) **deleted_at**

Table name: ratings
Description: Table to store a user comments.
Fields:
- (int, primary key, auto_increment) **id**
- (int) **report_id**

- (int) **user_id**
- (int) **rating**
- (boolean) **favorite**
- (boolean) **active**
- (timestamp) **created_at**
- (timestamp) **updated_at**
- (timestamp) **deleted_at**

Table name: revisions
Description: Table to store a revision history.
Fields:
- (int, primary key, auto_increment) **id**
- (int) **report_id**
- (int) **user_id**
- (varchar(255)) **description**
- (timestamp) **revision_dt**
- (boolean) **active**
- (timestamp) **created_at**
- (timestamp) **updated_at**
- (timestamp) **deleted_at**

Table name: glossaries
Description: Will store data dictionary/glossary items.
Fields:
- (int, primary key, auto_increment) **id**
- (varchar(255)) **term**
- (text) **definition**
- (boolean) **active**
- (timestamp) **created_at**
- (timestamp) **updated_at**
- (int) **created_by**
- (int) **updated_by**

Table name: users (Laravel built-in)
Description: Table to store users
Fields:
- (int, primary key, auto_increment) **id**
- (varchar(255)) **name**
- (varchar(255)) **email**
- (varchar(255)) **password**
- (varchar(100)) **remember_token**
- (timestamp) **created_at**
- (timestamp) **updated_at**

Table name: password_resets (Laravel built-in)
Description: Table to store users
Fields:
- (varchar(255)) **email**

- (varchar(255)) **token**
- (timestamp) **created_at**

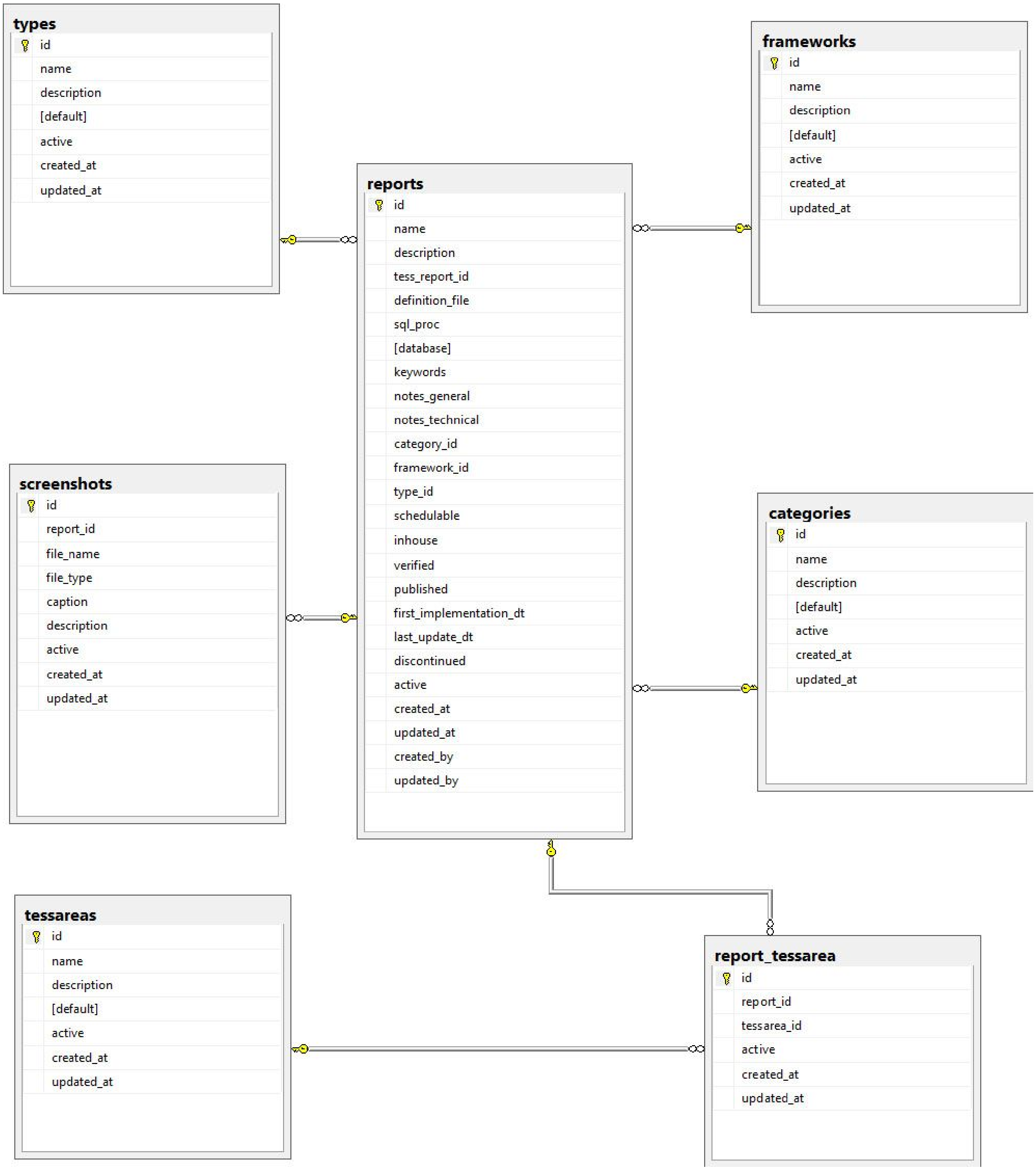
Table name: roles
Description: Table to store application roles.
Fields:
- (int, primary key, auto_increment) **id**
- (varchar(255)) **name**
- (varchar(255)) **description**
- (boolean) **default**
- (boolean) **active**
- (timestamp) **created_at**
- (timestamp) **updated_at**

Table name: role_user
Description: Pivot table between the roles table and the users table.
Fields:
- (int, primary key, auto_increment) **id**
- (int) **role_id**
- (int) **user_id**
- (boolean) **active**
- (timestamp) **created_at**
- (timestamp) **updated_at**

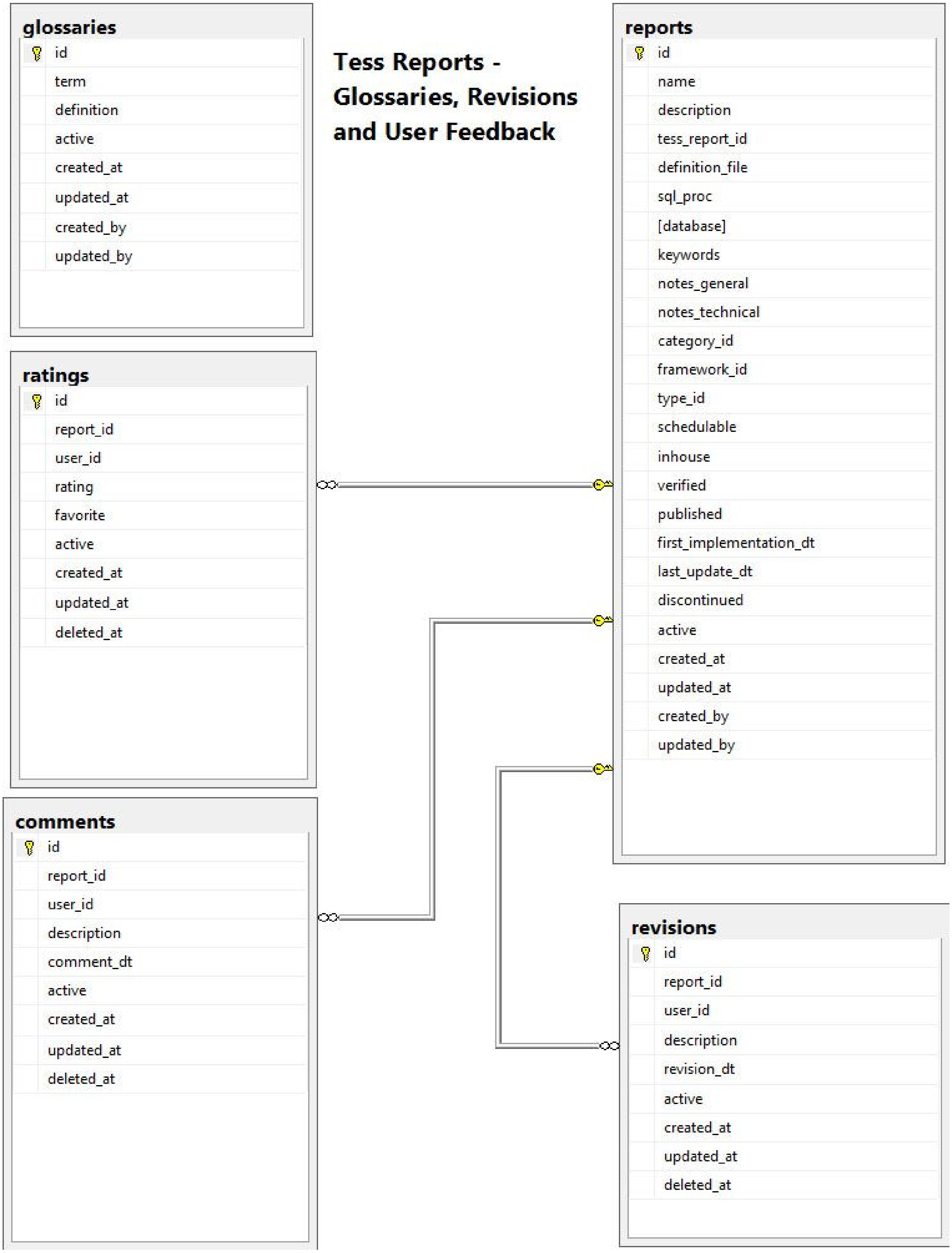
Table name: appobjects
Description: Will store object details for this web application
Fields:
- (int, primary key, auto_increment) **id**
- (varchar(255)) **name**
- (text) **description**
- (boolean) **default**
- (boolean) **active**
- (timestamp) **created_at**
- (timestamp) **updated_at**

Table name: appobject_role
Description: Pivot table between appobjects and roles for authorization purpose
Fields:
- (int, primary key, auto_increment) **id**
- (int) **appobject_id**
- (int) **role_id**
- (boolean) **create**
- (boolean) **read**
- (boolean) **update**
- (boolean) **delete**
- (timestamp) **created_at**
- (timestamp) **updated_at**

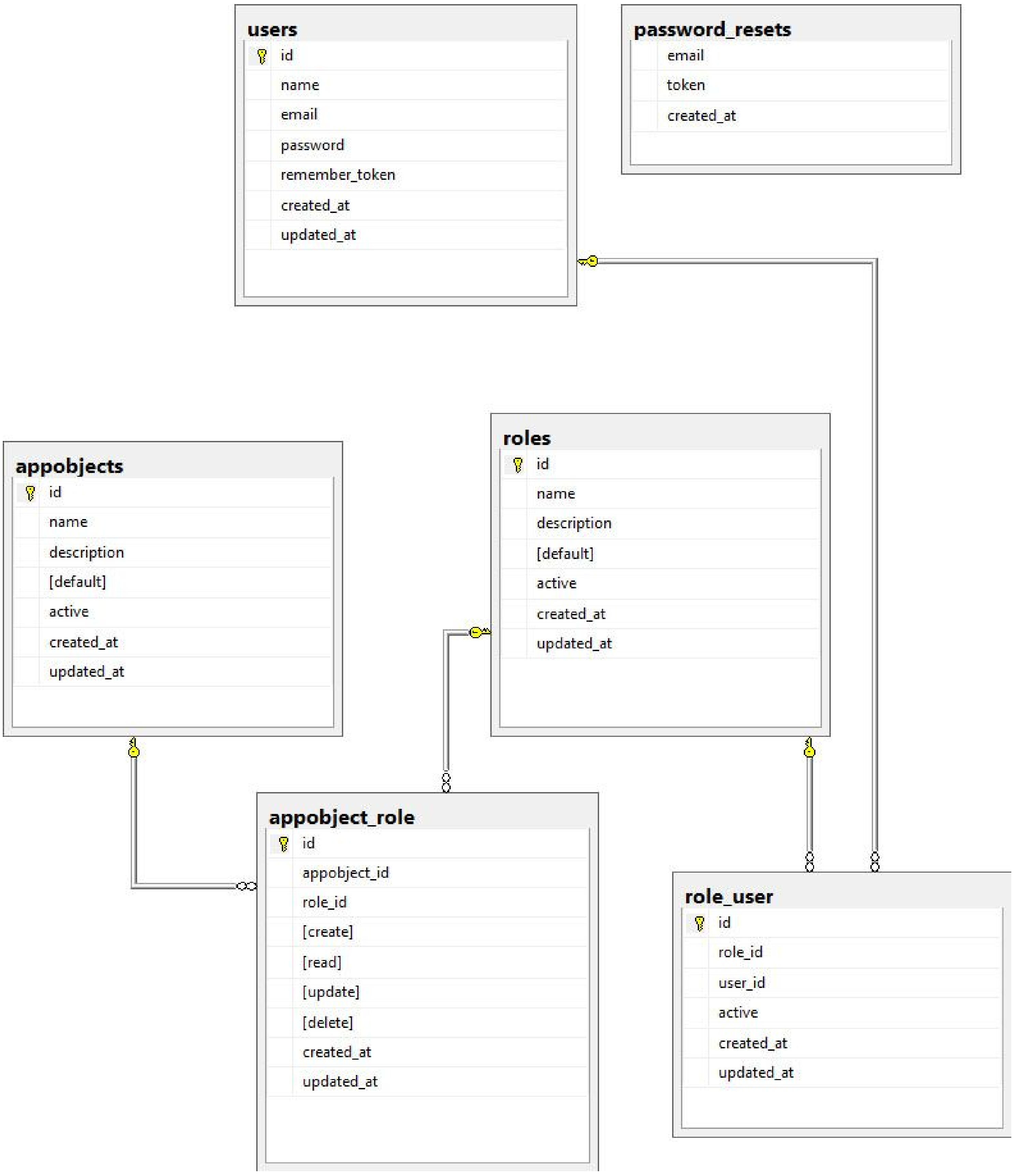
Tess Reports - Core Attributes



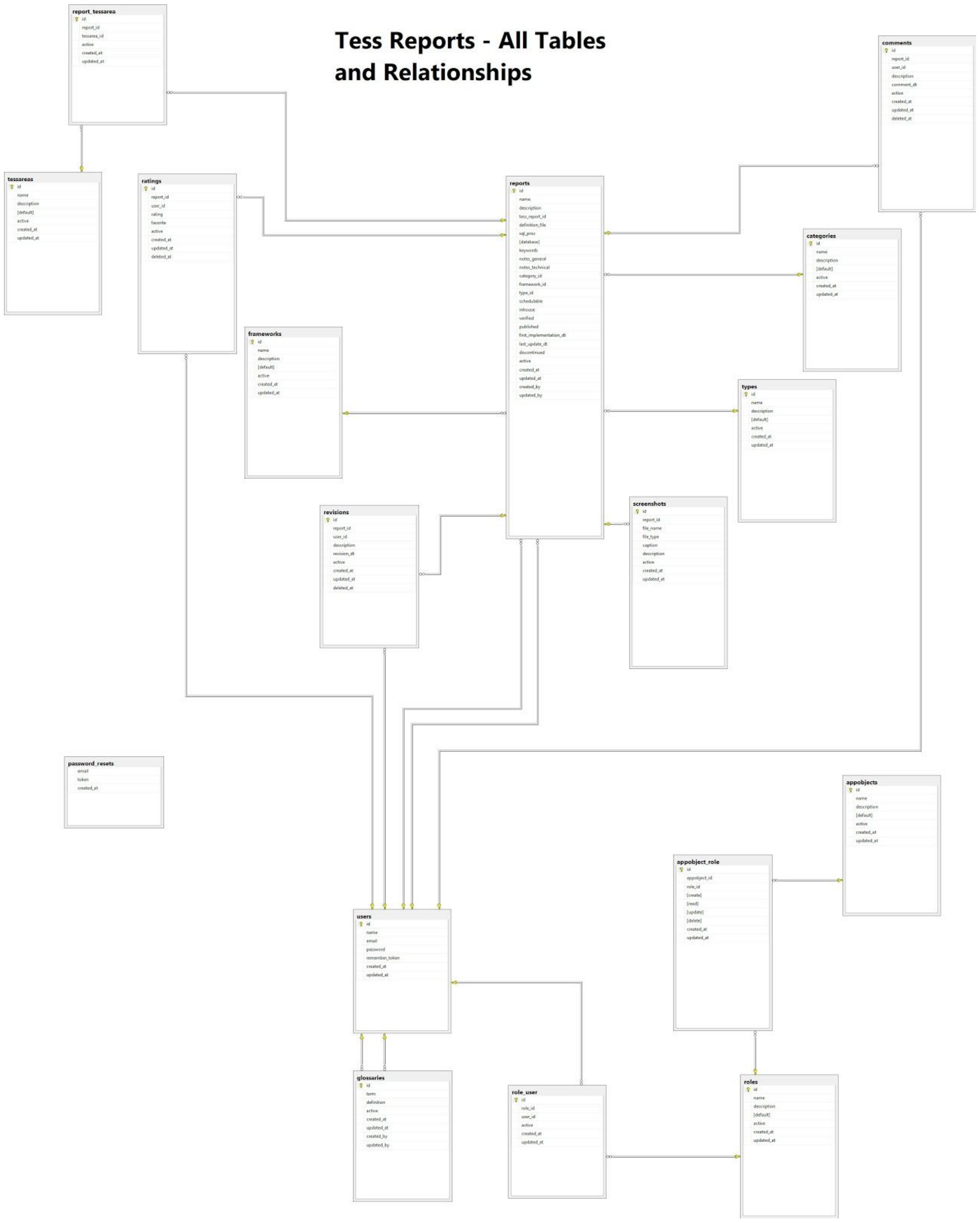
Tess Reports - Glossaries, Revisions and User Feedback



Tess Reports - Security, Authentication and Authorization



Tess Reports - All Tables and Relationships



Misc

1. General viewing of a report will not be password protected to accommodate linking from the core business application (yet to finalize this decision). All other functionalities will be password protected.

2. All system/reference data are quite static and hardly will require an up-date. Even if they ever get updated the frequency will be very low - may be once in a couple of years. This update will be done by the developers. So no front end entry/update screen is necessary at this point. That's why I added them as non-essential features.

3. Though for the class project purpose I will keep a signup screen for the users eventually there will be only login screen for the users but no sign-up screen as the application won't remain open to public. Only designated users will have access to this application. The users will be added by the admin staff.

4. Screenshot file names in the screenshots table will be saved with file extension but without any folder location. All screenshots will be pulled from a particular folder of the application.

5. Keywords to easily find a report will be saved as a comma separated value string in the reports table for simplicity purpose instead of putting them in a separate table.

6. Since Laravel built functionalities don't support role based security, I extended this part to add my own role based security. Look at the "Tess Reports - Security, Authentication and Authorization" diagram above for details.