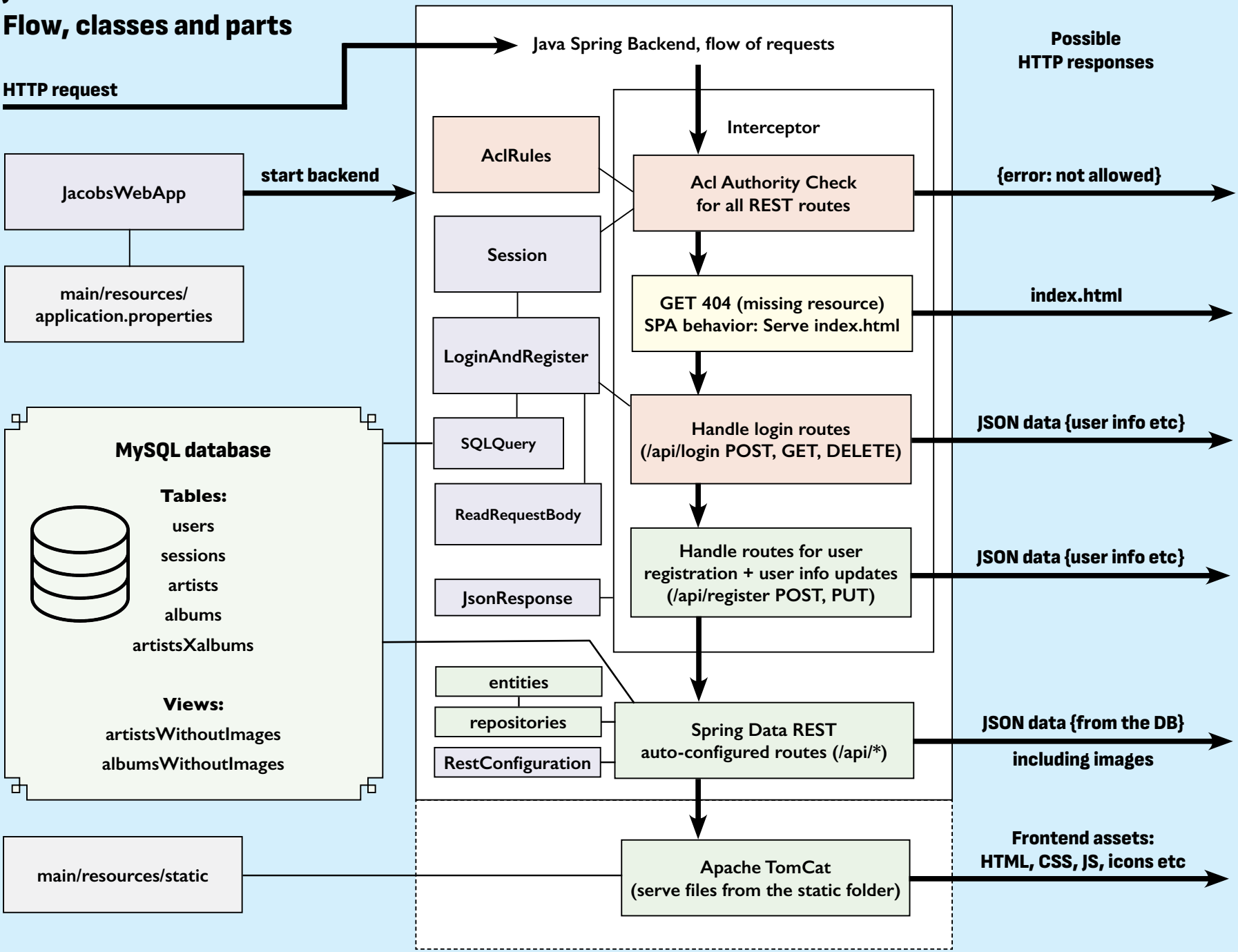
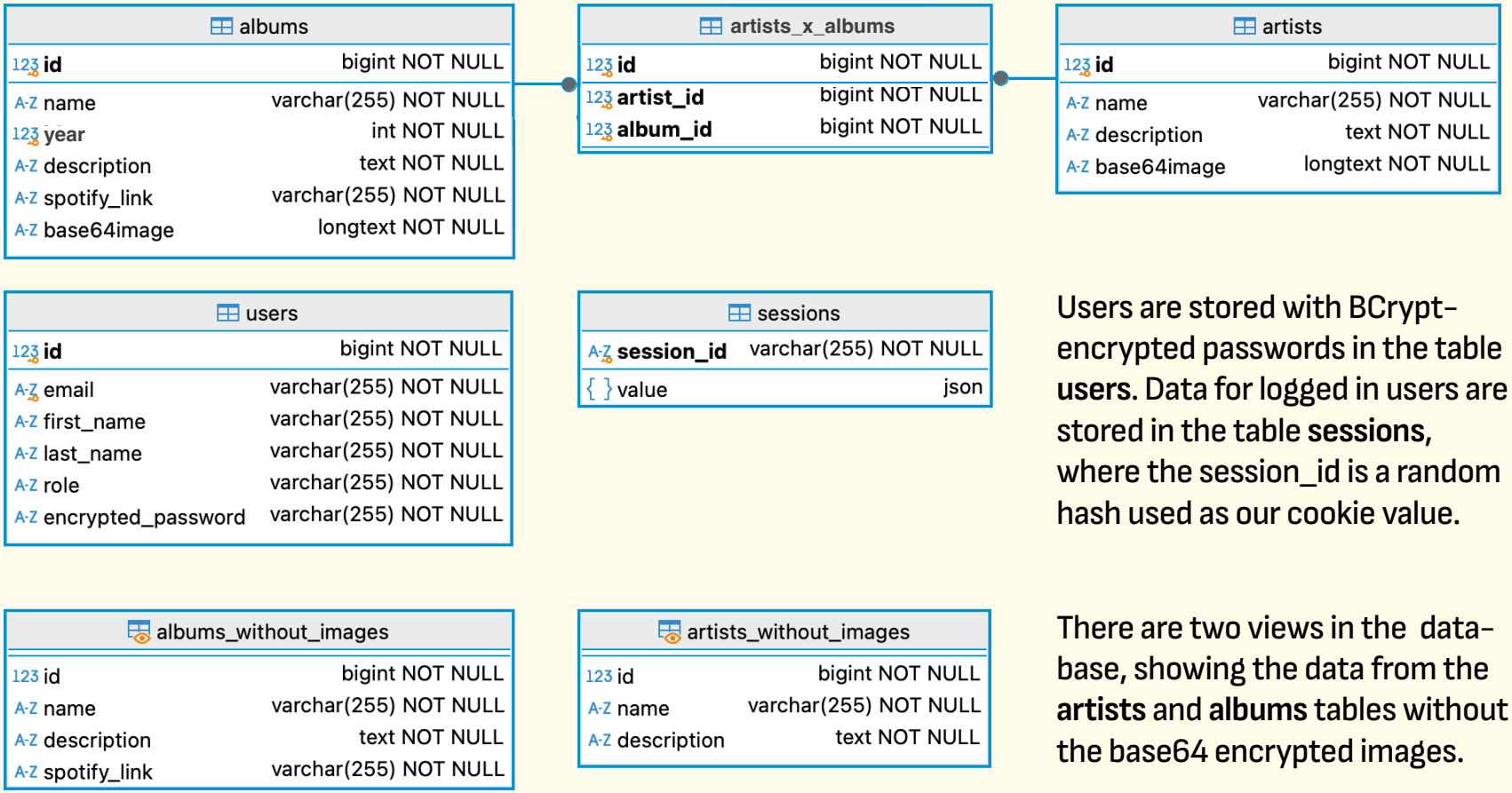
Jacob's Backend: Flow, classes and parts



Jacob's MySQL database: ER Diagram

The only relation we have is a many-to-many relationship between albums and artists:

- An album is made by one or several artists, an artist can make one to many albums
- We solve this many-to-many relation in the classic SQL way, by introducing a join table, **artistsXalbums**.



Users are stored with BCrypt-encrypted passwords in the table **users**. Data for logged in users are stored in the table **sessions**, where the session_id is a random hash used as our cookie value.

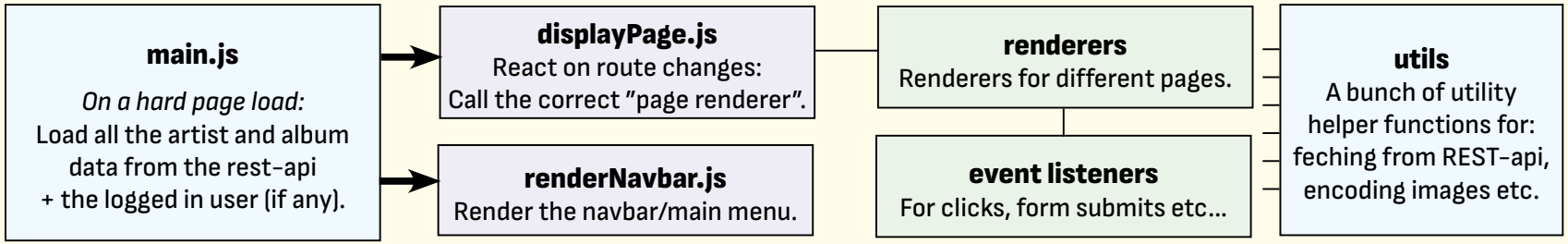
There are two views in the data-base, showing the data from the **artists** and **albums** tables without the base64 encrypted images.

Jacob's Backend: REST API Routes

Request method	**Route**	**Access control** *(by user roles)*
POST	/api/register	visitor
PUT	/api/register	user
POST	/api/login	visitor
GET	/api/login	visitor, user
DELETE	/api/login	user
POST	/api/artists	user
GET	/api/artists	visitor, user
GET	/api/artists/:id	visitor, user
PUT	/api/artists/:id	user
DELETE	/api/artists/:id	user
GET	/api/artistsWithoutImages	visitor, user
GET	/api/artistsWithoutImages/:id	visitor, user
POST	/api/albums	user
GET	/api/albums	visitor, user
GET	/api/albums/:id	visitor, user
PUT	/api/albums/:id	user
DELETE	/api/albums/:id	user
GET	/api/albumsWithoutImages	visitor, user
GET	/api/albumsWithoutImages/:id	visitor, user
GET	/artistXalbums	visitor, user
POST	/artistXalbums	user
DELETE	/artistXalbums/:id	user

Jacob's Frontend: Quick overview

The frontend is an SPA built with "vanilla JS" (JavaScript without any frontend framework). Two external JS libraries are used: The JS part of the Bootstrap CSS library and Marked.js (*conversion of markdown to html*). The Bootstrap CSS library is used to accomplish a modern responsive layout in conjunction with my own CSS.



SPA (Single Page Application): Frontend routing

The frontend is an SPA, which takes care of the routing of a number of different GET routes, via JavaScript running in the browser, without doing any hard page reloads between route changes.

Menu item / Link	Shown for	GET route	Description
Artists	everyone	/	List of artists
Albums	everyone	/albums	List of albums
Add an artist	logged in users	/add-artist	Form for adding an artist
Add an album	logged in users	/add-album	Form for adding an album
About	everyone	/about	Info about the application
Register	visitors (not logged in)	/register	Form for registering a user
[name of logged in user]	logged in users	/register	Form for updating user info
[link from each artist in list]	everyone	/artists-info/:id	Details about an artist
[link from each album in list]	everyone	/album-info/:id	Details about an album
[link from each artist in list]	logged in users	/edit-artist/:id	Form for editing artist info
[link from each album in list]	logged in usrs	/edit-album/:id	Form for editing album info