3.3.2. Physical Model

The model presented as a diagram of the database that constitutes the implementation of the conceptual model in the selected database management system.

It is required to include an elaboration on the transformation of the conceptual model to the physical model. Description of transformation should include how elements like, e.g. inheritance and associations or other sophisticated modelling concepts have been handled.

TRANSFORMATIONS		
transformation	**Description**	**examples**
Restricted words	PostgreSQL restricts usage of certain reserved words, therefore they needed to be adjusted in the physical model	User table changed to Client
Many-to-many relationships	Physical model doesn't allow for many-to-many relationships to exist so they need to be converted to one-to-many relationships	Audiobook-Genre relation from conceptual model was changed into one-to-many relationship
Multivalued attributes	Conceptual model includes attributes with multiple values, which need to be converted into additional table in physical database model	Representative(s') names attribute of Publisher from conceptual model was changed into additional table in physical model. Narrator(s) attribute of Audiobook from conceptual model was changed into additional table in physical model.
Keys and types	The conceptual model doesn't include key or types of attributes, which need to be added in physical model	Each table has specified keys and attribute types.
Plural relationships	Multiple relations between two tables should be avoided in physical database models.	Conceptual model includes two relationships between Chapter and Option tables, which were solved with including an additional table in physical database model.

PHYSICAL DATABASE MODEL: