

## Database conceptual model mapping

**user** = {user\_id#, username, password}

Pk = user\_id

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**bankAccount** = {account\_id#, account\_number#, balance, creation\_date, account\_type, user\_id\*}

Pk = account\_id + account\_number

Fk = user\_id ref user

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**investments** = {investment\_id#, investment\_name, investment\_amount, annual\_return\_rate}

Pk = investment\_id

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**applies**  $\longleftrightarrow$  **userInvestment** = {investment\_id#\*, user\_id#\*, end\_date, start\_date}

Pk = investment\_id + user\_id

Fk = investment\_id ref investments

Fk = user\_id ref user

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**comprises**  $\longleftrightarrow$  **investmentsBankAccount** = {investment\_id#\*, account\_id#\*}

Pk = investment\_id + account\_id

Fk = investment\_id ref investments

Fk = account\_id ref bankAccount

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**loan** = {loan\_id#\*, loan\_amount, annual\_interest\_rate, loan\_term\_months, request\_date, loan\_date, loan\_status, account\_id\*, user\_id\*, }

Pk = loan\_id

Fk = account\_id ref BankAccount

Fk = user\_id ref user

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**transactions** = {transaction\_id#, amount, transaction\_type, user\_id\*}

Pk = transaction\_id

Fk = user\_id ref user

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**covers**  $\longleftrightarrow$  **transactionsBankAccount** = {transaction\_id#\*, account\_id#, transfer\_date}

Pk = transaction\_id + account\_id

Fk = transaction\_id ref transactions

Fk = account\_id ref BankAccount

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