

Database model documentation

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1. Model details

Model name:

A Peer-to-Peer Lending Platform Data Model

Version:

2.3

Database engine:

PostgreSQL

Description:

2. Tables

2.1. Table investor

2.1.1. Columns

Column name	Type	Properties	Description
id	int	PK	
first_name	varchar(50)		
last_name	varchar(50)		
tax_id	varchar(20)		
date_of_birth	date		
contact_number	varchar(20)		
kyc_complete	char(1)		
escrow_account_number	varchar(35)		
investment_limit	money		
fund_committed	money		

2.2. Table borrower

Description:

Privacy rules applied

2.2.1. Columns

Column name	Type	Properties	Description
id	int	PK	
first_name	varchar(50)		The legal first names of the borrower
last_name	varchar(50)		The legal last names of the borrower
current_address	varchar(1000)		The current living address of the borrower. Verification is required
permanent_addresses	varchar(1000)		Permanent living address of the borrower. Verification and privacy rules applies

contact_number	varchar(20)		International format of borrower's contact number. Phone number if provided must be unique
date_of_birth	date		Date of birth of borrower. Registered borrowers must be not less than 18 years of age
kyc_complete	boolean		Indication if borrower has completing KYC verification processes
highest_qualification	varchar(50)	null	Highest educational qualification of borrower. This is not required but maybe required depending on the amount requested and purpose of loan.
passout_year	date	null	
email_address	varchar(150)		Valid email address of the borrower. Check for disposable email address
phone_number	varchar(70)	null	Phone number if provided must be unique
kyc_status	varchar(20)		KYC status of the user. This maybe an ENUM with choices (Verified, Unverified, Pending etc.)
on_boarding_complete	boolean	null	
on_boarding_complete_date	date		
kyc_submitted	boolean		
salutation	varchar(5)	null	
job_title	varchar(20)		
social_security_number	varchar(20)		
place_of_birth	varchar(50)		
time_zone	varchar(50)		The default time zone of the borrower

joined_date	date		Date and time when borrowers account was created
modified_date	date	null	
stripe_id	varchar(150)	null	As customers will be created using Stripe, this is the Stripe ID of the client
stripe_seller_id	varchar(150)	null	
pending_cash_balance	money		Amount of money pending in balance
verification_date	date	null	Date and time when borrowers account was verified
registered_ip_address	varchar(20)		IP address of the borrower captured at the time of registration
country_of_residence	varchar(2)	null	The ISO-2 of the country of residence of the borrower
currency_id	uuid		The default currency of the borrower. Currency will be sent against borrowers country of residence.

2.3. Table investor_proposal

2.3.1. Columns

Column name	Type	Properties	Description
id	int	PK	
investor_id	int		
loan_ticket_id	int		
proposal_amount	money		
proposal_date	date		
cancel_date	date	null	
last_update_date	date	null	

2.4. Table loan_ticket

2.4.1. Columns

Column name	Type	Properties	Description
id	int	PK	
borrower_id	int		
loan_amount	money		
loan_tenure_in_months	int		
interest_rate	money		
risk_rating	char(1)		
reason_for_loan	varchar(1000)	null	
ability_to_repay	varchar(4000)	null	
risk_factors	varchar(4000)	null	

2.5. Table loan_ticket_fulfillment

2.5.1. Columns

Column name	Type	Properties	Description
id	int	PK	
investor_proposal_id	int		
release_date_from_investor	date		
disburse_date_to_borrower	date		
pre_emi_amount	money	null	
pre_emi_due_date	date	null	
emi_amount	money		
emi_start_date	date		
emi_end_date	date		
num_of_total_emi	int		
pre_closure_flag	char(1)	null	
pre_closure_date	date	null	
last_update_date	date		

2.6. Table loan_repayment_schedule

2.6.1. Columns

Column name	Type	Properties	Description
id	int	PK	
loan_ticket_fulfillment_id	int		
emi_due_date	date		
due_interest_amount	money		
due_principal_amount	money		
due_emi_amount	money		
penalty_amount	money	null	
total_due_amount	money		
emi_amount_received	money		
penalty_amount_received	money	null	
receive_date	date	null	
is_emi_payment_defaulted	char(1)	null	
is_emi_payment_advanced	char(1)	null	

2.7. Table payment_method

2.7.1. Columns

Column name	Type	Properties	Description
id	int	PK	
investor_id	int		
account_number	varchar(35)		
account_type	char(1)		
account_holder_name	varchar(100)		
wire_transfer_code	int		
bank_name	varchar(100)		

account_type_code	char(1)		
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2.8. Table nominee

2.8.1. Columns

Column name	Type	Properties	Description
id	int	PK	
first_name	varchar(50)		
last_name	varchar(50)		
date_of_birth	date		
investor_id	int		
relationship_with_investor	varchar(20)		

2.9. Table account_statement

2.9.1. Columns

Column name	Type	Properties	Description
id	int	PK	
investor_id	int		
transaction_type_code	char(1)		
transaction_amount	money		
transaction_date	date		
closing_balance	money		

2.10. Table borrower_liability

2.10.1. Columns

Column name	Type	Properties	Description
id	int	PK	
loan_ticket_id	int		
liability_outstanding	money		
monthly_repayment_amount	decimal(19,2)		

liability_type	varchar(10)		
liability_start_date	date		
liability_end_date	date	null	

2.11. Table borrower_asset

2.11.1. Columns

Column name	Type	Properties	Description
id	int	PK	
loan_ticket_id	int		
asset_type	varchar(100)		
asset_value	decimal(20,2)		
ownership_percentage	int		
possession_since	date	null	

2.12. Table employment_detail

Description:

The Employment details of the Borrower

2.12.1. Columns

Column name	Type	Properties	Description
id	int	PK	
borrower_id	int		The ID of the Borrower
posting_date	date		
employment_type	varchar(50)		
profession_type	varchar(50)		
exp_in_curr_profession_in_yr	int		
tenure_with_curr_employer	int	null	
employment_description	varchar(4000)	null	
monthly_salary	money		

2.13. Table transaction_type

2.13.1. Columns

Column name	Type	Properties	Description
transaction_type_code	char(1)	PK	
transaction_type	varchar(20)		

2.14. Table account_type

2.14.1. Columns

Column name	Type	Properties	Description
account_type_code	char(1)	PK	
account_type_desc	varchar(20)		

2.15. Table country

Description:

Table represents users Countries

2.15.1. Columns

Column name	Type	Properties	Description
id	int	PK	
name	varchar(150)		
iso2	varchar(2)	null	
iso3	varchar(3)	null	
currency	varchar(3)		

2.16. Table state_or_region

Description:

Table represents users States or Regions in a Country

2.16.1. Columns

Column name	Type	Properties	Description
id	int	PK	
name	varchar(150)		

iso2	varchar(2)	null	
country	varchar(3)		
country_id	int		

2.17. Table city_locations

2.17.1. Columns

Column name	Type	Properties	Description
id	int	PK	
name	varchar(150)		
state_or_region_id	int		

2.18. Table borrower_address

Description:

Address of Borrower

2.18.1. Columns

Column name	Type	Properties	Description
id	int	PK	
address_line_1	varchar(150)		
address_line_2	varchar(150)		
state	varchar(150)		
city	varchar(150)		
zip_code	varchar(150)		
address_type	varchar(20)		
status	varchar(10)		
borrower_id	int		

2.19. Table page

Description:

Front end pages or Legal Pages. Pages maybe for Privacy policies or Term and conditions

2.19.1. Columns

Column name	Type	Properties	Description
id	uuid	PK	The unique identifier of the page

title	varchar(150)		The title of the page. Advisable to keep it short
slug	varchar(150)		The url slug of the page. Advisable to keep this short as possible
headline	varchar(150)	null	Descriptive headline of the page. Optional
content	varchar(5000)		The main body or content of the page. This can contain html
meta_keywords	varchar(255)	null	Meta keywords are types of meta tags in the HTML source code of a webpage that describe the content of a website.
meta_description	varchar(250)	null	A meta description (sometimes called a meta description attribute or tag) is an HTML element that describes and summarizes the contents of your page for the benefit of users and search engines. Keep this as short as possible.
created_date	date		Date and time when record was created
modified_date	date		Date and time when record was last modified

2.20. Table team_member

Description:

A team member is an employee who works in the Company. The data of these team members can be displayed on the About us page or any other dedicated page for this.

2.20.1. Columns

Column name	Type	Properties	Description
id	uuid	PK	The unique identifier of the team member
name	varchar(150)		The full name of the team member

designation	varchar(150)		Position of the team member
photo	varchar(150)		The photo of the team member
facebook	varchar(150)	null	Facebook url of the team member
twitter	varchar(150)	null	Twitter handle of the team member
linkedin	varchar(150)	null	LinkedIn profile url of the team member
created_date	date		Date and time when record was created
modified_date	date		Date and time when record was last modified

2.21. Table withdrawal

2.21.1. Columns

Column name	Type	Properties	Description
id	int	PK	
amount	money		
fees	money		
bank_account_id	int		
reference	varchar(150)		
transaction_history_id	int		
status	varchar(20)		
modified_date	date		
created_date	date		
approved_date	date		
completed_date	date		
borrower_id	int		

2.22. Table payment

2.22.1. Columns

Column name	Type	Properties	Description
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id	int	PK	
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2.23. Table refund

2.23.1. Columns

Column name	Type	Properties	Description
id	int	PK	

2.24. Table bank_account

2.24.1. Columns

Column name	Type	Properties	Description
id	int	PK	
dwolla_source_link	varchar(150)	null	
name	varchar(150)		
number_ending	varchar(4)	null	
plaid_account_id	varchar(150)	null	
plaid_token	varchar(150)	null	
stripe_bank_id	varchar(150)	null	
stripe_connect_bank_id	varchar(150)	null	
stripe_token	varchar(150)	null	
type	varchar(150)		
created_date	date		
modified_date	date		

2.25. Table card

2.25.1. Columns

Column name	Type	Properties	Description
id	int	PK	
card_type	varchar(50)		
stripe_id	varchar(150)		
card_ending	varchar(4)		
created_date	date		

modified_date	date		
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2.26. Table transaction_history

2.26.1. Columns

Column name	Type	Properties	Description
id	int	PK	

2.27. Table loan_grade

2.27.1. Columns

Column name	Type	Properties	Description
id	int	PK	
interest_rate	decimal		
label	varchar(50)		
min	int		
max	int		
created_date	date		
modified_date	date		

2.28. Table investment

2.28.1. Columns

Column name	Type	Properties	Description
id	int	PK	
amount	money		
date_completed	date		
date_invested	date		
grade	varchar(1)		
rate	decimal		
share	decimal		
status	varchar(20)		
term_months	int		
total_interest_gained	decimal		

total_return_amount	money		
created_date	date		
modified_date	date		
investor_id	int		
loan_grade_id	int		

2.29. Table loan

2.29.1. Columns

Column name	Type	Properties	Description
id	int	PK	
amount	money		
application_step	int		
apr	int		
balance	int		
charge_off_date	date		
current_other_amount	money		
current_payment_amount	money		
current_payment_type	varchar(150)		
current_payoff_amount	money		
denial_date	date		
funded	varchar(3)		
funded_date	date		
funding_amount	money		
funding_percentage	decimal		
interest_balance	money		
interest_rate	decimal		
investments	int		
listed	int		
listing_end_date	date		

listing_start_date	date		
loan_agreement	varchar(120)		
months_since	int		
next_monthly_payment_amount	int		
origination_date	date		
paid_date	date		
principal_balance	money		
purpose	int		
submitted_date	date		
status	int		
term_months	int		
total_interests	decimal		
total_interests_paid	decimal		
total_paid	money		
total_payments_made	money		
total_repayment_amount	money		
verification_stage	varchar(120)		
created_date	date		
modified_date	date		
borrower_id	int		
payment_id	int		

2.30. Table monthly_payment

Description:

Table represents monthly payments

2.30.1. Columns

Column name	Type	Properties	Description
id	uuid	PK	
amount	money		

date	date		
paid_date	date		
balance	money		
interest_balance	money		
interest_portion	money		
principal_balance	money		
principal_portion	money		
status	varchar(20)		
created_date	date		
modified_date	date		
completed_date	date		
loan_id	int		
payment_id	int		
borrower_id	int		

2.31. Table currency

2.31.1. Columns

Column name	Type	Properties	Description
id	uuid	PK	The unique identifier of the currency
name	varchar(50)		Name of the currency
code	varchar(3)		The currency code
created_date	date		
modified_date	date		

3. References

3.1. Reference nominee_investor

investor	0..*	nominee
id	<->	investor_id

3.2. Reference payment_method_investor

investor	0..*	payment_method
id	<->	investor_id

3.3. Reference account_statement_investor

investor	0..*	account_statement
id	<->	investor_id

3.4. Reference loan_ticket_borrower

borrower	0..*	loan_ticket
id	<->	borrower_id

3.5. Reference borrower_liability_loan_ticket

loan_ticket	0..*	borrower_liability
id	<->	loan_ticket_id

3.6. Reference borrower_asset_loan_ticket

loan_ticket	0..*	borrower_asset
id	<->	loan_ticket_id

3.7. Reference employment_detail_borrower

borrower	0..*	employment_detail
id	<->	borrower_id

3.8. Reference investor_proposal_investor

investor	0..*	investor_proposal
id	<->	investor_id

3.9. Reference investor_proposal_loan_ticket

loan_ticket	0..*	investor_proposal
id	<->	loan_ticket_id

3.10. Reference loan_tkt_ffl_investor_prp

investor_proposal	0..*	loan_ticket_fulfillment
id	<->	investor_proposal_id

3.11. Reference loan_repay_sch_loan_tkt_ffl

loan_ticket_fulfillment	0..*	loan_repayment_schedule
id	<->	loan_ticket_fulfillment_id

3.12. Reference acc_statement_trans_type

transaction_type	0..*	account_statement
transaction_type_code	<->	transaction_type_code

3.13. Reference payment_method_account_type

account_type	0..*	payment_method
account_type_code	<->	account_type_code

3.14. Reference state_or_region_country

country	0..*	state_or_region
id	<->	country_id

3.15. Reference city_locations_state_or_region

state_or_region	0..*	city_locations
id	<->	state_or_region_id

3.16. Reference borrower_address_borrower

borrower	0..*	borrower_address
id	<->	borrower_id

3.17. Reference withdrawal_transaction_history

transaction_history	0..*	withdrawal
id	<->	transaction_history_id

3.18. Reference withdrawal_bank_account

bank_account	0..*	withdrawal
id	<->	bank_account_id

3.19. Reference withdrawal_borrower

borrower	0..*	withdrawal
id	<->	borrower_id

3.20. Reference investment_investor

investor	0..*	investment
id	<->	investor_id

3.21. Reference investment_loan_grade

loan_grade	0..*	investment
id	<->	loan_grade_id

3.22. Reference loan_borrower

borrower	0..*	loan
id	<->	borrower_id

3.23. Reference list_of_payments

Description:

List of Loan payments. These are payments made by individual investors

payment	0..*	loan
id	<->	payment_id

3.24. Reference monthly_payment_loan

loan	0..*	monthly_payment
id	<->	loan_id

3.25. Reference monthly_payment_payment

payment	0..*	monthly_payment
id	<->	payment_id

3.26. Reference monthly_payment_borrower

borrower	0..*	monthly_payment
id	<->	borrower_id

3.27. Reference default_currency

currency	0..*	borrower
id	<->	currency_id

4. Areas

4.1. Borrower subject area

4.1.1. Tables

- borrower
- loan_ticket
- borrower_liability
- borrower_asset
- employment_detail
- borrower_address

4.1.2. References

- nominee_investor
- payment_method_investor
- account_statement_investor
- loan_ticket_borrower
- borrower_liability_loan_ticket
- borrower_asset_loan_ticket
- employment_detail_borrower
- investor_proposal_investor
- investor_proposal_loan_ticket
- loan_tkt_ffl_investor_prp
- loan_repay_sch_loan_tkt_ffl
- acc_statement_trans_type
- payment_method_account_type
- state_or_region_country
- city_locations_state_or_region
- borrower_address_borrower
- withdrawal_transaction_history
- withdrawal_bank_account
- withdrawal_borrower
- investment_investor
- investment_loan_grade
- loan_borrower
- list_of_payments
- monthly_payment_loan
- monthly_payment_payment
- monthly_payment_borrower
- default_currency

4.2. Loan Fulfillment and Repayment subject area

4.2.1. Tables

- investor_proposal
- loan_ticket_fulfillment
- loan_repayment_schedule

4.2.2. References

- nominee_investor
- payment_method_investor
- account_statement_investor
- loan_ticket_borrower
- borrower_liability_loan_ticket
- borrower_asset_loan_ticket
- employment_detail_borrower
- investor_proposal_investor
- investor_proposal_loan_ticket
- loan_tkt_ffl_investor_prp
- loan_repay_sch_loan_tkt_ffl
- acc_statement_trans_type
- payment_method_account_type
- state_or_region_country
- city_locations_state_or_region
- borrower_address_borrower
- withdrawal_transaction_history
- withdrawal_bank_account
- withdrawal_borrower
- investment_investor
- investment_loan_grade
- loan_borrower
- list_of_payments
- monthly_payment_loan
- monthly_payment_payment
- monthly_payment_borrower
- default_currency

4.3. Investor subject area

4.3.1. Tables

- investor
- payment_method

- nominee
- account_statement
- transaction_type
- account_type

4.3.2. References

- nominee_investor
- payment_method_investor
- account_statement_investor
- loan_ticket_borrower
- borrower_liability_loan_ticket
- borrower_asset_loan_ticket
- employment_detail_borrower
- investor_proposal_investor
- investor_proposal_loan_ticket
- loan_tkt_ffl_investor_prp
- loan_repay_sch_loan_tkt_ffl
- acc_statement_trans_type
- payment_method_account_type
- state_or_region_country
- city_locations_state_or_region
- borrower_address_borrower
- withdrawal_transaction_history
- withdrawal_bank_account
- withdrawal_borrower
- investment_investor
- investment_loan_grade
- loan_borrower
- list_of_payments
- monthly_payment_loan
- monthly_payment_payment
- monthly_payment_borrower
- default_currency

4.4. Geolocations subject area

4.4.1. Tables

- country
- state_or_region
- city_locations

4.4.2. References

- nominee_investor
- payment_method_investor
- account_statement_investor
- loan_ticket_borrower
- borrower_liability_loan_ticket
- borrower_asset_loan_ticket
- employment_detail_borrower
- investor_proposal_investor
- investor_proposal_loan_ticket
- loan_tkt_ffl_investor_prp
- loan_repay_sch_loan_tkt_ffl
- acc_statement_trans_type
- payment_method_account_type
- state_or_region_country
- city_locations_state_or_region
- borrower_address_borrower
- withdrawal_transaction_history
- withdrawal_bank_account
- withdrawal_borrower
- investment_investor
- investment_loan_grade
- loan_borrower
- list_of_payments
- monthly_payment_loan
- monthly_payment_payment
- monthly_payment_borrower
- default_currency

4.5. Content & Pages subject area

4.5.1. Tables

- page
- team_member

4.5.2. References

- nominee_investor
- payment_method_investor
- account_statement_investor
- loan_ticket_borrower
- borrower_liability_loan_ticket

- borrower_asset_loan_ticket
- employment_detail_borrower
- investor_proposal_investor
- investor_proposal_loan_ticket
- loan_tkt_ffl_investor_prp
- loan_repay_sch_loan_tkt_ffl
- acc_statement_trans_type
- payment_method_account_type
- state_or_region_country
- city_locations_state_or_region
- borrower_address_borrower
- withdrawal_transaction_history
- withdrawal_bank_account
- withdrawal_borrower
- investment_investor
- investment_loan_grade
- loan_borrower
- list_of_payments
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4.6.1. Tables

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4.6.2. References

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