OpenRide

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OpenRide Database Schema

This document contains information about all the tables of the "OpenRideDB" and their fields. It is also used to mark changes. It should contain the pre- or actual state of the database. That means changes of the document, such as type changes a.s.o., shall be realized on database-level afterwards. It should also be used to review the description of certain fields for a better understanding of the system of each developer. The document version should reflect the according backup-file of the database (see SVN: src\OpenRide-DB-Dump).

Version: 20-01-10

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Notes referring fields by table

Description of table: accounthistory

This table holds information on the payments account of a customer.

	Accounthistory			
	Fieldname	**Description**	**Needed**	**Type**
1	account_ammount			Double precision
2	account_action	Account actions are: payments, withdrawals, recharges.		Character varying(255)
3	cust_id	Customer-Entity Identifier, is generated when creating new <type>CustomerEntity</type>	x	Integer NOT NULL
4	account_timestamp			Timestamp without timezone NOT ZERO

Description of table: cardetails

This table holds information on the car of a customer.

	Cardetails			
	Fieldname	**Description**	**Needed**	**Type**
1	cardet_id	Cardetails-Entity Identifier, is generated when creating new<type>CardetailsEntity</type>	x	Serial NOT NULL
2	cardet_buildyear	The buildyear of the car.		smallint
3	cardet_colour	The color of the car.		Character varying(255)
4	cardet_brand	The brand of the car.		Character varying(255)
5	cardet_plateno			Character varying(255)
6	cust_id	Customer-Entity Identifier, is generated when creating new <type>CustomerEntity</type>	x	Integer NOT NULL

Description of table: customer

This table holds information on a customer.

	Customer			
	Fieldname	**Description**	**Needed**	**Type**
1	cust_id	Customer-Entity Identifier, is generated when creating new <type>CustomerEntity</type>	x	Integer NOT NULL
2	cust_addr_zipcode	The zip code of the customers place of domicile.	x	Integer
3	cust_addr_city	The city where the customer lives at.	x	Character varying(255)
4	cust_nickname	The nickname the customer uses within the system.	x	Character varying(255)

5	cust_driverpref_age	The preferred age of drivers, if the customer is a passenger.	x	Integer
6	cust_firstname	The first name of the customer.	x	Character varying(255)
7	cust_driverpref_gender	The preferred gender of drivers, if the customer is a passenger. Allowed values : {'-', 'f'}	x	Character(1)
8	cust_dateofbirth	The date of birth of the customer.	x	Date
9	cust_driverpref_musictaste	The preferred music taste of the driver, if the customer is a passenger.		Character varying(255)
10	cust_mobilephoneno	The customers' mobile phone number.	x	Character varying(255)
11	cust_riderpref_age	The preferred age of the passenger, if the customer is a driver.	x	Integer
12	cust_email	The customers' e-mail address.	x	Character varying(255)
13	cust_riderpref_gender	The preferred gender of the passenger, if the customer is a driver. Allowed values : {'-', 'f'}	x	Character(1)
14	cust_issmoker	True, if the customer is a smoker, otherwise false.		Boolean
15	cust_riderpref_musictaste	The preferred music taste of the passenger, if the customer is a driver.		Character varying(255)
16	cust_postident			Boolean
17	cust_bank_account			Integer
18	cust_bank_code			Integer
19	cust_lastname	The last name of the customer.	x	Character varying(255)
20	cust_presencemssg	A message that shows the actual status of the customer.	x	Character varying(255)
21	cust_fixedphoneno	The phone number of the customer.	x	Character varying(255)
22	cust_registrdate	The date that the customer first registered to the system.	x	Timestamp without timezone
23	cust_licensedate	Driver's license issuing date		Date
24	cust_account_balance			Double precision
25	cust_passwd	The password of the customer, that is needed to login to his view of the system.	x	Character varying(255)
26	cust_profilepic	A picture that can be integrated into the view of a customers profile.	x	Character varying(255)
27	cust_gender	The gender of the customer. (m=masculine, f=feminine)	x	Character(1)
28	cust_addr_street	The street of the customers' place of domicile.		Character varying(255)
29	cust_driverpref_smoker	This field marks whether the customer preferres the driver being a smoker or not, if the customer is a	x	Character(1)

		passenger. Allowed values : {'y', 'n', '-'}		
30	cust_riderpref_smoker	This field marks whether the customer preferres the passenger being a smoker or not, if the customer is a driver. Allowed values : {'y', 'n', '-'}	x	Character(1)
31	cust_session_id	The last sessionId of the customer, which can be set, when the user logs in to the system.		Integer
32	Is_logged_in	This field marks whether the customer is logged in to the system at the moment.		Boolean
33	cust_group			character varying(255)

Description of table: drive_route_point

Each column represents a route-point of a drivers' route. So each route of a driver is represented by multiple rows here.

	drive_route_point			
	Fieldname	**Description**	**Needed**	**Type**
1	drive_id	DriverUndertakesRide Foreign key	x	Integer NOT NULL
2	route_idx	Routepoints are numbered from source to target starting at 0	x	Integer NOT NULL
3	coordinate	Lon / Lat coord	x	Point NOT NULL
4	expected_arrival	Expected time driver will be at coordinate	x	Timestamp NOT NULL
5	seats_available	>=0	x	Integer NOT NULL
6	Coordinate_c	Carthesian Coordinate (Not mapped to Entity) Updates and Inserts are handled by trigger	x	Geometry
7	distance_to_source	Distance to drivers first route point in meters	x	Double Precision

Description of table: driverundertakesride

This table holds information on the ride that a driver is offering.

	driverundertakesride			
	Fieldname	**Description**	**Needed**	**Type**
1	ride_id		x	Integer NOT

				NULL
2	ride_weekday			Character varying(255)
3	ride_series_id			Integer
4	ride_starttime		x	Timestamp without timezone
5	ride_comment			Character varying(255)
6	ride_acceptable_detour_in_min		x*	Integer
7	ride_offeredseats_no		x	Integer
8	cust_id	Customer-Entity Identifier, is generated when creating new <type>CustomerEntity</type>	x	Integer
9	ride_startpt		x	Point
10	ride_endpt		x	Point
11	ride_currpos		x	Point
12	startpt_addr	This field contains the street name + house number of the startpoints address.	x	Character varying(255)
13	endpt_addr	This field contains the street name + house number of the endpoints address.	x	Character varying(255)
14	ride_acceptable_detour_in_percent	*At least one of the three detour thresholds must be not null	x*	Integer
15	ride_acceptable_detour_in_km		x*	Integer
16	ride_route_point_distance_meters			Double Precision NOT NULL

Description of table: favoritepoint

This table holds information on the favorite departure and target points of a rider or a driver.

	favoritepoint			
	Fieldname	Description	Needed	Type
1	favpt_point	Comma-separated latitude and longitude of one of a customers' favorite points.	x	Character varying(255) NOT NULL
2	cust_id		x	Integer NOT NULL
3	favpt_frequency	May be used to track usage of a favpt		Integer NOT NULL
4	favpt_displayname	User-specified display name for a favpt (e.g., "home"/"work"/…)		Character varying(255)
5	favpt_address	Full street address, including zip code, city and county (as returned by gmaps API)		Character varying(255)
6	favpt_id	Unique ID (sequence)	x	Integer NOT NULL

Description of table: geometry_columns

Table is created by postgis extensions by default. Postgis servers some wrapper functions for adding and removing columns of type 'geometry' which use this table. If we don't use these functions, we can remove this table.

	geometry_columns			
	Fieldname	**Description**	**Needed**	**Type**
1	f_table_catalog			Character varying(256) NOT NULL
2	f_table_schema			Character varying(256) NOT NULL
3	f_table_name			Character varying(256) NOT NULL
4	f_geometry_column			Character varying(256) NOT NULL
5	coord_dimension			integer NOT NULL
6	srid			Integer NOT NULL
7	type			Character varying(30) NOT NULL

Description of table: match

Each column represents a route-point of a drivers' route. So each route of a driver is represented by multiple rows here.

	match			
	Fieldname	**Description**	**Needed**	**Type**
1	riderroute_id	Id of the search		Integer NOT NULL
2	ride_id	Id of the offer		Integer NOT NULL
3	match_shared_distance_meters			Double
4	match_detour_meters			Double
5	match_expected_start_time			Timestamp
6	match_drive_remaining_distance_meters			Double
7	match_price_cents			Integer

8	driver_change		The date when the related driver changed the state last time.		Timestamp
9	rider_change		The date when the related rider changed the state last time.		Timestamp
10	driver_access		The date when the related driver accessed the match last time.		Timestamp
11	rider_access		The date when the related rider accessed the match last time.		Timestamp
12	driver_state		The state the driver gave this match.		Integer
13	rider_state		The state the rider gave this match.		Integer

Description of table: route_point

Each column represents a route-point of a drivers' route. So each route of a driver is represented by multiple rows here.

	route_point				
	Fieldname	**Description**		**Needed**	**Type**
1	ride_id	DriverUndertakesRide Foreign key		x	Integer NOT NULL
2	route_idx	Routepoints are numbered from source to target starting at 0		x	Integer NOT NULL
3	longitude	Lon / Lat coord		x	Point NOT NULL
4	latitude	Expected time driver will be at coordinate		x	Timestamp NOT NULL
5	riderroute_id	>=0		x	Integer
6	is_required	Carthesian Coordinate (Not mapped to Entity) Updates and Inserts are handled by trigger		x	geometry NOT NULL

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Description of table: registration_pass

This table holds information on the registration passcodes identifying new site visitors as being invited to sign up for a user account.

	registration_pass			
	Fieldname	**Description**	**Needed**	**Type**
1	id	Unique ID (sequence)	x	Integer NOT NULL
2	passcode	Unique code to be supplied upon registration ("invitation code")		Character varying(32) NOT NULL
3	creation_date	The date this code was created		Date NOT NULL
4	usage_date	The date this code was used to create an account		Date
5	cust_id	Customer-Entity Identifier, is generated when creating new <type>CustomerEntity</type>	x	Integer

Description of table: riderundertakesride

This table holds information on a ride that a rider is searching or on a ride that the rider undertook.

	riderundertakesride			
	Fieldname	**Description**	**Needed**	**Type**
1	riderroute_id	Id of the search.	x	Integer NOT NULL
2	ride_id	Id of the offer.	x	Integer
3	starttime_latest			Timestamp without timezone
4	timestamprealized	The date and time a ride has been finished and is ready to be rated		Timestamp without timezone
5	price			Double precision
6	cust_id	Customer-Entity Identifier, is generated when creating new <type>CustomerEntity</type>	x	Integer
7	no_passengers			Integer
8	timestampbooked			Timestamp without timezone
9	account_timestamp			Timestamp without timezone
10	starttime_earliest			Timestamp without timezone
11	startpt		x	Point
12	endpt		x	Point
13	startpt_addr	This field contains the street name + house number of the startpoints address.	x	Character varying(255)

14	endpt_addr	This field contains the street name + house number of the endpoints address.	x	Character varying(255)
15	givenrating	Rider's rating for their driver (1/0/-1).		Smallint
16	givenrating_date	The date the driver submitted their rating.		Timestamp without timezone
17	giverating_comment	The rider's comment on their rating.		Character varying(255)
18	receivedrating	Driver's rating for their rider (1/0/-1).		Smallint
19	receivedrating_comment	The driver's comment on their rating.		Character varying(255)
20	receivedrating_date	The date the driver submitted their rating.		Timestamp without timezone
21	startpt_c	carthesian coordinate of startpt (not mapped by entity -> trigger)	x	Geometry
22	endpt_c	carthesian coordinate of endpt (not mapped by entity -> trigger)	x	Geometry
23	comment		x	character varying(255)

Description of table: sequence

This table is needed for the Annotation type: @GeneratedValue(strategy=GenerationType.AUTO). It could also be replaced by the use of postgres serial function.

(Comment: Using JPA it is not possible to persist Entites without an ID, so one has to either set it manually or let it be generated by the mentioned annotation. This annotation only supports the usage of this table, which should not be a Problem.

That is why using serial as a type for auto-generation of primarykeys is not an option.)

	sequence			
	Fieldname	**Description**	**Needed**	**Type**
1	seq_name		x	Character varying(50) NOT NULL
2	seq_count		x	Numeric(38)

Description of table: spatial_ref_sys

This table is created by postgis extensions by default. It is in use since projection of coordinate relies on this table.

	spatial_ref_sys			
	Fieldname	**Description**	**Needed**	**Type**
1	srid			Integer NOT NULL
2	auth_name			Character varying(256)
3	auth_srid			Integer

4	srtext		Character varying(2048)
5	proj4text		Character varying(2048)