

## user

Attribute	Type	Description
u_id	INT	PK
u_name	VARCHAR(32)	unique
u_password	CHAR(32)	MD5 encrypted
u_email	VARCHAR(32)	unique
u_identity	ENUM('0', '1')	0->passenger 1->driver (also a passenger)
u_avatar	BLOB	user's avatar
u_rate	DOUBLE	drivers' rate, a double between 0 - 5
u_gender	ENUM('male', 'female')	unimportant attributes for users to manage
u_phone	VARCHAR(32)	
u_description	TEXT	

## vehicle

Attribute	Type	Description
v_id	INT	PK
v_driverid	INT	FK on user.u_id on delete cascade
v_driverlicense	VARCHAR(32)	
v_manufacturer	VARCHAR(32)	we need these attributes for security reasons  add other related attributes you can think of
v_model	VARCHAR(32)	
v_plate	VARCHAR(32)	
v_mileage	INT	
v_capacity	INT	

## carpool\_created

Attribute	Type	Description
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cc_id	INT	PK
cc_driverid	INT	FK on user.u_id on delete cascade
cc_fromlatitude	DOUBLE	latitude of departure location
cc_fromlongitude	DOUBLE	longitude of departure location
cc_fromlocation	VARCHAR(32)	a string for display purpose
cc_tolatitude	DOUBLE	latitude of arrival location
cc_tolongitude	DOUBLE	longitude of arrival location
cc_tolocation	VARCHAR(32)	a string for display purpose
cc_date	DATE	if daterange != null then "from date to daterange"
cc_daterange	DATE	
cc_time	TIME	if time != null then "from time to timerange"
cc_timerange	TIME	
cc_maxpassenger	INT	max passenger number
cc_price	DOUBLE	driver's ideal price
cc_driverconfirmed	ENUM('0', '1')	0->not confirmed 1->confirmed
cc_passengerconfirmed	INT	number of confirmed passengers
cc_passengeraboard	INT	number of passengers get in the vehicle
cc_ondemand	INT	FK on carpool_demanded.cd_id on delete set null  indicate if a carpool is created according to a demand, otherwise set to null

## carpool\_demanded

Attribute	Type	Description
cd_id	INT	PK
cd_passengerid	INT	FK on user.u_id on delete cascade
cd_fromlatitude	DOUBLE	latitude of departure location
cd_fromlongitude	DOUBLE	longitude of departure location
cd_fromlocation	VARCHAR(32)	a string for display purpose
cd_tolatitude	DOUBLE	latitude of arrival location
cd_tolongitude	DOUBLE	longitude of arrival location
cd_tolocation	VARCHAR(32)	a string for display purpose
cd_date	DATE	if daterange != null then "from date to daterange"
cd_daterange	DATE	
cd_time	TIME	if time != null then "from time to timerange"
cd_timerange	TIME	
cd_price	DOUBLE	passenger's ideal price

### driver\_interested

Attribute	Type	Description
di_id	INT	PK
di_driverid	INT	FK on user.u_id on delete cascade
di_carpoolid	INT	FK on carpool_demanded.cd_id on delete cascade
di_datetime	DATETIME	keep track of when the driver add this record, sort according to this attribute when displaying

### passenger\_interested

Attribute	Type	Description
pi_id	INT	PK
pi_passengerid	INT	FK on user.u_id on delete cascade
pi_carpoolid	INT	FK on carpool_created.cc_id on delete cascade
pi_datetime	DATETIME	keep track of when the passenger add this record, sort according to this attribute when displaying

### passenger\_confirmed

Attribute	Type	Description
pc_id	INT	PK
pc_passengerid	INT	FK on user.u_id on delete cascade
pc_carpoolid	INT	FK on carpool_created.cc_id on delete cascade
pc_paid	ENUM('0', '1')	0->not paid 1->paid  this attribute is set by the driver after carpool trip check this attribute before passengers trying to write review

### review

Attribute	Type	Description
r_id	INT	PK
r_reviewerid	INT	FK on user.u_id on delete set null
r_driverid	INT	FK on user.u_id on delete cascade

r_rate	DOUBLE	double 0 - 5
r_review	TEXT	review content