Project Phase 1 Solution [1]

February 14, 2018

1.a   The ER; See the figure below.
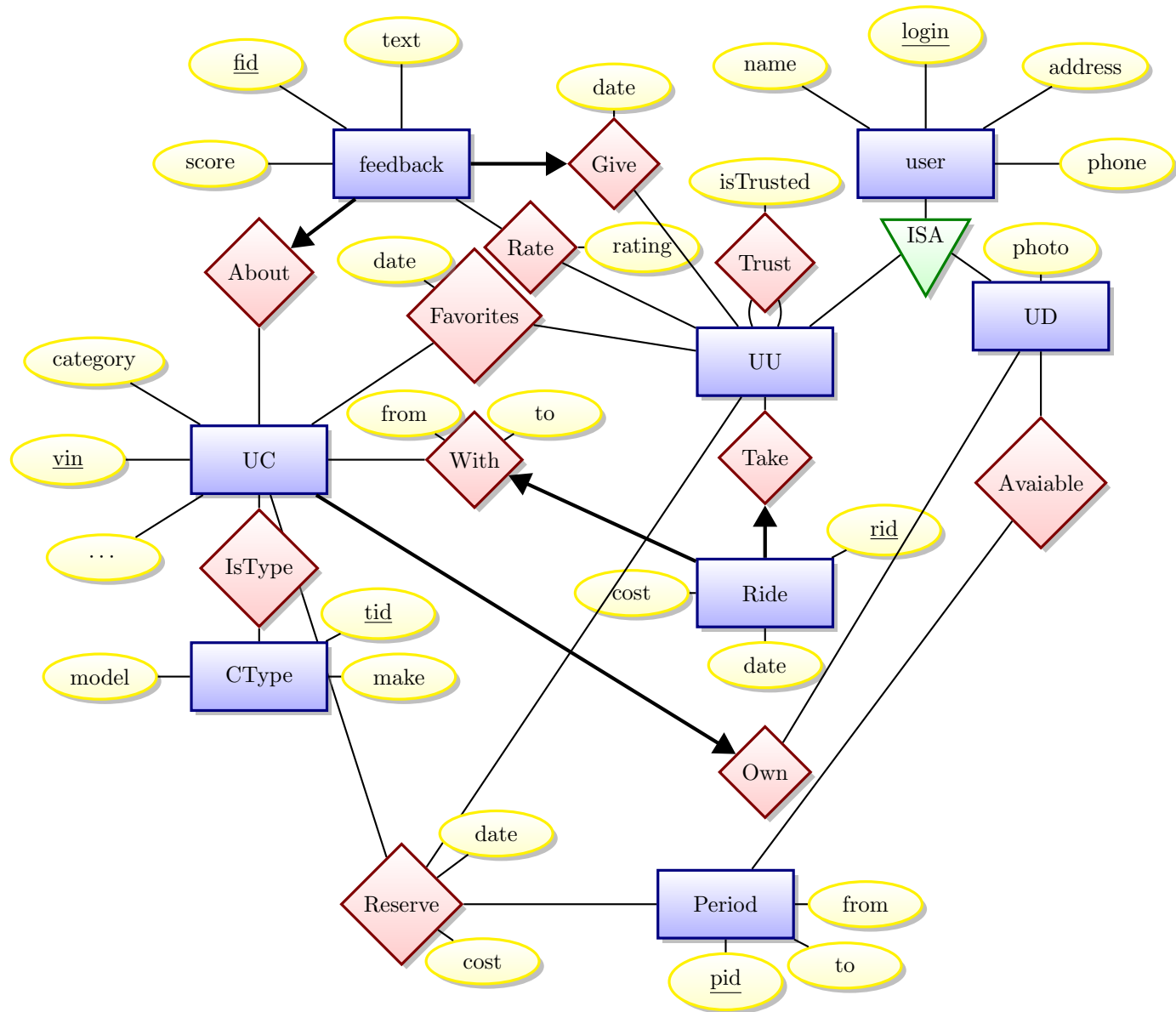
1.b The relational schema. See the schemas below:

UU(<u>login</u> char[30] primary key, name varchar[40], $\cdots$);

UD(<u>login</u> char[30] primary key, name varchar[40], $\cdots$, photo blob);

UC(<u>vin</u> int primary key, category varchar[50], $\cdots$, login foreign key references UD NOT NULL);

Period(<u>pid</u> int primary key, fromHour int, toHour int);

Available(<u>login, pid</u> primary key, login foreign key references UD, pid foreign key references Period);

Reserve(<u>login, vin, pid</u> primary key, cost int, date time, login foreign key references UU, vin foreign key references UC, pid foreign key references Period);

Ride(<u>rid</u> primary key, cost int, date time, login foreign key references UU NOT NULL, vin foreign key references UC NOT NULL, fromHour int, toHour int);

Trust(<u>login1, login2</u> primary key, isTrusted boolean, login1 foreign key references UU, login2 foreign key references UU);

Feedback(<u>fid</u> int primary key, $\cdots$, text char[100], fbdate date, vin foreign key references UC NOT NULL, login foreign key references UU NOT NULL)

Rates(<u>login, fid</u> primary key, rating char[20], login foreign key references UU, fid foreign key references feedback);

Favorites(<u>vin, login</u> primary key, fvdate date, vin foreign key references UC, login foreign key references Users)

Ctypes(<u>tid</u> int primary key, make char[50], model char[50])

IsCtypes(<u>vin, tid</u> primary key, vin foreign key references UC, tid foreign key references Ctypes)