

WolfieMeetsBagel

Final Project Documentation

Team Name: WolfieMeetsBagel

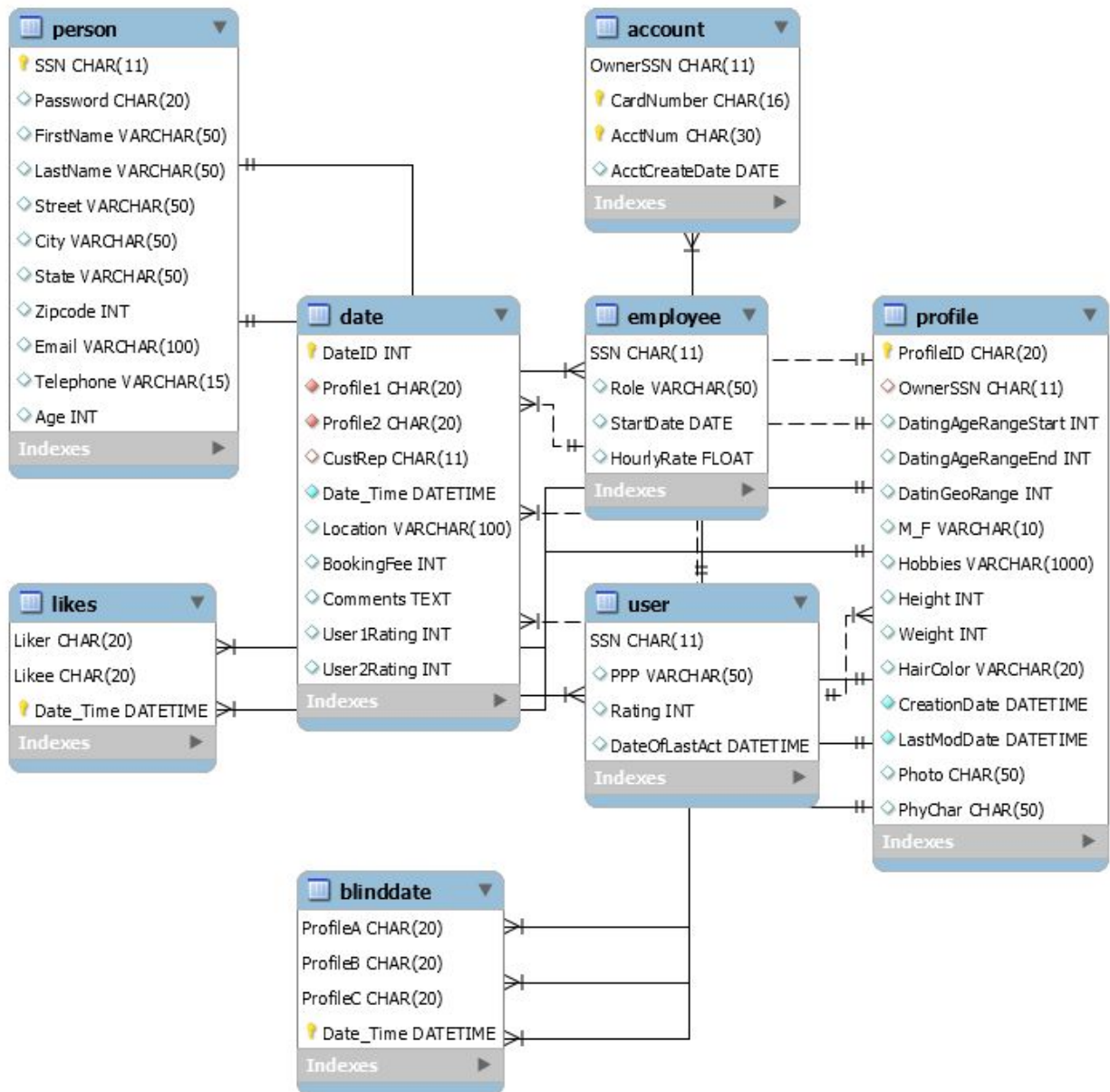
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Entity Relationship Diagram



Description of the relational database scheme

Dates

Field	Type	Null	Key	Default	Extra
DateID	int	NO	PRI	NULL	auto_increment
Profile1	char(20)	NO	MUL	NULL	
Profile2	char(20)	NO	MUL	NULL	
CustRep	char(11)	YES	MUL	NULL	
Date_Time	datetime	NO		NULL	
Location	varchar(100)	YES		NULL	
BookingFee	int	YES		NULL	
Comments	text	YES		NULL	
User1Rating	int	YES		NULL	
User2Rating	int	YES		NULL	

A modification we made from the Dates table in HW 2 is that we added a DateID column that is a primary key and auto increments. This was necessary in order for some of the functionality, such as cancel date, to work without making the query overly verbose.

Blinddate

Field	Type	Null	Key	Default	Extra
ProfileA	char(20)	NO	PRI	NULL	
ProfileB	char(20)	NO	PRI	NULL	
ProfileC	char(20)	NO	PRI	NULL	
Date_Time	datetime	NO	PRI	NULL	

In the blinddate table Profile A is the one who refers Profile B to Profile C.

Likes

Field	Type	Null	Key	Default	Extra
Liker	char(20)	NO	PRI	NULL	
Likee	char(20)	NO	PRI	NULL	
Date_Time	datetime	NO	PRI	NULL	

Employee

Field	Type	Null	Key	Default	Extra
SSN	char(11)	NO	PRI	NULL	
Role	varchar(50)	YES		NULL	
StartDate	date	YES		NULL	
HourlyRate	float	YES		NULL	

HourlyRate was changed from type int to type float. (Difference from HW2)

Person

Field	Type	Null	Key	Default	Extra
SSN	char(11)	NO	PRI	NULL	
Password	char(20)	YES		NULL	
FirstName	varchar(50)	YES		NULL	
LastName	varchar(50)	YES		NULL	
Street	varchar(50)	YES		NULL	
City	varchar(50)	YES		NULL	
State	varchar(50)	YES		NULL	
Zipcode	int	YES		NULL	
Email	varchar(100)	YES		NULL	
Telephone	varchar(15)	YES		NULL	
Age	int	YES		NULL	

Added age column for search based on function

Profile

Field	Type	Null	Key	Default	Extra
ProfileID	char(20)	NO	PRI	NULL	
OwnerSSN	char(11)	YES	MUL	NULL	
DatingAgeRangeStart	int	YES		NULL	
DatingAgeRangeEnd	int	YES		NULL	
DatinGeoRange	int	YES		NULL	
M_F	varchar(10)	YES		NULL	
Hobbies	varchar(1000)	YES		NULL	
Height	int	YES		NULL	
Weight	int	YES		NULL	
HairColor	varchar(20)	YES		NULL	
CreationDate	datetime	NO		NULL	
LastModDate	datetime	NO		NULL	
PhyChar	char(50)	YES		NULL	
Photo	char(50)	YES		NULL	

A modification from HW2 is the addition of the Photo and PhyChar columns to match the user interface.

User

Field	Type	Null	Key	Default	Extra
SSN	char(11)	NO	PRI	NULL	
PPP	varchar(50)	YES		NULL	
Rating	int	YES		NULL	
DateOfLastAct	datetime	YES		NULL	

Account

Field	Type	Null	Key	Default	Extra
OwnerSSN	char(11)	NO	PRI	NULL	
CardNumber	char(16)	NO	PRI	NULL	
AcctNum	char(30)	NO	PRI	NULL	
AcctCreateDate	date	YES		NULL	

An addition from HW2 is the AcctCreateDate column.

Functional Dependencies

Dates

- DateID -> Profile1, Profile2, CustRep, Date_Time
- Profile1 -> User1Rating
- Profile2 -> User2Rating

Blinddate

- ProfileA -> ProfileB, ProfileC, Date_Time

Likes

- All attributes are functionally independent of one another

Employee

- SSN -> Role, StartDate, HourlyRate

Person

- SSN -> Password, FirstName, LastName, Street, City, State, Zipcode, Email, Telephone, Age

Profile

- OwnerSSN, ProfileID → DatingAgeRangeStart, DatingAgeRangeEnd, DatinGeoRange, M_F, Hobbies, Height, Weight, HairColor, CreationDate, LastModDate, PhyChar, Photo

Account

- OwnerSSN, CardNumber, AcctNum → AcctCreateDate

User

- SSN → PPP, Rating, DateOfLastAct

Integrity Constraints

Dates

- DateID, Profile1, Profile2, Date_Time cannot be NULL
- Primary Key is DateID
- Profile1 is a foreign key that references profile.ProfileID
- Profile2 is a foreign key that references profile.ProfileID
- CustRep is a foreign key that references employee.SSN

Blinddate

- None of the fields can be NULL
- Primary key is (ProfileA, ProfileB, ProfileC, Date_Time)
- Candidate keys are ProfileB and ProfileC
- ProfileA is a foreign key that references profile.ProfileID
- ProfileB is a foreign key that references profile.ProfileID
- ProfileC is a foreign key that references profile.ProfileID

Likes

- None of the fields can be NULL
- Primary key is (Liker, Likee, Date_Time)
- Candidate is Likee
- Liker is a foreign key that references profile.ProfileID
- Likee is a foreign key that references profile.ProfileID

Employee

- All fields except Primary key can be NULL
- Primary key is (SSN) which is also a foreign key that references Person.SSN

Person

- All fields except Primary key can be NULL
- Primary key is (SSN)

User

- All fields except Primary key can be NULL
- Primary key is SSN, which is also a foreign key that references Person.SSN

Profile

- Creation date and LastModDate can not be NULL
- All other fields except primary key can be NULL
- Primary key is (ProfileID)
- Foreign key on OwnerSSN, which references User.SSN

Account

- All fields except primary key can be NULL
- Primary key is (OwnerSSN, CardNumber, AccountNum)
- Foreign key on OwnerSSN, which references User.SSN