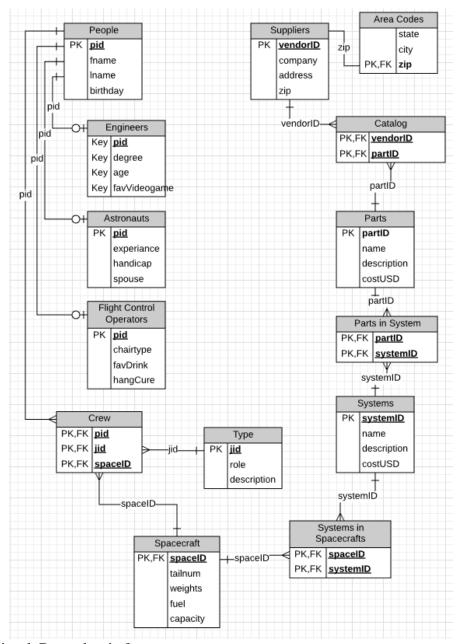
Michael Sanzo

Database Management

11/11/2016

1. Beautiful E/R Diagram



- 2. Functional Dependencies?
 - a. Catalog vendorID, partID
 - **b.** Crew Pid, jid, spaceID
 - c. Systems in Spacecrafts

spaceID, systemID

d. Engineers

Pid degree, age, favvideogame

e. Astronauts

Pid experience, handicap, spouse

f. FCO

Pid chairtype, favdrink, hangcure

g. Type

Jid role, description

h. Spacecraft

SpaceID talinum, weights, fuel, capacity

i. Systems

systemID name, description, costUSD

j. Parts

partID name, description, costUSD

k. Suppliers

VendorID company, address, zip

l. Area Codes

Zip city state

m. Person

Pid fname, lname, birthday, staddress, zip, spouse

3. Why is it in 3NF?

It is in first normal form (1NF) because each cell in the solution has at least one piece of data in it. Each of the columns names anticipates just one piece of data for every row, or otherwise it is null.

It is in second normal form (2NF) because when looking at the functional dependencies there is not any that rely with one another. Also in addition to this each of the non-primary keys (foreign) that determine a primary key.

It is in third normal form (3NF) because there are no transitive dependencies because each table is only one column in the primary key, or there are two primary key columns.

The difference between the 3NF and BCNF is that the clause is a member of some key. The clause excuses a functional dependent if it is prime.

It is in BCNF because...