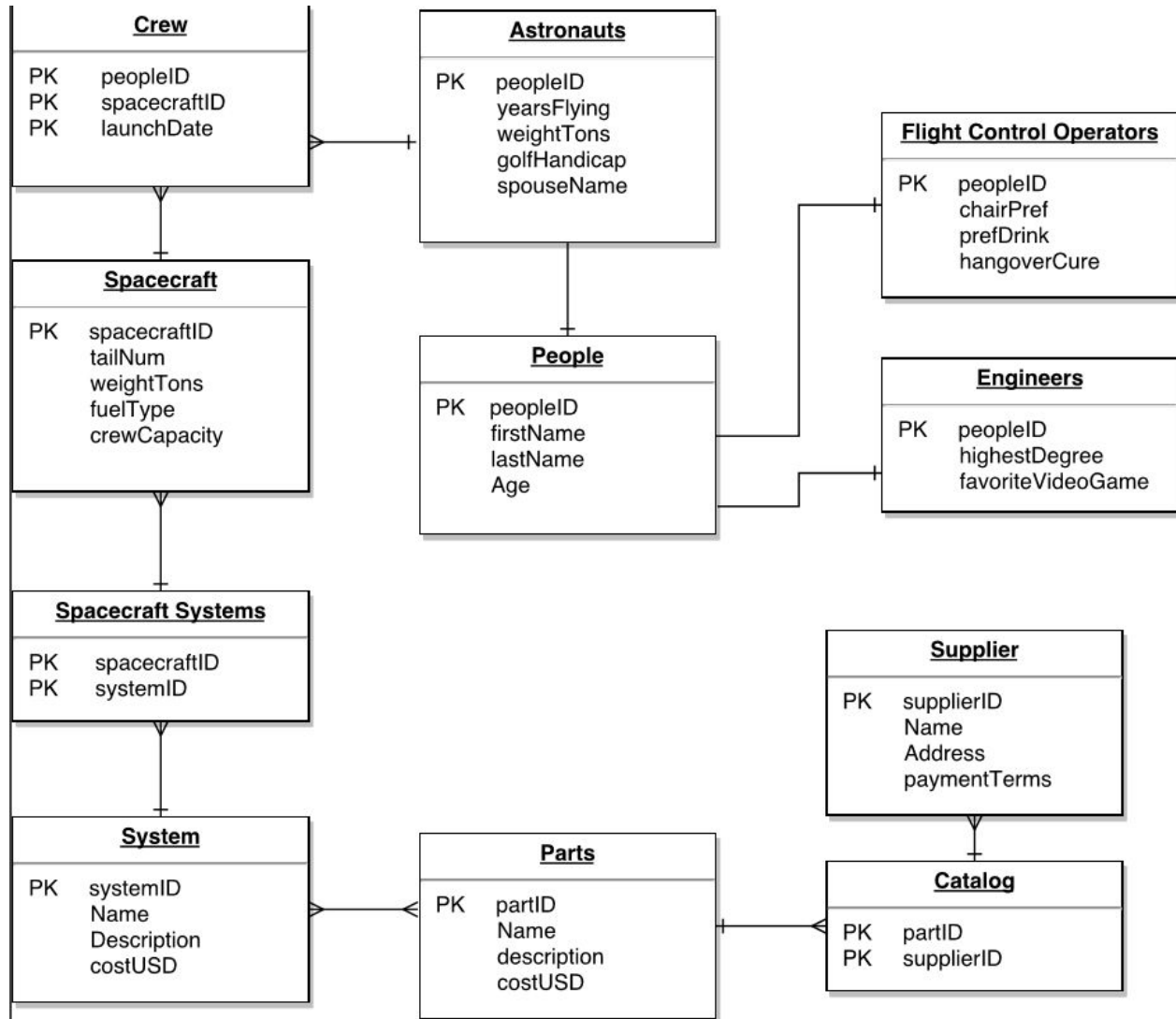


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Database Mangement  
Lab 9  
November 10th 2016



### Functional Dependencies

Engineers: peopleID  $\rightarrow$  highestdegree, favoriteVideoGame

Astronauts: peopleID  $\rightarrow$  yearsFlying, golfHandicap, spouseName

FCO: peopleID  $\rightarrow$  chairPreference, prefDrink, hangoverCure

Spacecraft: spacecraftID  $\rightarrow$  tailNum, weightTons, fuelType, crewCapacity

Crew: peopleID spacecraftID launchDate

SpacecraftSystems: spacecraftID, system ID

People: peopleID  $\rightarrow$  firstName, lastName, Age

Parts: partsID  $\rightarrow$  Name, Description, costUSD

Supplier: SupplierID  $\rightarrow$  Name, Address, paymentTerms

Catalog: PartID, SupplierID

If this database is in Boyce-Codd Normal Form, which it is, the database would also have to be in 1st Normal Form, now if all the values are then located within the tables then combined through join statements and they can't be divided making them all singular thus making this a first normal form. There are no partial dependencies because all the tables are identified by their primary keys, thus making it 2nd Normal Form. Finally what makes this table 3rd Normal form is that there are no transitive dependencies either.