Alliyah Taylor
Lab 9
11|16|2016

1. Functional Dependencies

People

PID → firstName, lastName, Age

Flight Control Operators

PID→chairPreference, preferredDrink, hangoverCure

Engineers

PID→highestDegree, favoriteGame

Astronauts

PID-→yearsFlying, golfHandicap

Crew

(PID,SID)→

Spacecraft

SID→Name, tailNumber, weightTons, fuelType, crewCapacity

SystemsIn

(SID, sysID)→

Systems

sysID→Name, Description, costUSD

PartsIn

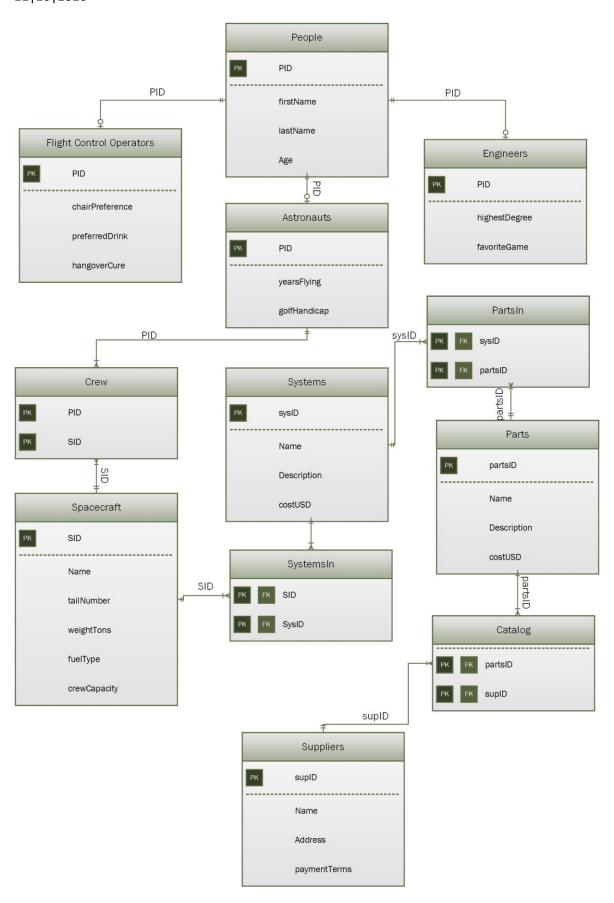(sysID, partsID)→

Parts

partsID→Name, Description, costUSD

Catalog

(partsID, supID)→

Suppliers

supID→Name, Address, paymentTerms

2. The Diagram

People

PK | PID
- - - - - - - -
firstName

lastName

Age

Flight Control Operators

PK | PID
- - - - - - - -
chairPreference

preferredDrink

hangoverCure

Engineers

PK | PID
- - - - - - - -
highestDegree

favoriteGame

Astronauts

PK | PID
- - - - - - - -
yearsFlying

golfHandicap

PartsIn

PK | FK | sysID

PK | FK | partsID

Crew

PK | PID

PK | SID

Systems

PK | sysID
- - - - - - - -
Name

Description

costUSD

Parts

PK | partsID
- - - - - - - -
Name

Description

costUSD

Spacecraft

PK | SID
- - - - - - - -
Name

tailNumber

weightTons

fuelType

crewCapacity

SystemsIn

PK | FK | SID

PK | FK | SysID

Catalog
- - - - - - - -
PK | FK | partsID

PK | FK | supID

Suppliers

PK | supID
- - - - - - - -
Name

Address

paymentTerms

PID

PID

PID

PID

sysID

partsID

partsID

SID

SID

supID

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3. The diagram is in 3NF because every non-key attribute in each table is functionally dependent upon the entire primary key, and nothing else as illustrated by the functional dependencies.