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Lab 9 Questions

1. Functional Dependencies:

Flight Control Operators: chairPreference, preferredDrink, preferredHangoverCure are all dependent on fcoid.

People: firstName, lastName, and age are all dependent on pid.

Astronauts: golfHandicap and spouseName both dependent on aid.

Engineer: highestAcademicDegreeEarned and favoriteVideoGame are both dependent on eid.

Crew: cid, scid, and roleName all dependent on crid.

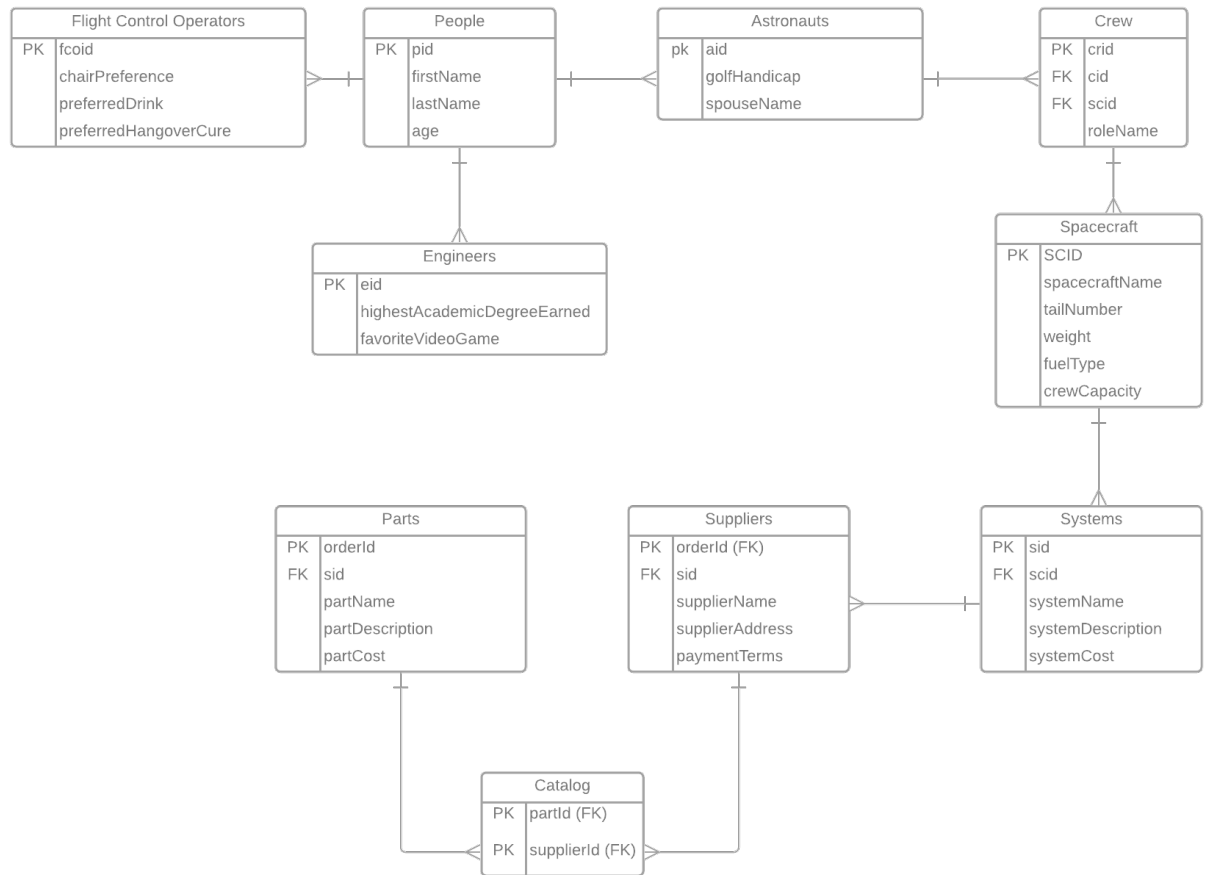
Spacecraft: spacecraftName, tailNumber, weight, fuelType, and crewCapacity are all dependent on SCID.

Systems: scid, systemName, systemDescription, and systemCost are all dependent on sid.

Suppliers: sid, supplierName, supplierAddress, and paymentTerms are all dependent on orderId.

Parts: sid, partName, partDescription, and partCost are all dependent on orderId.

Catalog: partId and supplierId are both dependent on one another.



2.

3. The database is in a 3NF because it reduces the replication of data by using overlapping information with a single variable as well as avoiding data anomalies and is easy to use why trying to organize data. All the information is also split so that if the information needs to be repeated in another table, it'll take that information and use that information rather than having duplicate data. All tables have their own primary keys and occasionally have its foreign keys to help with its information.