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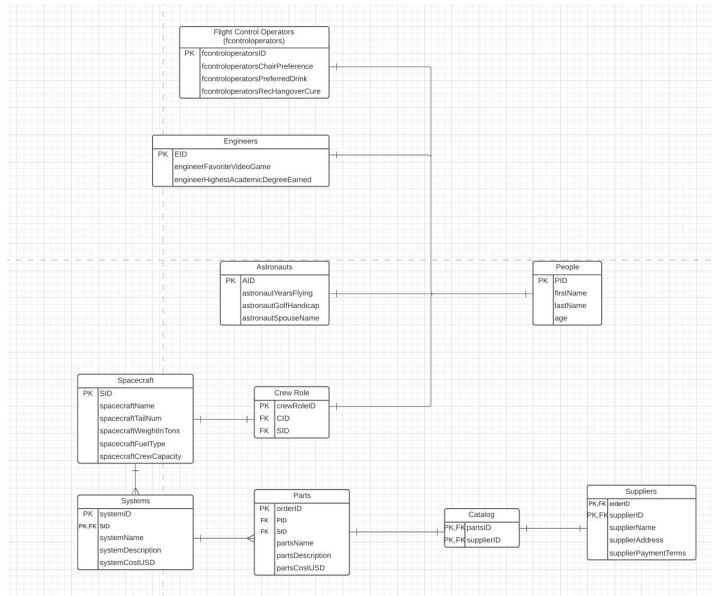
Professor Labouseur

Database Management

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Lab 9

1. In the engineers table, the highest academic degree earned and favorite video game are dependent on engineer id. In the astronauts table, years flying, golf handicap, and spouse name are dependent on the astronaut id. In the flight control operators table, chair preference, preferred drink, and recommended hangover cure are dependent on the flight control operators id. In the spacecraft table, name, tail number, weight in tons, fuel type, and crew capacity are dependent on spacecraft id. In the crew role table, crew id and spacecraft id are dependent on crew role id. In the systems table, spacecraft id, name, description, and costUSD are all dependent on the system id and spacecraft id. In the parts table, order id, people id, spacecraft id, name, description, and cost USD, are all dependent on order id. In the catalog table, parts id and suppliers id are dependent on each other. In the suppliers table, order id, supplier id, name, address, and payment terms are all dependent on order id and supplier id. In the people table, first name, last name, and age are all dependent on people id.



2.

3. The database is in third normal form because there are no multiple key dependencies which is saying that there are no non-key attributes that are also a functional dependency. It is also in third normal form because it satisfies second normal form because there are also no partial key dependencies. Also, it is in third normal form because it satisfies first normal form because the rows, columns, and intersections are atomic. The database also has referential integrity because it is accurate and consistent through each relationship in each table.