Entity-Relationship Diagram

Employee
- Employee ID
- Name
- Phone Number

Managed by

Assigned

Sales Office
- Office Number

Lists
- Date
- Price

Property
- Property ID
- Property Type

Owned
- Percent Owned

Owner
- Name
- ID

Location (Property Address)
- (Address)
  - Street
  - Number
- City
- State
- Zip

Location (Sales Office Address)
- (Address)
  - Street
  - Number
- City
- State
- Zip

Description

Building Name/Room Number

Capacity

Start Date

Type

Number

Project(s) —||— Assigned —|< Laboratory

Works on

Project Leader

Has

Name

Rank

Chemists —||— Employs —||— Research Facility

ID

Email

Check In Date

Borrows

Has

Check Out Date

Equipment —||

Serial Number

Description

Cost

3)Examples of data I would store in DBMS over OS files are Employee records, customer records, sale's data, company data, intellectual property of a company, large clusters of data such as itemized forms particularly for a bureaucratic type of entity. Data I would choose to store on OS Files rather than DBMS are personal information such as my personal photos, data such as SSN, Phone Number, birthdate, banking information etc. I would also choose to keep files that could potentially be harmful to the DBMS and cause data leaks in OS files rather than on the DBMS for security reasons. Pros os DBMS are: Data sharing, security, accessibility, integration, consistency, Decision Quality, and Data back up. Cons of DBMS are: Cost, speed, management, reliability, complexity. Pros for OS files are: user friendly, secure, multitasking, sharing. Cons for OS files are: cost, reliability, fragmentation, viruses.