Project A – Question 1
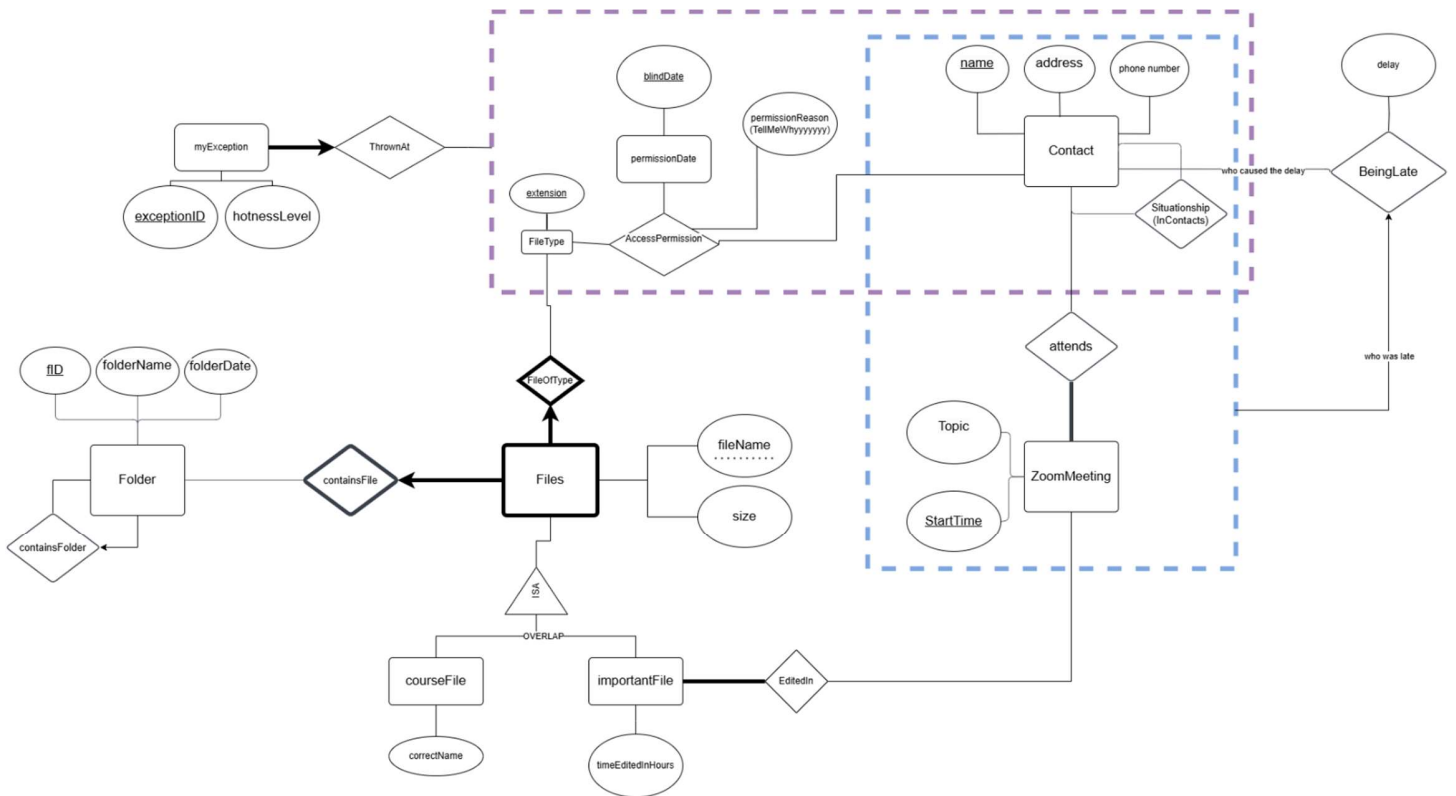
Course: DATA BASES - 009404241

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Notes For ERD diagram

1. **Exception - Hotness Level:**

   o The attribute "hotnessLevel" is a continuous numerical value ranging from 1 to 10. This constraint cannot be explicitly represented in the ERD but can be enforced in the DDL using the CHECK constraint.

2. **Phone Number Validation:**

   o The condition requiring a number to start with "9725" and contain exactly 12 digits cannot be enforced within the ERD. However, it can be implemented in the DDL using a CHECK constraint.

3. **Permission Reason Validation:**

   o There is no way to ensure that the "permissionReason" attribute is a string within the ERD. However, this constraint can be enforced in the DDL using a CHECK constraint.

4. **File Extension Length:**

   o The constraint requiring the file extension to contain exactly three characters cannot be represented in the ERD. This can be enforced in the DDL using a CHECK constraint.

5. **Important File - Time Edited:**

   o The "timeEdited" attribute represents the cumulative time a file was edited across all Zoom meetings in which it was opened. This constraint cannot be represented in the ERD or the DDL if it is not known at the time of table creation. It can only be ensured using SQL queries.

6. **Folder Hierarchy:**

   o The ERD cannot handle cases where a folder might not be contained within another folder, and neither can the DDL. These constraints can be implemented using SQL queries.

7. **Course File - Format:**

   o This is a Boolean attribute. While it cannot be explicitly represented in the ERD, it can be enforced in the DDL.

8. **Exception Handling:**

   - For each exception, there is exactly one aggregation of AccessPermission, FileType, and Contact where it was thrown.

   - For each aggregation of AccessPermission, FileType, and Contact, there may be any number of exceptions thrown (0, ...).