## Project Demo Requirement and Advice

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## Tell one story

- Tell one logically coherent story
  - Application and business rules
  - Entity-relationship model
  - Relational model
  - Database implementation
  - Application implementation and questions answered
  - Model refinement: normalization and application improvement
  - Implementation refinement
  - Future work (application? Learning goals?)

## Preparing presentation sides

- General guideline
- Course specific guideline

#### Audience cannot read

- One point per slide
- Sufficient space
- Slide space: head, important, repeating/nonimportant

#### Audience cannot see

- Color contrast
- Font family
  - sans-serif vs serif
- Font size
- Size of figure

#### Audience cannot hear

- Speak loudly or use microphone
- Engage the audience
  - Ask questions
  - Answer questions

## Entity-Relational Model

#### • Include a table

Object	Number
Entity Sets (Total)	?
Weak Entity Sets	?
Relationship (Total)	?
Relationship (1-to-1)	?
Relationship (1-to-many)	?
Relationship (Many-to-many)	?
Weak relationship	?
IS-A relationship	?

#### Relational Model

- List schema
- Using the table (last slide) and the schema, discuss the methodology used

## Database implementation

- Discuss
  - Choice of data types?
  - Primary keys and non-primary keys?
  - Constraints?

# Application Design and Implementation

- Discuss application design
  - Model classes
  - View classes
  - Controller classes

#### Queries

- List a few important questions and their answers (queries)
- Demo the queries and the application

#### Normalization

Discuss the process and the result of normalization

## Database Implementation Improvement

- Views created and why?
- Index created and why?
- Transactions created and why?
- Stored procedure and functions?

## Application Improvement

- How do improve the Java application after normalization?
- What about
  - Views, transactions, and stored procedures/functions?

#### **Future Work**

- Discuss two aspects
  - Improving database and application
  - Future learning goals (what else do you want to learn in a class or on your own)?