Class Design

CIS110

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- **Abstraction**: set of information properties relevant to a stakeholder about an entity

- Information Property (or property): a named, objective and quantifiable aspect of an entity

- Stakeholder: a real or imagined person (or a class of people) who is seen as the audience for, or user of the abstraction being defined

Class Design

- Example:
  - Entity: Movie
  - Properties:
    - Title
    - Year
    - Length
    - Genre
    - Format
    - Price

Class Design

Movie			On-Line Customer		
Title (string)	Year (int)	Length (int)	Genre (string)	Format (string)	Price (float)
"Moneyball"	2011	133	"Sports"	"Blueray"	15.00
"Gone With the Wind"	1939	219	"Drama"	"DVD"	10.95
"Jurassic Park"	1993	127	"SciFi"	"DVD"	12.50
"Pirates of the Caribbean"	2003	143	"Comedy"	"Blueray"	17.50
"Sicko"	2007	116	"Documentary"	"Streaming"	11.75

Representing the Movie Abstraction using a Table

Java Class

- Entity is the class: Movie.Java
- Properties become attributes (data fields)
  - `String title`
  - `int year`
  - etc.

Activity

- Download the classwork file from the course website and complete the activity