Domain Logic Model

- Represents the logical steps and decisions that make your app (business) unique
- Handles simple data validation
- Handles complex business rules
- The gatekeeper of the Data Model

Domain Logic Model (con't)

- Has relationships with Data Models
  - Can be 1-1, 1-N, N-1, N-N, depending on your choices and architecture. Probably is a hybrid
- Has methods that comprehend and understand Data Models
- Has properties or constants from the business configuration
  - Maximum amount of discount on sale

Domain Logic Model (con't)

- Going back to harddrive example
  - Harddrive data object has suggested price of $40
  - Input has the sale price coming in at $30
  - Domain Logic Model to the rescue!

- Data Logic Model validates the sale
  - Property says maximum discount is 20%
  - Input discount is 25%
  - Rejects input, does not allow Data Model to accept $30 as the sale price

  - Perhaps maximum discount is 0% & must be exact
  - Rejects input if input is not exactly $40

Domain Logic Model (con't)

- Another example
  - Blog Entry Model has a title
  - Business says Blog entry titles should not be longer than 100 characters
  - Domain Logic Model will validate that the input ready for this Blog Entry model is <= 100

Why is the separation important?

- Two reasons
  - Reuse
    - 100 different items for sale, but they don't have a common ancestor (ie, you can't extend a class. In this example, we choose not to use traits)
    - Each one must sell for the exact sale price
    - Only ONE object is required to validate that each time - instead of duplicating that code in each model
    - ** Design patterns - there are more options than just extending forever!!

Why is the separation important? (con't)

- Two reasons
  - Data models should just represent an entity, not the logic behind it
    - Your car has a maximum load. The steel doesn't know that
    - Harddrive example!
      - Harddrive is for sale at main warehouse. It is the same harddrive for 10 resellers.
      - Each reseller has different properties that determine the final sale price
      - The harddrive ITSELF never changes - so that class should be exactly the same for all retailers

Summarize Domain Logic Models

- Understands the business logic
- Comprehends data models
- The Gatekeeper of valid data