

# Mental Model vs Conceptual Model

**Presented by:**

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# Mental Model (1)

- **What is mental model all about?**
- An explanation of someone's thought process about how something works in the real world.
- Example: You have a mental representation of how to order food at *burger king*. So, mental model represents some visual stepwise representation of the same.

# Mental Model (2)

- **Questions answered by mental model:**
  - How do we think?
  - How do people understand some domain of knowledge?
  - What triggers thinking and reasoning?
- **Applications:**
  - Reasoning
  - Artificial Intelligence
  - Linguistics
  - Sociology
  - Human Computer Interaction

# Conceptual Model (1)

- Designer's conceptualization of the envisioned system:
  - What system is?
  - How it is organized?
  - What it does?
  - How it works?
- Designer should know these things as he/she creates the system.
- Conceptual model is also called as designer's mental model.
- Difficult for users to establish a mental model if designer has never done the same.

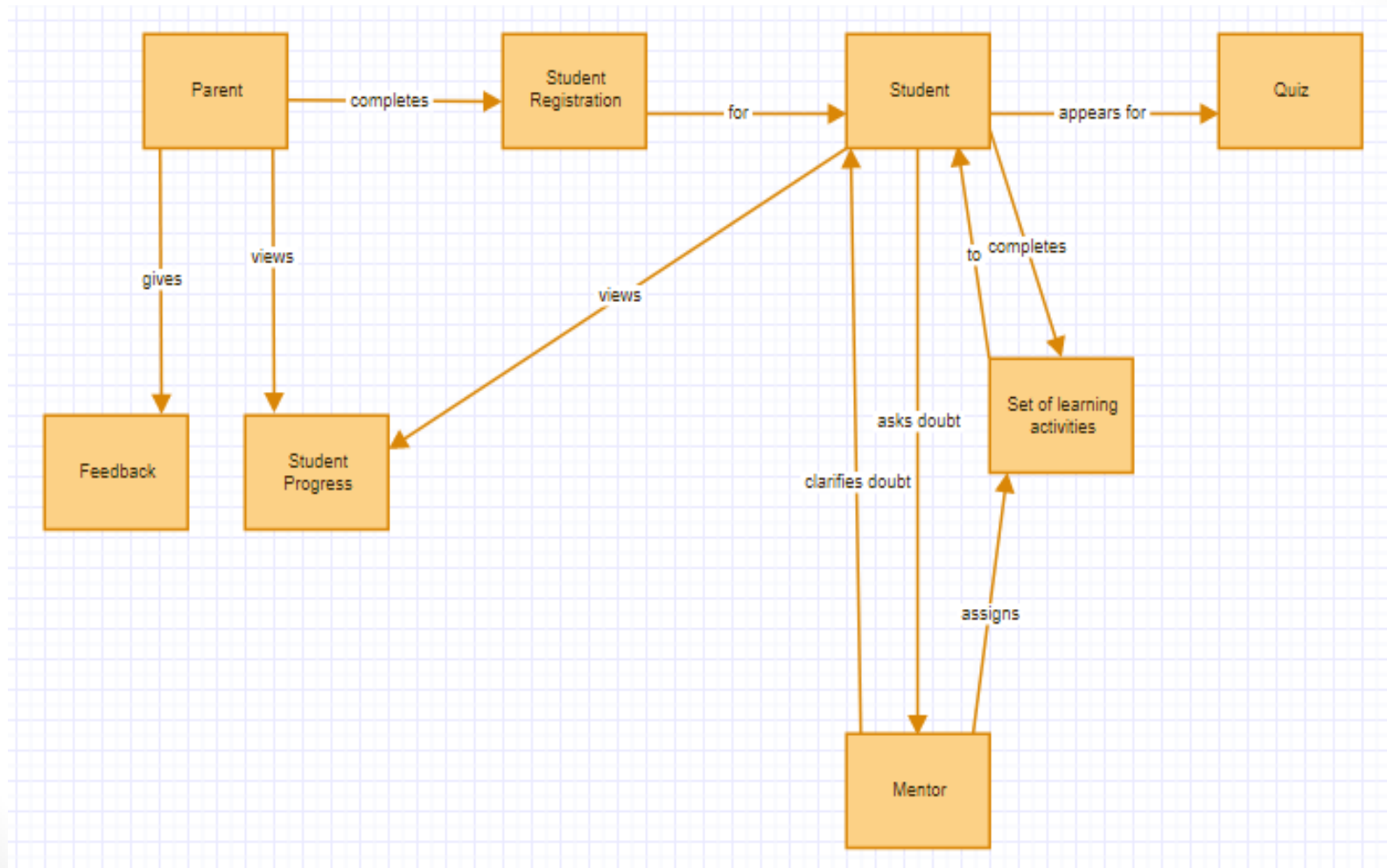
# Conceptual Model (2)

- The closer the designer's mental model orientation is to the user's work domain and work practice, the more likely users will internalize the model as their own.
- If anything is not in the designer's mental model, the system should not require the users to be aware of it.
- Three Perspectives:
  - Ecological Perspective- describes what it does, how it works.
  - Interaction Perspective- describes how users operate it.
  - Emotional Perspective- describes the intended emotional impact.

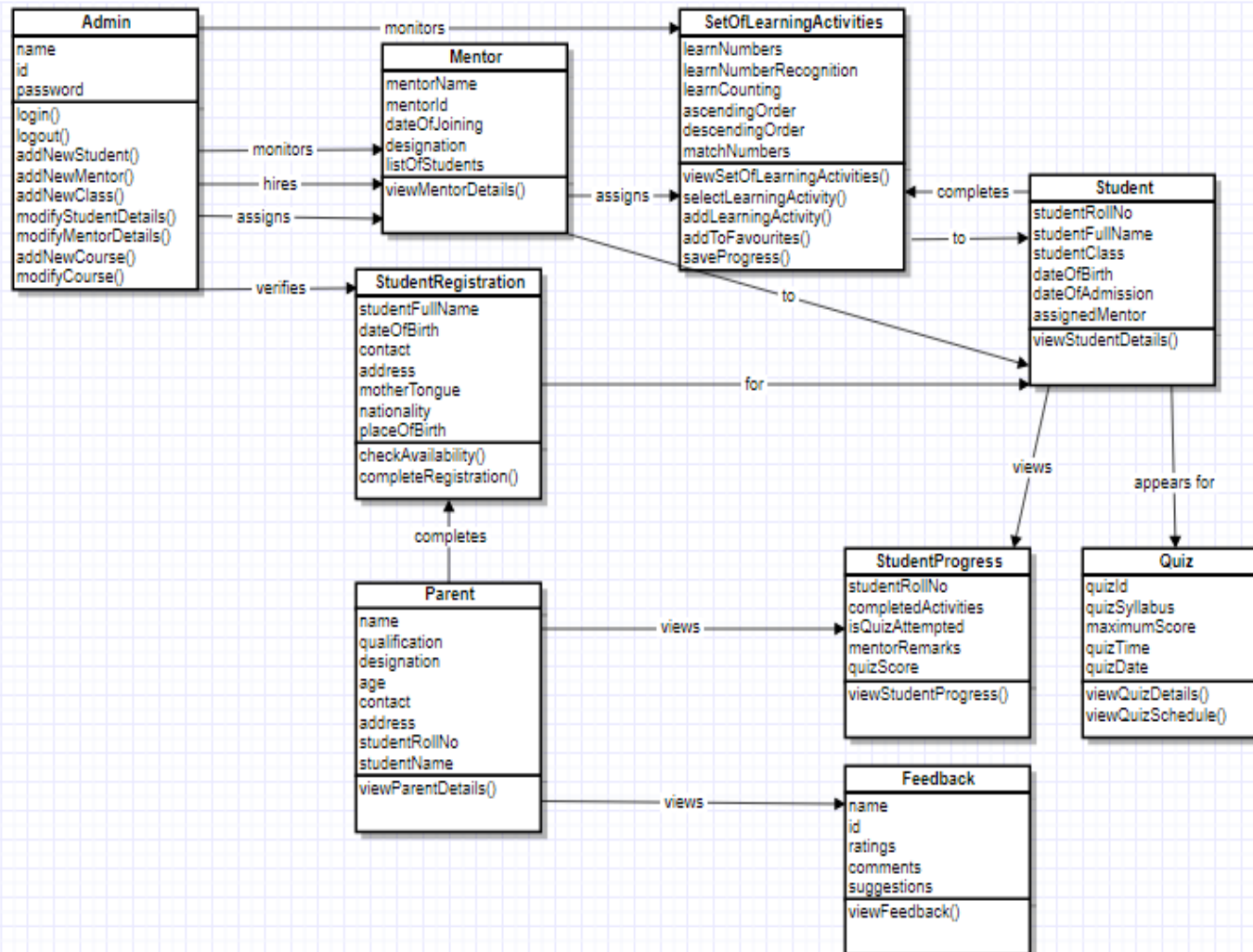
# Example

- **Problem Statement:** Application for kindergarten and preschool kids.
- Design the user's mental model and designer's mental model for student registration, teaching kindergarten and preschool kids in UML class diagram notation.
- The mental model should represent the entire end-to-end flow of the application.

# User's Mental Model



# Conceptual Model





# References

- Rex Hartson and Pardha Pyla, The UX Book, MK publications.
- <https://www.slideshare.net/kishankits/mental-models-final-presentation>
- Tool Used for UML diagram: Gliffy

Thank You ☺