Requirements Modelling

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Requirement Modelling

- Paradigm Shift ?
- Structured Vs OOAD Vs Web Modelling

Basic Idea of Modeling

- The philosophy behind each of the phases.
- The workflows and the individual activities within each phase.
- The artifacts that should be produced (diagrams, textual descriptions and code).
- Dependencies between the artifacts.
- Notations for the different kinds of artifacts.
- The need to model static structure and dynamic behavior.

Structured Analysis and Structured Design

- Used to develop the Traditional Projects that uses procedural programming.
- **Analysis Phase:** It uses Data Flow Diagram, Data Dictionary, State Transition diagram and ER diagram.
- **Design Phase:** It uses Structure Chart and Pseudo Code

OOAD

- Used to develop Object-oriented Projects that depends on Object-oriented programming.
- Uses common processes likes: analysis, design, implementation, and testing.
- Uses UML notations likes: use case, class diagram, communication diagram, development diagram and sequence diagram.

Web Modelling

- Web modeling (aka model-driven Web development) is a branch of Web engineering which addresses the specific issues related to design and development of large-scale Web applications.
- In particular, it focuses on the design notations and visual languages that can be used for the realization of robust, well-structured, usable and maintainable Web applications.
- Designing a data-intensive Web site amounts to specifying its characteristics in terms of various orthogonal abstractions.
- The main orthogonal models that are involved in complex Web application design are: data structure, content composition, navigation paths, and presentation model.