term	definition
Project Management	the process of planning and controlling system development within a specified time at a minimum cost with the right functionality
A project	set of activities with a specified beginning and end point meant to create a system that brings value to the business
Project Managers	control all tasks and roles that need to be coordinated
Inception phase	generate a system request based on a business need or opportunity
Perform a feasibility analysis	revise the system request approve or decline the project
Project Identification	when someone in the organization identifies a business need to build a system
The project sponsor	someone who recognizes the strong business need for a system.
The System Request	A document that describes the reasons for and the value added from building a new system.
Economic Feasibility	(also called a cost–benefit analysis), which identifies the financial risk associated with the project
A work plan	dynamic schedule that records and keeps track of all tasks to be accomplished over the course of the project
The Project Work plan	the mechanism that is used to manage the tasks that are listed in the work breakdown structure
Gantt Chart	horizontal bar chart that shows the same task information as the .project workplan but in a graphical way
Scope Management	Scope creep happens when new requirements are added to the project after the original project scope was defined and “frozen"
Reporting Structures	One way to reduce efficiency losses on teams is to understand the complexity that is created in numbers and to build in a reporting structure that tempers its effects
Questionnaires	set of written questions used to obtain information from individuals May be paper based or electronic
Observation	Users/managers often don’t remember everything they do Checks validity of information gathered in other ways Behaviors may change when people are watched Be careful not to ignore periodic activities
Use case	use cases are used to explain and document the interaction that is required between the user and the system to accomplish the user’s task
Swimlanes	Used to assign responsibility to objects or individuals who actually perform the activity, Represents a separation of roles among objects, Can be drawn horizontally or vertically

Functional models	represent system behavior
Structural models	represent system objects and their relationships; People, Places, Things
Relationships	Describe how classes relate to one another
CRC Cards	index cards used to document the responsibilities and collaborations of a class
Generalization	denotes inheritance
Aggregation	denotes a logical "a-part-of" relationship
Composition	denotes a physical "a-part-of" relationship
Sequence Diagrams	Illustrate the objects that participate in a single use-case, A dynamic model, Generic diagram shows all scenarios for a use-case, Instance diagrams show a single scenario
Communication Diagrams	Depict the dependencies among the objects, An object diagram that shows message passing relationships, Emphasize the flow through a set of objects
Factoring	Creating modules that account for similarities and differences between units of interest
Partition	create a sub-system of closely collaborating classes
Package	general construct that groups units together, Used to reduce complexity of models, A package diagram shows packages only
System Integration	Building a new system by combining packages, legacy systems, and new software
Inheritance	Permits reuse of existing classes with extensions for new attributes or operations
Inheritance Conflicts	An attribute or method in a subclass with the same name as an attribute or method in the super class
Cohesion	A cohesive class, object or method refers to a single thing
Constraints and Contracts	A contract is a set of constraints & guarantees, If the requestor (client) meets the constraints, the responder (server) will guarantee certain behavior, Constraints must therefore be unambiguous
Sequential access files	Operations (read, write and search) are conducted one record after another (in sequence)
Random access files	Efficient for operations (read, write and search) Inefficient for report writing
Relational Databases	Most popular way to store data for applications, Consists of a collection of tables, Structured Query Language (SQL) is used to access the data

Consistency	Extremely important concept in making the system simple, It allows the users to predict what is going to happen, All parts of the system work in the same way, Users learn how one portion works and immediately apply it to others
Output Design	Reports produced from the data generated by the system