Intro to Systems Analyst

**Causes of Problems in Systems**

* Lack of methodology
* Poor communication
* Complex systems
* Unreasonable expectations about the development process
* Poor or no documentation

**Other Issues**

* Software is inherently complex
  + There may be interdependencies between components and it may be complex data intensive systems
* Conformity
  + Software must conform to existing hardware/software platform, and pre-existing information systems.

**Goal of a System**

* The primary goal is to create value for an organization

**What is a System?**

* A collection of interrelated components that function together to achieve an outcome.
* Key Components
  + People
  + Processes
  + Hardware
  + Software
  + Data
* Example: Moodle, Omnivox, Payroll System

**Characteristics of a System**

* A level of complexity
* Has definite purpose or function
* May have subsystems or be part of a larger system
* Components arranged according to some plan or structure

**Analysis**

* The resolution of anything complex into simple elements.
* The exact determination of its components

**Methodology**

* A process model composed of tasks, work products and roles which help to consistently and cost-effectively achieve a specific objective.

**Lifecycle / Methodology**

* Uses phases where each phase has a standard set of outputs
* **Planning**
  + Identifies business values, develop a work plan, staff the project, control and direct.
* **Analysis**
  + Information gathering, process modeling, data modeling
* **Design**
  + Physical design, interface design, database and file design, program design
* **Implementation**
  + Construction, installation
* **Post-Implementation (Maintenance)**
  + Bug fixes, on going maintenance, hardware maintenance, enhancements, etc.