## SysML Notes

#### Block Definition Diagram

* The end of association shows the role. A role is provided when the name of the type does not adequately describe the role the part plays
* Reference properties indicate there is some relationship
* Reference relatioship is like the composition but the black diamond is not filled; white
* Value propeties used to model quantative characteristics of a Block
* Value Types are used to describe the values for quantities
* Enumeration defines a set of names values called litterals
  + Example of litterals are colors and days of the week

#### Internal Block Diagram

* Ports are used to model interfaces
* Shows how the part props of a block are visually connected
  + Ports: Flow and Standard (now Full and Proxy)
  + Connectors used to bind two parts and shows interaction
  + Reference props on an IBD is a dotted line as the block frame
  + item flows used to specify flow across Connectors

#### Sequence Diagram

#### State Diagram

* describes state-dependent behavior of a block throughout it’s lifecycle
* State machines can be called by an Activiy and referenced by a lifeline
* Owned by blocks normally
* state machine is specified by a set of regions, each of which defines a State
* behaviors can be optionally excuted at entry and exit of a State
* change of state is affected by transitions; connects source state to a target State
* Transitions are defined by triggers, guards, and effets
* Just a characteristics

#### Paramentric Diagram