**Software Design Fundamentals Week 2**

* Each software development methodologie follows:
  + Analysis -> Design -> Development -> Testing
  + Analysis: What is being built
* Use cases = user goals
* Use case diagram
  + Primary Actors are typically actors that initiate the use case
  + Secondary/Supporting actors are typically the actors that don’t initiate the use cases, but are required in order to complete them
* Use case relationships
  + Associations
    - Typically show relationship between Actors and Use Cases
  + Includes <<include>>
    - Used when one Use Case’s functionality is dependent on another use case
  + Extends <<extend>>
    - Used when a use case adds optional or alternate behaviour to another use case
  + Generalization
    - When a use case has specialized behaviour which is modelled by other use cases
* Use case narrative
  + Interaction between actors and the system from pov of user
  + User does…, system does….
* Use cases need a clear value to the app, needs to have a start and end, and an external initiator
* Use cases are the definition of what is being built
  + They define the entire system
* Adjust Volume
  + User switches radio on
  + User adjusts volume
  + User chooses station