1. IoT (Internet of Things)
   1. Internet of things refers to the way that devices are embedded with technology that allows them to connect with the internet. Things like this can be as simple as a printer or something as complicated as a medical device that hooks up to a user interface. Regardless these devices need to have security measures in place, otherwise someone could exploit them and gain access.
2. Embedded Technologies
   1. Embedded technologies refer to devices that use hardware with a dedicated function within a larger mechanical or electrical system.
3. Edge Computing/ Analytics
   1. Rather than data being funneled to one main location, data is gathered across specific networks and used to help improve efficiency. Commonplace in industrial companies.
4. SDLC
   1. Software Development Lifecycle
   2. Consists of a series of steps to follow in order to build and maintain a stable end-product. Steps include:
      1. Planning: Meeting with a client to discuss what they might need/ what they are looking for.
      2. Implementation: Software engineers start writing code according to the client’s request
      3. Testing: Make sure the code doesn’t have any bugs or defects.
      4. Documentation: The whole process is documented in the event they need to go back and to aid in its continual development. May include writing an API
      5. Deployment/ Maintenance: Software is deployed
      6. Maintenance: Software improvement/ new requirements (change requests)
   3. Types of Models:
      1. Waterfall Model:
         1. Finish each phase completely before moving onto next one.
      2. V-Shaped Model:
         1. Focuses on execution of processes in a sequential manner, similar to waterfall but more focused on testing. Testing procedures are determined before commencement of writing code.
      3. Incremental Model:
         1. Involved multiple development cycles. The cycles are divided up into smaller iterations. These iterations are managed and go through a set of phases including:
            1. Requirements
            2. Design
            3. Implementation
            4. Testing