Week 2 Assignment: Baseline SCIs

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1. CSM\_CS406\_SAMS
   1. Concept\_Div.
      1. Market\_Analysis
      2. Rough\_Prototypes
      3. Architectures
   2. System\_Design
      1. Refine\_Design
      2. Make-Buy\_Analysis
      3. Quality\_Control\_Def.
   3. Coding
      1. Iteration\_1
         1. UC04\_Login
         2. UC05\_Logout
         3. UC01\_Search\_for\_Programs
      2. Iteration\_2
         1. UC02\_Display\_Program\_Details
         2. UC03\_Submit\_Online\_App
         3. UC06\_Edit\_Online\_App
      3. Iteration\_3
         1. UC07\_Check\_App\_Status
         2. UC08\_Submit\_Recommend
         3. UC09\_Appr\_Equivalency\_Form
   4. Test
      1. Field\_Test
      2. Recode\_and\_Fix\_Errors
   5. Deploy
      1. Key\_Customers
      2. Evaluate
      3. Begin\_Full\_Production
   6. Docs
      1. Documentation
      2. Training
2. Identify SCIs associated with each baseline
   1. **Concept\_Development**
      1. **Market\_Analysis:** Minimize risks associated with directing SAMS towards the target market.
      2. **Rough\_Prototypes:** Evaluate and test SAMS project to clarify production costs and issues.
   2. **System Design**
      1. **Architectures:** Provide stakeholders with ability to understand, negotiate, establish buy-in, and communicate project aspects.
      2. **Refine\_Design:** Large scale aspects into simplified versions for formal verification.
      3. **Make-Buy\_Analysis:** Identify what parts to create and what parts to outsource.
      4. **Quality Control Definition:** Does SAMS meet the goals at the best value for the customer.
   3. **Coding**
      1. **Iteration\_1**
         1. **UC04\_Login**
         2. **UC05\_Logout**
         3. **UC01\_Search\_for\_Programs**
      2. **Iteration\_2**
         1. **UC02\_Display\_Program\_Details**
         2. **UC03\_Submit\_Online\_App**
         3. **UC06\_Edit\_Online\_App**
      3. **Iteration\_3**
         1. **UC07\_Check\_App\_Status**
         2. **UC08\_Submit\_Recommend**
         3. **UC09\_Appr\_Equivalency\_Form**
   4. **Test**
      1. **Field\_Testing:** Discover and resolve problems.
      2. **Recode\_and\_Fix\_Errors:** Verify and validate SAMS.
   5. **Deploy**
      1. **Key\_Customers:** Validation and confirmation of SAMS by primary customer individuals.
      2. **Evaluate:** Performance, budget, cost, design, and value.
      3. **Begin\_Full\_Production:** Package files and assets into a compressed consumable form that is executable.
   6. **Docs**
      1. **Documentation:** Instructions and procedures for using, maintaining, and updating SAMS.
      2. **Training:** Hands on turnover of SAMS to the client’s users.
3. Define a naming scheme for each type of CI identified.
   1. **(REFER TO QUESTION 1 & 2)**
4. Identify the events that will mandate changes to each type of CI identified.
   1. **(REFER TO QUESTION 2)**
5. Describe what information should be included in an ECP, engineering change proposal.
   1. Application
   2. Forms
   3. Description of proposed change
   4. ID of person proposing change
   5. Reason for change
   6. ID of affected base line SCIs
   7. Costs
   8. Schedule impacts
6. Change control Auditing
   1. Describe the steps needed for a baseline to transition from TBE to a formal baseline.
      1. Document is produced
      2. Document is entered into the Software Configuration Management System
   2. Describe methods to ensure that the identified CIs are entered in the SCM system for change control. (Visual inspection works for small projects)
      1. Maintaining a problem report form that connects each change to a configuration item to the reason for its change and to the associated individuals of the change problem.
      2. Establish periodic independent review of approved change proposals that includes implementation validation. This will also allow for a periodic monitoring of the change.
      3. Utilization of software configuration management tools
      4. Integrate change control into a Kanban board so that the progress and implementation can be easily tracked.
   3. Describe how CIs will be checked for correctness.
      1. Define mechanisms for establishing a baseline:
         1. to-be-executed baseline (TBE)
         2. Sanctioned baseline
      2. Configuration item verification:
         1. Ensures configuration baselines are transferred during succeeding or updated baselines.
      3. Configuration item validation:
         1. Ensures configuration baselines solve the problem they were implemented to solve.
      4. Ensure changes specified in approved ECPs are implemented efficiently.
   4. Describe how change control auditing will ensure the changes in approved ECPs are implemented in a timely manner.
      1. Objectively assess functional and physical integrity.
      2. Functional examination of test results before and after implementation.
      3. Physical compares the CI products and their design specifications.

Through proper documentation of changes, functional and physical auditing will identify implemented and non-implemented changes.

References