Low Level Design

This checklist covers low level designs. For this checklist, a "unit" describes the low level element you are working on; it could be a module, class, script, web page, form, report, etc. See *CxStand_Design* for a discussion of different design levels in CxOne.

General

LLD-1   Does the design conform to *CxCheck_Design*?

LLD-2   Does each unit have a unique identifier and follow style and naming conventions?

LLD-3   Are the proposed programming languages and technologies appropriate?

LLD-4   Does the design for each unit contain appropriate views? (e.g., static structure, data definition, data flow, control flow, states, etc.)

LLD-5   Is the design at an appropriate completeness level as per project planning and lifecycle?

LLD-6   Has the designer verified that a reusable design for this unit doesn't already exist?

LLD-7   Has sufficient detail been included for someone else to develop the code?

Design Features

LLD-8   Has the overall function and intent of each unit been described?

LLD-9   Are calls, events, and messages between units documented?

LLD-10   Are all unit interfaces consistent among themselves and with the system interfaces?

LLD-11   Is the design consistent with other sibling units?

LLD-12   Does the design reflect the actual operating environment? Hardware? Software?

LLD-13   Does the design support the appropriate level of modularity?

LLD-14   Does the design support the appropriate level of design and code reuse?

LLD-15   Have all the constraints, such as processing time, run time, memory usage, I/O, database access and response time, for this unit been taken into consideration?

LLD-16   Is error, exception, and other abnormal processing and states described in detail?

Data

LLD-17   Have data elements been described to a sufficiently low level of detail?

LLD-18   Have valid value ranges and other data constraints been specified?

LLD-19   Has the management and use of shared and stored data been clearly described?

Interface Design

LLD-20   Are the internal and external interfaces clearly defined?

LLD-21   Are the number and complexity of the interfaces minimal and consistent?

LLD-22   Are the inputs and outputs for all the interfaces sufficient and necessary?

LLD-23   Do low-level routines have high fan-in?

LLD-24   Do most routines have low-to-medium fan-out?

Object Oriented Issues

LLD-25   Does the design conform to *CxCheck_ObjectOrientedDesign*?