Pittsburgh Public Schools
Standard Operating Procedure

Development Coding Standards
Office of Information and Technology

OIT-002
Development and Coding Standards

Overview
The following standards have been established for employees in the Data Warehousing & IT Operations Department

Work should be tracked using JIRA
- Jira tasks have due dates. If a task cannot be completed by due date reason for delay must be documented in Jira comments.
- Tasks are closed by Coordinators (Solanda for the Data Management and Operational Support Team, Joe for PeopleSoft, Ellen for the Systems Integrations & Visualizations Support). Upon completion Jira tasks should be assigned back to Coordinator for review and close.
- Coordinators meet weekly with Director (Veronica) to review open and outstanding tasks in order to identify potential roadblocks and highlight resource constraints.
- All work should be documented clearly in JIRA. This includes:
  - Emails and notes from user meetings
  - Notes from design meetings
  - Developer notes
- Location of source code and any data files (test input files, etc.) must be noted in Jira task. When possible, link issues to prior issues done on code or process.

Code Libraries
- Production code cannot be stored on local machines. All code must be saved in shared drives or district databases
- All source code must be stored in code libraries and noted in JIRA,
- Source code documentation – see attached for PPS coding standards

Service Level Agreements – In Development
- Director is working with CIO to develop service level agreements for the Data Warehousing & IT Operations Department

Job Scheduling
- Production code should not run on QA or development servers
Change Management and Deployment Model

- Changes to existing code must go through a code review process prior to being moved into production
  - Data Management & Operational Support
    - For Data Warehousing support, Rakend reviews all code
    - For Munis support, Rakend reviews all code
  - Systems Integrations & Visualizations Support
    - For Systems Integrations, Yogi reviews all code
    - For Dashboards & Reporting, Prateek reviews all code
  - Strategic Support
    - Changes to PeopleSoft must be reviewed by Joe Charnock

- All DWH development (new code and modifications to existing code) are made in the development environment (sp-dev1). Databases on this server are refreshed from production as requested by the development team.

- All DWH development (new and modifications to existing processes) are tested in the QA environment (sp-qa1). Databases on this server are refreshed from production based on deployment scheduled on documented Test plan and test results must be documented in Jira task and reviewed by Rakend.

- Changes to the DWH production environment (sp-db02) are made by a DBA (Rakend or Yogi) pending approval of Rakend.

- Changes to the PeopleSoft production environment are made by Joe Charnock.

- Changes to the Munis environment are made by Rakend Vasireddy.

OIT Workbench

- The OIT Workbench is an email group established to assist in the support of the PeopleSoft system
- Emails sent to the OIT Workbench are automatically logged into Jira – project PPS Business Operations (PBO)
  - Due Date is set to date email was received
  - Assignee is automatically set to Joe Charnock
  - Body of email is put into Issue Description
  - Issue Label is set to sender of email
  - Email attachments are automatically attached to Jira Issue

- Joe Charnock is responsible for management of OIT Workbench with Veronica as primary backup and Solanda as secondary backup

- Joe will send email response to all items coming into OIT Workbench as soon as possible. Email will include an ETA (if possible). In Joe’s absence Veronica will send response (primary backup) or Solanda (as secondary backup)

Prior to closing tasks in Jira Joe will send follow up email notifying end-user that task has been completed and confirming if anything else needs to be done.