

PROGRAM/SOFTWARE DEVELOPMENT PROCEDURE (TCH-P007)

Clarksville-Montgomery County School System

1.0 SCOPE:

- 1.1 This procedure outlines the process taken to develop software to meet the needs of Clarksville-Montgomery County School System.

The online version of this procedure is official. Therefore, all printed versions of this document are

2.0 RESPONSIBILITY:

- 2.1 Programming Staff

3.0 APPROVAL AUTHORITY:

- 3.1 Chief Technology Officer (CTO)

4.0 DEFINITIONS:

- 4.1 Programs: Instructions to cause a computer to perform in a certain way.
- 4.2 Software: Same as programs; multiple programs may be combined to become a software package.
- 4.3 Hardware: Computer processing unit, input-output devices.
- 4.4 Desk Checking: Method of checking logic of a program whereby the programmer follows each branch of logic manually from a listing of the logic.
- 4.5 Syntax: Rules of a particular computer language.
- 4.6 Owner: Individual or department in Clarksville-Montgomery County Schools with authority over a specific data structure or related software.
- 4.7 User: Any employee of CMCSS authorized to use system software.

5.0 PROCEDURE:

- 5.1 Request is received from the department head to develop new software to meet the needs of the owner(s) (ref. [TCH-F001](#)).
- 5.2 Chief Technology Officer reviews request to determine need and approves or disapproves. If approved, a schedule is prepared. If disapproved, the requestor is notified stating reason for denial.
- 5.3 Requirements of new software are researched.
 - 5.3.1 Determination of hardware needs and requirements is made.
 - 5.3.2 Determination of software language, data input and output needs, format requirements, data retrieval and interaction with established software is made.
- 5.4 Programming staff constructs program.
 - 5.4.1 Structures and logic modules involved in requested change are identified.
 - 5.4.2 Logic process and major component elements are built.

PROGRAM/SOFTWARE DEVELOPMENT PROCEDURE (TCH-P007)

Clarksville-Montgomery County School System

- 5.4.3 Program is coded into appropriate compiler language to create executable code in test database.
- 5.4.4 Program is verified through desk checking.
- 5.4.5 Coded programs are tested to check for syntax or logic errors.
- 5.4.6 Programmer certifies program operates as requested and completes program documentation on request form.
- 5.4.7 Developed changes are presented to owners.
- 5.4.8 Owners test approved system.
- 5.4.9 Training on the new software is provided and user access is approved. Necessary related personnel are notified and trained.
- 5.4.10 Developed system is moved to production database.

6.0 ASSOCIATED DOCUMENTS:

- 6.1 Software Development/Maintenance Support Request ([TCH-F001](#))

7.0 RECORD RETENTION TABLE:

<u>Identification</u>	<u>Storage</u>	<u>Retention</u>	<u>Disposition</u>	<u>Protection</u>
Software Development/Maintenance Support Request	Chief Technology Officer's filing cabinet	5 years	Discard as Desired	Secured Building

8.0 REVISION HISTORY:

<u>Date:</u>	<u>Rev.</u>	<u>Description of Revision:</u>
10/08/03		Initial Release
11/11/03	A	Change user to use in 4.7 and denied to approved in the flowchart
10/30/08	B	Add logo, update Approval Authority Title, no revisions to procedure

9.0 FLOWCHART:

- 9.1 A flowchart detailing this process can be found in "Exhibit A" of this procedure.

* * * E n d o f p r o c e d u r e * * *

Program/Software Development Flowchart

