Blue Card Export Specifications

Contents

Definitions

Required / Optional

        Required   - This field is required for the export to function and cannot be left blank.

        Optional   - This field is optional and can be left blank.

Data Type

        int   - An integer value. Recommended to start IDs at 1 and increment by 1.

        string   - A string value.

        date   - A value representing a date in YYYYMMDD format.

File Format

The attached Excel file is separated into four sheets. Each sheet represents a different data structure and are linked to each other using IDs as keys. The sheets are as follows:

- Class – A list of merit badge classes with counselors assigned
- Counselor – A list of merit badge counselors with information to print on the blue cards
- Student – A list of merit badge class students with information to print on the blue cards
- StudentClassEntry – A list of the progress data of a student in a class

Since CSV files cannot contain multiple sheets, the four sheets can be exported as individual CSV files.

Class Sheet

Column	Required / Optional	Data Type	Description
ClassId	Required	int	Unique key for merit badge classes
ClassName	Required	string	Merit badge class name
CounselorId	Optional	int	ID to a merit badge counselor

The Class sheet is a list of all the merit badge classes that are being exported. The class name should be the merit badge name that is being taught in the class. The value in ClassName will appear on the top of the requirement grid and the three "Merit badge" on the blue card. A linked counselor is optional. If CounselorId is blank or a counselor cannot be found, the counselor details and initials for the completed requirements will not be populated on the blue card.

Counselor Sheet

Column	Required / Optional	Data Type	Description
CounselorId	Required	int	Unique key for merit badge counselors
FirstName	Required	string	First name of the counselor First character is used to populate the first initial for completed requirements
LastName	Required	string	Last name of the counselor First character is used to populate the second initial for completed requirements
Address	Optional	string	
City	Optional	string	
State	Optional	string	Recommended 2 letter abbreviation
ZipCode	Optional	string	
Telephone	Optional	string	
Email	Optional	string	Email address of the counselor

The Counselor sheet is a list of all the merit badge counselors that can be associated with a merit badge class. The FirstName and LastName are used to create the two-letter initials for completed requirements. If City and State are not blank, a comma and space will be used to separate the two since they appear on the same line of the blue card (e.g. Columbus, OH). If either are blank, a comma will not be included.

Note: The address, city, state, zip code, and telephone do not have to be the demographics of the counselor. They could be an organization's contact information if there is enough information for blue card verification, and it meets the requirements of what is needed by either the district or council policies.

Student Sheet

Column	Required / Optional	Data Type	Description
StudentId	Required	int	Unique key for merit badge class students
FirstName	Required	string	First name of the student
LastName	Required	string	Last name of the student
Address	Optional	string	
City	Optional	string	
State	Optional	string	Recommended 2 letter abbreviation
ZipCode	Optional	string	
UnitType	Optional	String	Troop, Team, or Crew
UnitNumber	Optional	int	
District	Optional	string	
Council	Optional	string	
Email	Optional	string	Email address of the student/guardian

The Student sheet is a list of all the merit badge class students that are being exported. Although only the name of the student is required, it is recommended to include the unit number and other identifying information in case of a similar name or student validation.

StudentClassEntry Sheet

Column	Required / Optional	Data Type	Description
StudentId	Required	int	Dual key combined with ClassId to create a unique entry
ClassId	Required	int	Dual key combined with StudentId to create a unique entry
Complete	Optional	date	See additional details below.
Requirements	Required	string	See additional details below.
Remarks	Optional	string	Populates the Remarks field on the blue card. Limit of 100 characters.

The StudentClassEntry sheet is a list of the completion status of a merit badge for each student in a class. Each row represents a single student in a single class. The StudentId and ClassId each point to a merit badge student and a merit badge class, respectively, listed in the other sheets.

Complete

If a valid date in the format of YYYYMMDD is populated in Complete, then the merit badge is considered complete and the date will be printed on the blue card in the three necessary locations. Otherwise, the merit badge is not considered complete and will not print a completed date on the blue card. For example, "0", "1", and "2020-04-12" are not valid dates and the merit badge is not considered complete.

Requirements

The Requirements field is special to allow for a dynamic number of requirements across different merit badges. A string in the format of <requirement>~<status>^<requirement>~<status>^… is required. <requirement> is the merit badge requirement (e.g. "1", "2a", or "3ii"). <status> is the status of the completion of the requirement for the student. It can either be a date in the format of YYYYMMDD representing that the requirement was completed on that date, or 0 representing that the requirement is incomplete. The string can contain up to 22 requirement-status pairs, since there are up to 22 requirement entries on the blue card. The caret (^) is used to delimit the requirement-status pairs and the tilde (~) character is used to separate the requirement from the status in each requirement-status pair. A valid Requirements field could look like the following:

        1~20200411^2a~0^2b~0^2c~20200414^3~0^4~0^5~0^6~20200411

which translates to the following:

- Requirement 1 – Completed on April 11, 2020
- Requirement 2a – Incomplete
- Requirement 2b – Incomplete
- Requirement 2c – Completed on April 14, 2020
- Requirement 3 – Incomplete
- Requirement 4 – Incomplete
- Requirement 5 – Incomplete
- Requirement 6 – Completed on April 11, 2020