

# Michigan Questionnaire Documentation System Version 5 (MQDS5)

September 2020



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# Agenda

1. Goals
2. The History of MQDS
3. Basic Structure
4. Three Functions
5. Future Enhancements
6. Questions?



# Goals for MQDS5



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1. The primary goal of MQDS for Blaise 5 is to extract Blaise information for:
  - reviewing/testing questionnaires
    - without going through the Blaise instrument question by question, export or print out the entire questionnaire, check the spelling/translation issues
  - preparing documentation
    - export or print the codebook, this will display all questions and statistical summary information for each question
  - reviewing the data dictionary
    - understand the Blaise data structure to plan for data processing
    - get column definitions, data types, on route question list
1. Simple data output, easy to use, and fast!

# History of MQDS



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- V1 - 2003
  - “BlaiseDoc”
- V2 - 2007
  - Re-written in .NET
  - Included additional utilities
- V3 - 2009
  - Database Driven to use DDI 3.0 standard
- V4 - 2011
  - Enhanced to be more efficient for large data models
  - Enhanced to use DDI 3.1 standard

**MQDS4 and earlier**  
**Blaise versions 4.6, 4.7, or 4.8**

# Basic Structure



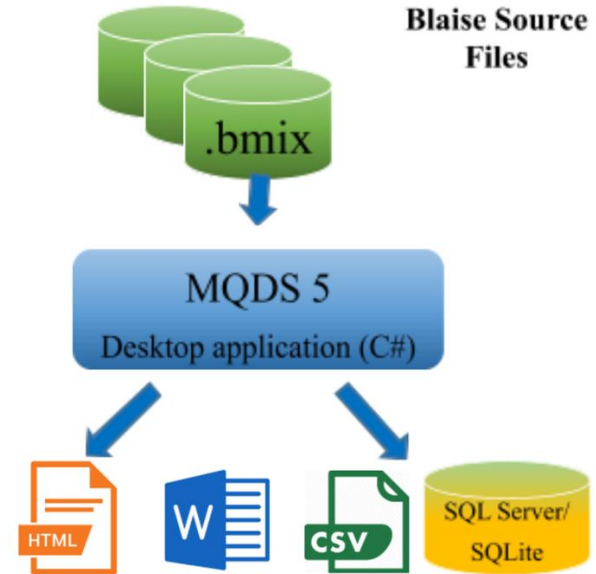
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## High-level Capabilities

- Database output
- Exportable output (csv, txt, etc)
- Help documentation for every function
- No longer utilizes the DDI Standard

## Accessibility

- Desktop application
- No login required
- Minimal configuration required to install

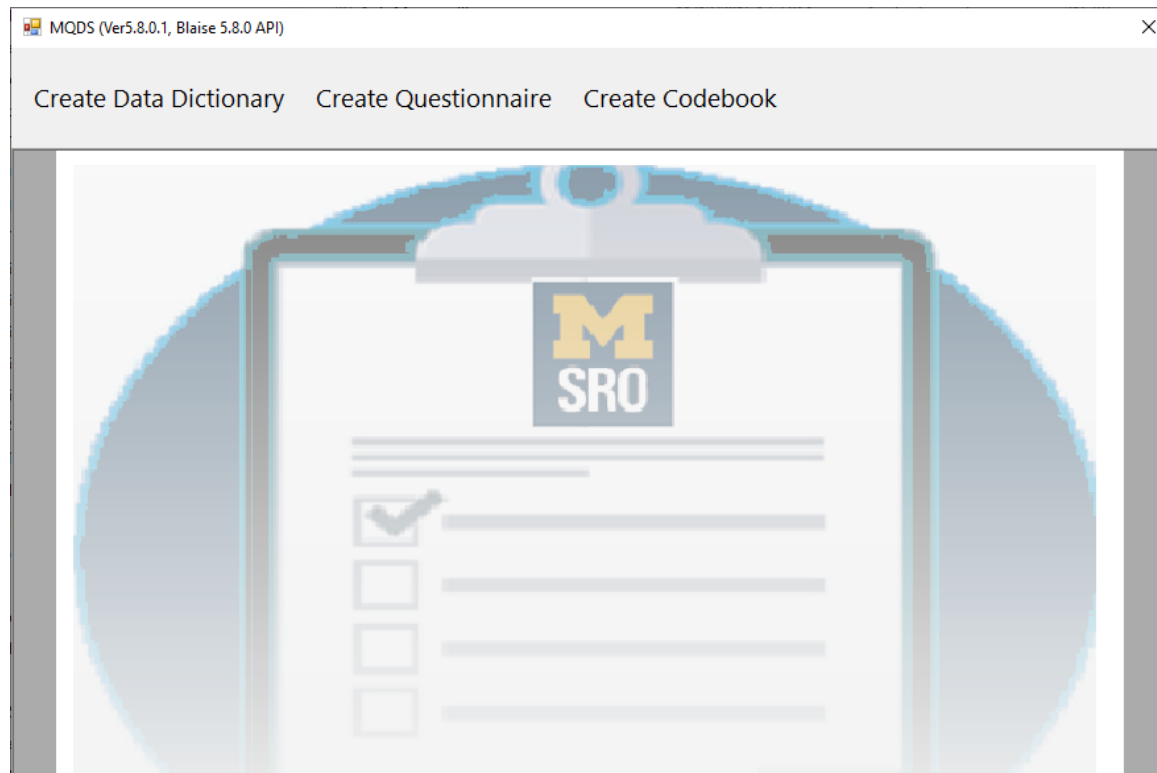


# Three Functions



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- Create Data Dictionary
- Create Questionnaire
- Create Codebook

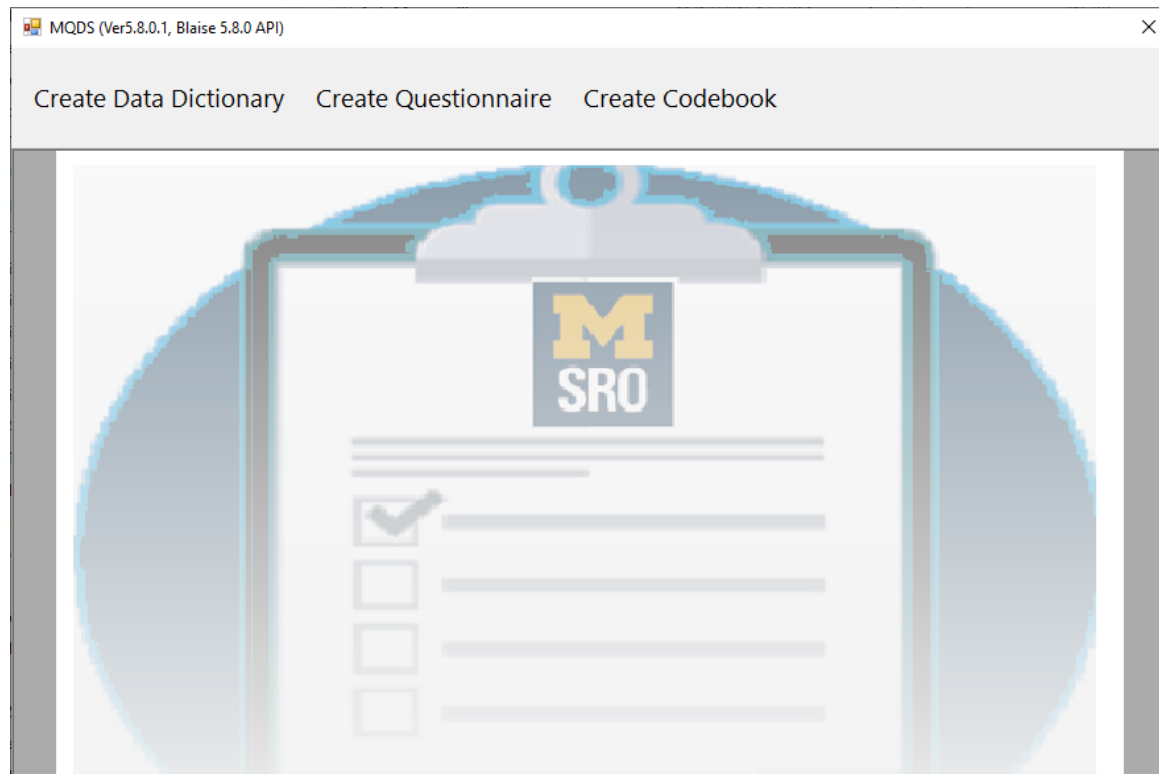


# Three Functions



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- **Create Data Dictionary**
- **Create Questionnaire**
- **Create Codebook**



# Data Dictionary – Fields



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- FieldName
- BlockName
- LocalName
- BaseName
- isBlock
- isSetMember
- isArrayMember
- isAuxField
- Definition Order
- Route Order
- Structure
- Type
- Description
- Question
- Help
- Enumeration
- isAskable
- Used Methods

# Data Dictionary - delimited



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```
dd_output_csv.txt - Notepad
File Edit Format View Help
FieldName^BlockName^LocalName^BaseName^isBlock^isSetMember^isA
StartMode^^StartMode^StartMode^False^^False^1^^String^String[255]^Ei
CurrentMode^^CurrentMode^CurrentMode^False^^False^2^^String^String
ModeSwitch^^ModeSwitch^ModeSwitch^False^^False^3^^Enumeration^T
puGoToEnd^^puGoToEnd^puGoToEnd^False^^False^4^^String^String[255]
SampID^^SampID^SampID^False^^False^5^^String^String[10]^No Empty
HHID^^HHID^HHID^False^^False^6^^String^String[10]^No Empty^HO
IWType^^IWType^IWType^False^^False^7^^Enumeration^TIWType [1/4]
Preload_RTab[1].X001ARNdx^Preload_RTab[1]^X001ARNdx^Preload_R
Preload_RTab[1].X002ARPN^Preload_RTab[1]^X002ARPN^Preload_RTa
Preload_RTab[1].X003AR1_R2^Preload_RTab[1]^X003AR1_R2^Preload
Preload_RTab[1].X004AmoBorn^Preload_RTab[1]^X004AmoBorn^Preload
Preload_RTab[1].X005AdaBorn^Preload_RTab[1]^X005AdaBorn^Preload
Preload_RTab[1].X006AsameSpP^Preload_RTab[1]^X006AsameSpP^Prel
Preload_RTab[1].X007AfinFam^Preload_RTab[1]^X007AfinFam^Preload
Preload_RTab[1].X008AInNHome_V^Preload_RTab[1]^X008AInNHome
Preload_RTab[1].X009AModule_V^Preload_RTab[1]^X009AModule_V^P
Preload_RTab[1].X010AModuleSp_V^Preload_RTab[1]^X010AModuleSp
Preload_RTab[1].X011AWordLst_V^Preload_RTab[1]^X011AWordLst_V^
Preload_RTab[1].X012AVocLst_V^Preload_RTab[1]^X012AVocLst_V^Pr
```

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
1	FieldName	BlockName	LocalName	BaseName	isBlock	isSetMember	isArrayMe	isAuxField	Definition	RouteOrd	Structure	Type	Descriptive	Question	Help	Enumerat	isAskable	UsedMeth
2	SampleID		SampleID		FALSE			FALSE	1		String	SampleID		'Click here to go back to login page.'				
3	Preload		Preload		TRUE			FALSE			BlockName	BPreload						
4	Preload.P	Preload	PsidSID	Preload.P	FALSE			FALSE	2	3	String	TSampID	PsidSID	'PsidSID'			TRUE	Ask
5	Preload.T	Preload	TAType	Preload.T	FALSE			FALSE	3	4	Enumerat	BPreload.TAType	'TAType'		[[^Display		TRUE	Ask
6	Preload.TI	Preload	Title_1	Preload.TI	FALSE			FALSE	4	5	String	STRING[6]	Title_1	'Title_1'			TRUE	Ask
7	Preload.FI	Preload	FirstName	Preload.FI	FALSE			FALSE	5	6	String	STRING[2]	FirstName	'FirstName_1'			TRUE	Ask
8	Preload.IV	Preload	MiddleNa	Preload.IV	FALSE			FALSE	6	7	String	STRING[1]	MiddleNa	'MiddleName_1'			TRUE	Ask
9	Preload.LI	Preload	LastName	Preload.LI	FALSE			FALSE	7	8	String	STRING[2]	LastName	'LastName_1'			TRUE	Ask
10	Preload.SI	Preload	Suffix_1	Preload.SI	FALSE			FALSE	8	9	String	STRING[3]	Suffix_1	'Suffix_1'			TRUE	Ask
11	Preload.IR	Preload	InCo_1	Preload.IR	FALSE			FALSE	9	10	String	STRING[4]	InCo_1	'InCo_1'			TRUE	Ask
12	Preload.A	Preload	Address_1	Preload.A	FALSE			FALSE	10	11	String	STRING[4]	Address_1	'Address_1'			TRUE	Ask
13	Preload.A	Preload	AptSte_1	Preload.A	FALSE			FALSE	11	12	String	STRING[1]	AptSte_1	'AptSte_1'			TRUE	Ask
14	Preload.A	Preload	Address2	Preload.A	FALSE			FALSE	12	13	String	STRING[4]	Address2	'Address2_1'			TRUE	Ask
15	Preload.C	Preload	City_1	Preload.C	FALSE			FALSE	13	14	String	STRING[4]	City_1	'City_1'			TRUE	Ask
16	Preload.SI	Preload	State_1	Preload.SI	FALSE			FALSE	14	15	String	STRING[3]	State_1	'State_1'			TRUE	Ask
17	Preload.SI	Preload	StateAbbr	Preload.SI	FALSE			FALSE	15	16	String	STRING[4]	StateAbbr	'StateAbbr_1'			TRUE	Ask
18	Preload.ZI	Preload	Zip_1	Preload.ZI	FALSE			FALSE	16	17	String	STRING[9]	Zip_1	'Zip_1'			TRUE	Ask
19	Preload.C	Preload	Country_1	Preload.C	FALSE			FALSE	17	18	String	STRING[3]	Country_1	'Country_1'			TRUE	Ask
20	Preload.C	Preload	CountryA1	Preload.C	FALSE			FALSE	18	19	String	STRING[2]	CountryA1	'CountryAbbr_1'			TRUE	Ask
21	Preload.C	Preload	CellPhone	Preload.C	FALSE			FALSE	19	20	String	TPhone	CellPhone	'CellPhone_1'			TRUE	Ask
22	Preload.C	Preload	CellFor_1	Preload.C	FALSE			FALSE	20	21	String	STRING[2]	CellFor_1	'CellFor_1'			TRUE	Ask
23	Preload.H	Preload	HomePho	Preload.H	FALSE			FALSE	21	22	String	TPhone	HomePho	'HomePhone_1'			TRUE	Ask
24	Preload.H	Preload	HomeFor	Preload.H	FALSE			FALSE	22	23	String	STRING[2]	HomeFor	'HomeFor_1'			TRUE	Ask
25	Preload.EI	Preload	Email_1	Preload.EI	FALSE			FALSE	23	24	String	BPreload	Email_1	'Email_1'			TRUE	Ask
26	Preload.EI	Preload	Email2_1	Preload.EI	FALSE			FALSE	24	25	String	BPreload	Email2_1	'Email2_1'			TRUE	Ask
27	Preload.TI	Preload	Title_2	Preload.TI	FALSE			FALSE	25	26	String	STRING[6]	Title_2	'Title_2'			TRUE	Ask
28	Preload.FI	Preload	FirstName	Preload.FI	FALSE			FALSE	26	27	String	STRING[2]	FirstName	'FirstName_2'			TRUE	Ask
29	Preload.IV	Preload	MiddleNa	Preload.IV	FALSE			FALSE	27	28	String	STRING[1]	MiddleNa	'MiddleName_2'			TRUE	Ask
30	Preload.LI	Preload	LastName	Preload.LI	FALSE			FALSE	28	29	String	STRING[2]	LastName	'LastName_2'			TRUE	Ask

.TXT File

.CSV File

DB Browser for SQLite - C:\Users\smansuri\Desktop\DataManagerStuff\2020-03-19,14,56,00\_Manipula\dd\_output\_sqlite.db

File Edit View Tools Help

New Database Open Database Write Changes Revert Changes Open Project Save Project Attach Database Close Database

Database Structure Browse Data Edit Pragmas Execute SQL

Create Table Create Index Print

Name	Type	Schema
Tables (3)		
DD_JOB		CREATE TABLE [DD_JOB]([ModelName] text, [Instrume
DataDictionary		CREATE TABLE [DataDictionary]([Id] INTEGER PRIMARY
Id	INTEGER	"Id" INTEGER
FieldName	text	"FieldName" text
BlockName	text	"BlockName" text
LocalName	text	"LocalName" text
BaseName	text	"BaseName" text
isBlock	integer	"isBlock" integer
isSetMember	integer	"isSetMember" integer
isArrayMember	integer	"isArrayMember" integer
isAuxField	integer	"isAuxField" integer
DefinitionOrder	integer	"DefinitionOrder" integer
RouteOrder	integer	"RouteOrder" integer
Structure	text	"Structure" text
Type	text	"Type" text
ValueRange	text	"ValueRange" text
Attribute	text	"Attribute" text
Description	text	"Description" text
Question	text	"Question" text
Help	text	"Help" text
Enumeration	text	"Enumeration" text

Edit Database Cell

Mode: Text

1

Type of data currently in cell: Text / Numeric  
1 character(s)

Apply

Remote

Identity Public

Name	Commit	Last modified
------	--------	---------------

SQL Log Plot DB Schema Remote

UTF-8

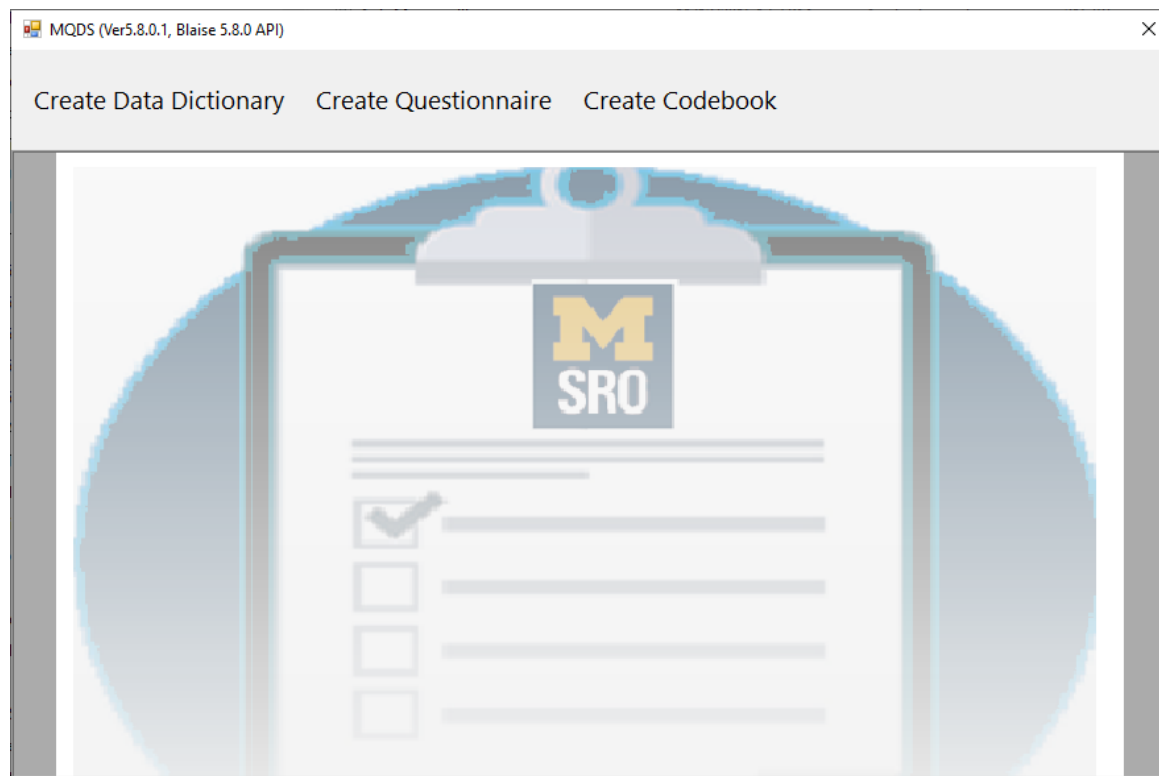
## Data Dictionary - SQLite

# Three Functions



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- Create Data Dictionary
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SecB.Citizenship.B085\_

## US CITIZENSHIP

Are you a citizen of the United States?

- (1) Yes
- (5) No
- (8) SP:Refusal
- (9) SP:DontKnow

- **Type:** TYesNo [1/2]
- **Attributes:** No Empty,DontKnow,Refusal

SecB.Citizenship.B086\_

## BORN US CITIZEN

Were you born a citizen of the United States? DEF: By "U.S.-born citizens" we mean people born abroad of an American parent or parents, and those born in U.S. territories and possessions, including Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas.

- (1) Yes
- (5) No
- (8) SP:Refusal
- (9) SP:DontKnow

- **Type:** TYesNo [1/2]
- **Attributes:** No Empty,DontKnow,Refusal

SecB.Citizenship.B087\_

## YEAR BECAME US CITIZEN

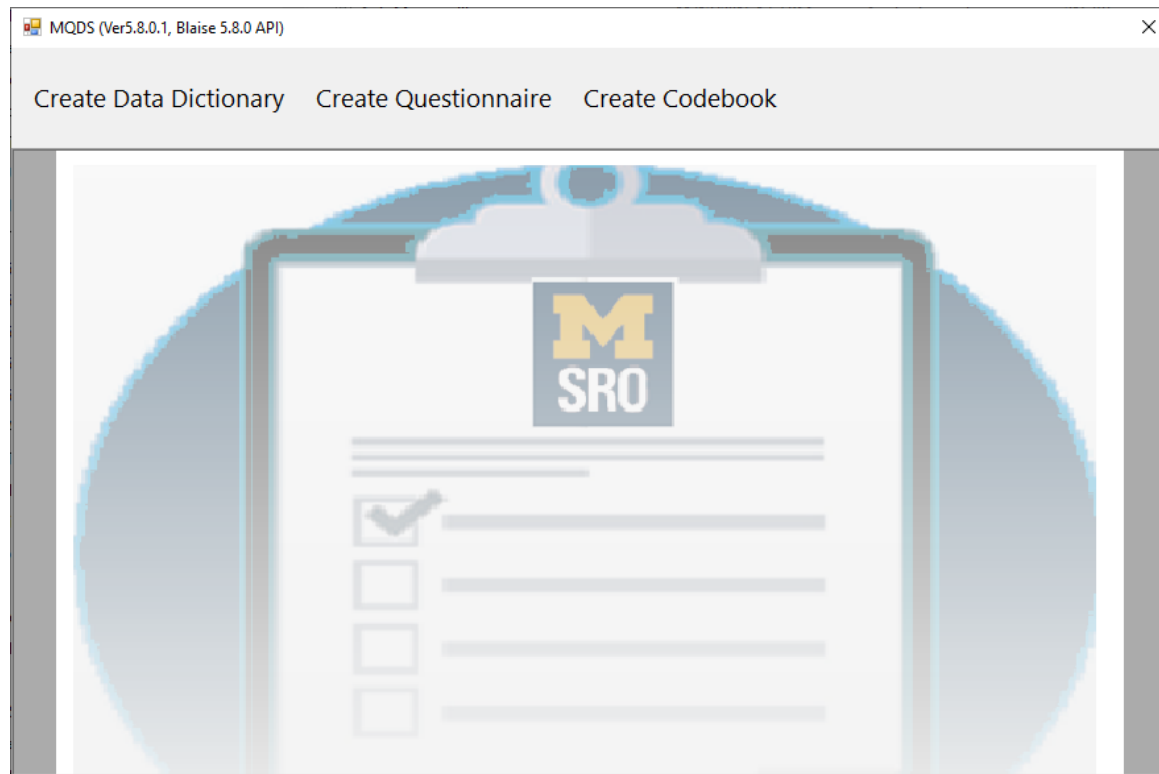
- **Type:** Integer
- **Valid Range:** 1880 - 2021
- **Attributes:** No Empty,DontKnow,Refusal

# Three Functions



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Please think about your life as a whole. How satisfied are you with it?

- (1) Completely satisfied
- (2) Very satisfied
- (3) Somewhat satisfied
- (4) Not very satisfied
- (5) Not at all satisfied
- (8) SP:Refusal
- (9) SP:DontKnow

- **Type:** Tsatisfied [1/5]
- **Attributes:** Empty,DontKnow,Refusal

Answer status of 2721 respondent(s):

- a) # of Empty Response: 1787 (65.674%)
- b) # of Nonempty/NonSpecialAnswer Response: 934 (34.326%)
- c) # of SpecialAnswer: 0 (0.000%)

Statistics of 934 Nonempty/NonSpecialAnswer Enumeration Type (single choice) Response(s)

Choice	Count	Percentage to Nonempty/NonSpecialAnswer R (934)	Percentage to total R (2721)
(1) 'Completely satisfied'	129	13.81%	4.74%
(2) 'Very satisfied'	360	38.54%	13.23%
(3) 'Somewhat satisfied'	361	38.65%	13.27%
(4) 'Not very satisfied'	72	7.71%	2.65%
(5) 'Not at all satisfied'	12	1.28%	0.44%

Section\_C.C6

## How Many Times Married

\*xC6\* many times altogether have you been married?

- Type: Integer
- Valid Range: 1 - 97
- Attributes: Empty,DontKnow,Refusal

Answer status of 2721 respondent(s):

a) # of Empty Response: 2494 (91.657%)

b) # of Nonempty/NonSpecialAnswer Response: 227 (8.343%)

c) # of SpecialAnswer: 0 (0.000%)

Statistics of 227 Nonempty/NonSpecialAnswer Integer Type Response(s)

N	Mean	Standard Deviation	Min	25th Percentile	Median	75th Percentile	Max
227	1.062	0.259	1	1.000	1.000	1.000	3

# Data Dictionary



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## Includes:

- Field types (DataField vs. AuxField)
- Route status (on-route vs. off-route)
- Data structure types (integer, string, enumeration, set, etc.)
- Question and description texts
- Enumerations
- Special answers

# Data Dictionary



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## 5 Simple Steps:

- **Step 1:** Select Blaise 5 .bmix file
- **Step 2:** Select Mode & Language
- **Step 3:** Select Additional Output Field Options (Optional)
  - Include AuxFields
  - Include Route Order Information
  - Expand Sets
  - Output Block/Section Information
  - Limit to First Array Member
- **Step 4:** Select Export Format
- **Step 5:** Export Data Dictionary

# Steps!

Animated

### STEP 1: SELECT BLAISE 5 DATA MODEL (.bmix file)

C:\Samples\2020-03-19,14,56,00\_Manipula\HRS20.bmix

### STEP 4: SELECT EXPORT FORMAT

^ delimited text file

.vdd\_output\_csv.txt

SQLite Database

.vdd\_output\_sqlite.db

SQL Server Tables

Server Name:

srodbstmsrs

Database Name:

Paradata\_Analysis

Summary Table:

[MQDS].[DD\_Job]

Details Table:

[MQDS].[DataDictionary]

**Export Data Dictionary**

All Modes

Selected Mode Only

Expand Set Fields

(A multiple choice set question is expanded to multiple fields to be consistent with some survey data output format)

Output Block/Section Information

Limit to the First Array Member Only

(To avoid repeated questions and reduce the total number of output fields)

# Questionnaire



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## Includes:

- All possible on-route fields by mode and/or language
- Field names, labels, question text, response options
- Interviewer instructions

# Questionnaire

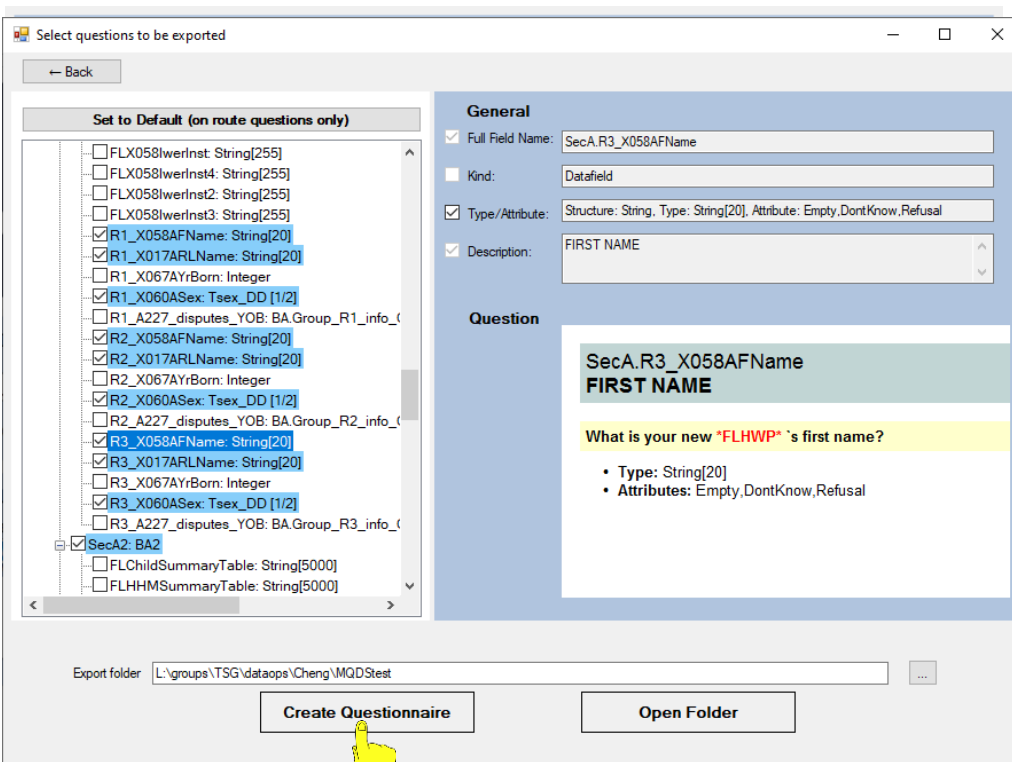


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## 4 Simple Steps:

- **Step 1:** Select Blaise 5 .bmix file
- **Step 2:** Select Mode & Language
- **Step 3:** Select Questions to Output
- **Step 4:** Export Questionnaire

# Steps!



# Code Book



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## Includes:

- Create the summary statistics and frequencies of a survey instrument
- Frequencies broken down by...
  - empty answers,
  - non-empty
  - non-special answers
  - special answers
- Enumerated type summary statistics broken down by
  - mean, min, max, standard deviation
  - 25th and 75th percentile.

# Codebook



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## STEP 1: SELECT BLAISE 5 INTERFACE FILE (.bdix file)

.bdix file  ...

## STEP 3: SELECT OUTPUT FOLDER

Output  ...

Create Codebook

Open Folder

Read in survey data : [1553/19409 records]

Output :

OK

## 3 Simple Steps:

- **Step 1:** Select Blaise 5 .bdix file
- **Step 2:** Select Mode & Language
- **Step 3:** Choose Output Location

**Steps!**  
Step 4: Create Codebook

# Future Enhancements



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Include:

- Codebook
  - Ability to select a subset of variables for output.
  - Include routing logic and universe statements for each variable.
  - Additional output formats.



Questions