

A Genealogical Data Management Program Using the SAS® System

Rick Langston, SAS Institute Inc.

Do SAS Institute employees use the SAS System for applications other than those related to work? Sure we do! This application is one of several that I maintain for personal data. Other simpler applications involved management of personal and family expenses, gas mileage, utility consumption, and music library.

Managing personal applications helps us to better understand what our customers encounter. And these applications can help to find defects in our test systems so that they're never seen by our customers!

Introduction to the program

This poster describes my FAMTREE program, written using the SAS System. FAMTREE is a custom-written application that manages genealogical data and produces a variety of reports. The flagship report is a bound set of family worksheet pages, joined with an index. Also produced is a set of pedigree charts and a family event calendar.

The family worksheet pages link together an individual in roles both as parent and child. The index indicates all pages in which an individual appears.

The family worksheet

The family worksheet represents the parents and children of a family. If the parent is a blood relative, the page on which he/she is a child appears for cross-referencing. Because all children will be blood relatives, they also can have page numbers for cross-referencing where they are parents. Because multiple marriages with issue can occur, a person can be a parent on multiple pages. If a person had no children, the NI (no issue) indicator states this.

Multiple marriages, each with issue, are supported.

"Parent page" refers back to "Child page."

FAMILY MEMBER: Langston, Ernest Albert PAGE: 12
BORN: 12APR1880 BIRTHPLACE: Seven Springs, NC
DIED: 01NOV1937 BURIED: Langston Cem, Riley's Cr NC
AGE: 57 YRS 6 MOS 20 DAS

SPOUSE: Scott, Julia Bertha PAGE: 23
BORN: 24DEC1885 BIRTHPLACE: Riley's Cr, NC
DIED: 21OCT1927 BURIED: Riley's Cr Ch Cem
AGE: 41 YRS 9 MOS 27 DAS
MARRIED: 28DEC1911

CHILDREN

NAME	BIRTH	SPOUSE	MARRIAGE	DEATH	PAGE	AGE
1. Langston, Elgin Frederick	03DEC1912	Helen Brice	07MAR1937	22DEC1978	2	66 YRS 0 MOS 19 DAS
2. Langston, Oris Elizabeth	17OCT1914	.	N	23JUN1916	NI	1 YRS 8 MOS 6 DAS
3. Langston, Fannie Allene	23JUN1916	Bernard Lewis	19MAY1935	01MAR1960	41	43 YRS 8 MOS 7 DAS
4. Langston, Edna Kathleen	14OCT1918	Oscar Lewis	22MAY1937	10NOV1976	43	58 YRS 0 MOS 27 DAS
5. Langston, Gerald Ross	03APR1920	Kate Savage	20SEP1941	29MAR1991	7	70 YRS 11 MOS 26 DAS
"	"	Udell Putrell	.	.	NI	.
6. LANGSTON, EDWARD ADOLPH	14JAN1923	HAZEL FLYNN	26JUN1943	22JUG1986	48	63 YRS 7 MOS 8 DAS
7. Langston, Ethel Mae	14APR1924	Sinclair Mitchell	16DEC1944	.	46	.
8. Langston, Ernest Albert	27MAY1925	Hazel Howard	.	01SEP1991	9	66 YRS 3 MOS 5 DAS

GENERATION: 1

RELATIONSHIP OF 1-8 TO RICHARD D. LANGSTON: PARENT/aunts & uncles

FAMILY MEMBER: Scott, William Bryant

PAGE: 29

PAGE 23

New features planned

MULTI-THREAD RELATIVES: There are many crossovers between blood lines. This is very common in rural America, especially in the 1800s and early 1900s. To ensure that the program recognizes these, I plan to add a feature to tag such individuals. For example, my mother recently remarried, to the widower of her first cousin!

GUI FOR BROWSING: I plan to implement a Graphical User Interface (GUI) to allow for point-and-click connection similar to that now indicated by the page number connection.

EGOCENTRICITY ADJUSTMENT: I plan to allow dynamic modification of the egocentric key so that the report can be printed based on any blood relative as the central point, instead of just me.

AGE: 40 YRS 6 MOS 15 DAS
MARRIED: 18APR1878

CHILDREN

NAME	BIRTH	SPOUSE	MARRIAGE	DEATH	PAGE	AGE
1. Scott, James Best	18JAN1879	Della Thompson	03FEB1906	10JUN1939	24	60 YRS 4 MOS 23 DAS
2. Scott, Clifton Dale	26AUG1880	.	N	01FEB1904	NI	23 YRS 5 MOS 6 DAS
3. Scott, Augustus Divine	16APR1882	Maryjane Brinkley	28DEC1928	08JUN1953	25	71 YRS 1 MOS 23 DAS
4. Scott, William Porter	24AUG1883	Annie Merritt	31MAR1918	15JUN1958	26	74 YRS 9 MOS 22 DAS
5. SCOTT, JULIA BERTHA	24DEC1885	ERNEST LANGSTON	28DEC1911	21OCT1927	1	41 YRS 9 MOS 27 DAS
6. Scott, Robert White	18SEP1887	Exie Harrelson	09JUN1913	13FEB1930	27	42 YRS 4 MOS 26 DAS
7. Scott, Kate Lester	14NOV1889	Simmeon Langston	28NOV1908	09OCT1936	13	46 YRS 10 MOS 25 DAS
8. Scott, Walter Lee	22APR1894	Lea Peay	26APR1926	12MAY1972	28	78 YRS 0 MOS 20 DAS
9. Scott, Ethel Beatrice	20AUG1896	Aaron Herring	25FEB1922	09MAR1944	32	47 YRS 6 MOS 18 DAS
10. Scott, Daisy Sybil	03NOV1898	Carl Henry	13FEB1920	25JAN1982	33	83 YRS 2 MOS 22 DAS

"Child page" refers back to "Parent page."

Index refers to both "Child" and "Parent" pages.

GENERATION: 2

RELATIONSHIP OF 1-10 TO RICHARD D. LANGSTON: GRANDPARENT/great-aunts & uncles

Each family worksheet indicates positive generation (ancestral) or negative (descendant) generation. Also, the actual kinship is specified.

Direct ascendants are listed in all caps.

Other neat features

SUBSETTING: The program allows you to specify a family line, and the entire report is produced with only that line. For example, MF means mother's father, so that only those ascendants and descendants of my maternal grandfather will be part of the report. This is very useful when I'm asked by relatives such as second cousins to get a copy of just their relatives.

GROWTH-CAPABLE: Any person can be added to the database as long as I can map their relationship to me. This allows for me to add new people as I continue my research on new lines. I can rerun the program and produce new reports as needed.

INTERESTING ANALYSES: Traits such as lifespans, family sizes, ages at marriages, etc. can be examined by using the various SAS procedures against the database.

McCullen, Stephen Chevis.....69	Potter, Christian Langston.....16	Scott, Marie.....26
McCullen, Stephen Flynn.....68,69	Pridgen, Zilphia M.....78	Scott, Mary Lincoln.....27
McCullen, Tammy Ann.....68	Quinn, Alonzo Allen.....19	Scott, Nancy Futch.....29
McDaniel, Rutha.....119	Quinn, Barbary Allin.....19	Scott, Robert Graham.....27
McDougald, Elisabeth Craig.....108	Quinn, Furney Lawton.....19	Scott, Robert White.....23,27
McDougald, Katherine Frances..92,10	Quinn, George Allen.....19,20	Scott, Swannie Bell.....24
McDougald, Ronald.....108	Quinn, George Franklin.....19	Scott, Thurman Eugene.....26
McIntire, Cora Langston.....12	Quinn, Idella Winnifred.....19	Scott, Vivian Nell.....28
McKeithan, Helen Langston.....2,5	Quinn, James Allen.....19	Scott, Walter Lee.....23,28
McKeithan, Robert Dewitt.....5	Quinn, John Henry.....19	Scott, William Bryant.....23,29
McQuaig, Charles Michael.....85	Quinn, John Henry.....19	Scott, William Porter.....23,26
McQuaig, Elizabeth Carol.....85	Quinn, Loftin.....20	Scott, William Porter.....26
McQuaig, Elizabeth Williams...84,85	Quinn, Mary Catherine.....19	Simmons, Katherine.....120
McQuaig, William David.....85	Quinn, Myrtie Winnifred.....19	Sneeden, Mary Scott.....27
Miller, Dorothy Bell.....110	Quinn, Nancy.....20	Spooner, Alma Langston.....14
Mitchell, Amy.....47	Quinn, Nannie Elizabeth.....12,19	Squires, Elvin Michael Jr.....56
Mitchell, Donald Albert.....46,47	Quinn, Sarah Moody.....19	Squires, Gloria Flynn.....54,56
Mitchell, Donald Albert Jr.....47	Quinn, Sarget Edward.....19	Squires, Julie Carol.....56,57
Mitchell, Ethel Langston.....1,46	Quinn, Susan Idella.....19	Stokely, Winifred Flynn.....58
Mitchell, Katie.....47	Quinn, William Ivy.....19	Thigpen, Jeffrey Dean.....42
Mitchell, Ronald Allen.....46	Rantuccio, Alda Scott.....27	Thigpen, Julie Deann.....42
Moody, Sarah Jane.....19	Reagan, Gloria Flynn.....74,75	Thigpen, Mary Lewis.....41,42



It's all in the key!

The database is constructed such that all observations have a key. That key indicates the person's relationship to me. Characters include M (mother), F (father), B (brother), S (sister), O (son), and A (daughter). Numbers are also used to ensure proper sequencing and for proper matching. For example, the key MFB1A1 refers to "mother's father's sibling1's child1" where sibling1 is a brother and child1 is a daughter. The use of M/F B/S O/A allows for me to know the sex of each person (useful in appending married names and allowing for consistency in placing on pedigree charts). With this key mechanism, anyone that is blood-related to me, and knows their relation, can have a key and appear in the database.

Index lists women by both maiden and married names.

EVENT ANNIVERSARY CALENDAR

DATE/FMT	EVENT
07MAR	Elgin Frederick Langston married Helen Brice 1937 (56 years ago)
07MAR	Idella Winnifred Quinn died 1858 (135 years ago)
08MAR	George Allen Quinn died 1890 (103 years ago)
08MAR	Joseph Lewis Williams married Ellen Long 1911 (82 years ago)
09MAR	Ethel Beatrice Scott Herring died 1944 (49 years ago)
09MAR	Paul Augustus Flynn married Hazel Futch 1929 (64 years ago)
10MAR	Beulah May Boney died 1920 (73 years ago)
12MAR	Kevin Scott Henry born 1960 (33 years ago)
12MAR	William Henry Williams born 1882 (111 years ago)
12MAR	William Henry Williams died 1969 (24 years ago)
13MAR	James Travis Lanier born 1970 (23 years ago)
14MAR	Regan Wayne Norris born 1979 (14 years ago)
16MAR	Charles Gesker Williams born 1873 (120 years ago)
17MAR	Augustus Donald Scott married Nancy Boyette 1959 (34 years ago)
17MAR	Deanese Langston born 1917 (76 years ago)
17MAR	Dorothy Langston born 1917 (76 years ago)
17MAR	Thomas Franklin Langston married Susan Ross 1983 (10 years ago)
18MAR	Jane Winifred Flynn born 1923 (70 years ago)
19MAR	Richard Dean Langston born 1955 (38 years ago)
20MAR	Ivy Christine Flynn born 1953 (40 years ago)
20MAR	James M. Charles died 1844 (149 years ago)
21MAR	David Taylor Blanton born 1984 (9 years ago)
21MAR	Melissia Jane Bell Williams died 1922 (71 years ago)
22MAR	Jay Mack Godwin born 1959 (34 years ago)
23MAR	Elvin Michael Jr. Squires born 1978 (15 years ago)
24MAR	Della Delillion Langston born 1879 (114 years ago)
27MAR	Mark Gilchrist Dawson married Betsy Hawkins 1976 (17 years ago)
28MAR	Alma Langston married Wade Spooner 1942 (51 years ago)
28MAR	Douglas Ralph Flynn born 1942 (51 years ago)
28MAR	George Franklin Whitley born 1924 (69 years ago)
28MAR	William James Flynn died 1910 (83 years ago)
29MAR	Gerald Ross Langston died 1991 (2 years ago)
29MAR	John Henry Quinn born 1859 (134 years ago)
29MAR	Sarget Edward Quinn born 1859 (134 years ago)
30MAR	William Ivy Quinn died 1918 (75 years ago)
31MAR	Franklin Love Bell died 1961 (32 years ago)
31MAR	Susan Marie Kerney married Edward Litton 1990 (3 years ago)
31MAR	William Porter Scott married Annie Merritt 1918 (75 years ago)
01APR	Amy Mitchell born 1975 (18 years ago)
01APR	Bennie George Williams born 1941 (52 years ago)
01APR	Mack Lloyd Nunalee born 1885 (108 years ago)
02APR	Della Delillion Langston Scott died 1940 (53 years ago)
02APR	Della Delillion Langston Thompson died 1940 (53 years ago)
03APR	Blondy Ebert Scott died 1992 (1 year ago)
03APR	Gerald Ross Langston born 1920 (73 years ago)
04APR	Kristina Jane Lilly born 1977 (16 years ago)
04APR	Pearley Boney died 1907 (86 years ago)
04APR	Rutha McDaniel born 1821 (172 years ago)
06APR	Effie Catherine Decker born 1903 (90 years ago)
08APR	Agnes Jane Williams married Livies Edge 1901 (92 years ago)
08APR	Clifton Dale Scott born 1907 (86 years ago)
08APR	Kenneth Everette Henry born 1922 (71 years ago)
08APR	Marie Scott married Grag Horton 1943 (50 years ago)
09APR	Annie Jane Boney born 1892 (101 years ago)
09APR	Benjamin Clarence Boney married Bertha Thompson 1892 (101 years ago)
09APR	Samuel Aubrey Decker married Margaret Mae Brown 1928 (65 years ago)

Ascendant Chart for 7 Generations



