

A Web-Based Genealogy System

Jim Rennard and Charles Tappert

Seidenberg School of CSIS, Pace University
1 Martine Ave, White Plains, NY, 10606, USA

Abstract

Genealogy software products have been available for years, both as shrink-wrapped packages and more recently as web-based systems. Typically these systems require a single user to serve as the administrator of a family tree, and to enter all of the data. The Pace Genealogy System allows multiple family members to work on a given tree, with an administrator determining access privileges. The genealogical data are stored in a backend database, and displayed quickly and easily by family members in the form of a descendent or ancestor family tree. The current version of this system, which extends the functionality of an earlier system developed in 2003, compares well against the commercial web-based genealogy systems.

History of Genealogy Computer Products

In this paper we describe the current version of the Pace University Genealogy System that extends the functionality of the 2003 version of the system [1].

Genealogy software products for home computer users first became available in the late 1970's. "Genealogy: Compiling Roots and Branches", developed to run on the Radio Shack TRS-80 system, was one of the first well-known genealogy software packages [2]. Even though it was featured on the cover of the September 1979 issue of *Personal Computing Magazine*, few people purchased the product primarily due to its selling price of \$250. In the early 1980s, a company called CommSoft released the first genealogy software for IBM-compatible PCs called "Roots". The starting price for this software was also \$250, with optional modules bringing the price up to \$450. Some time after Broderbund purchased the rights to the program, they stopped developing the product due to insufficient sales volume. But the high price was not the only problem with the early versions of genealogy computer software products. Most users found the products difficult to use, and the documentation manuals were not easy for the casual home-user to understand.

The first reasonably priced genealogy software product was introduced by the Church of Jesus Christ of Latter-day Saints in 1983 [3]. The product, called Personal Ancestral File, was sold for a then unheard of low cost price of \$35.

Over time, numerous low cost, easy-to-use genealogy software programs have been created for both the Windows and Mac Operating Systems. Today, popular products such as “Family Tree Maker” [4] and “Legacy” [5] can be purchased for \$29.99. Compared to the primitive products that were available ten to twenty years ago, this new generation of genealogy software programs are filled with features such as family and individual views, query / search functions, ancestor and descendent trees, and descendent narrative reports.

Web-Based Genealogy Systems

Standalone computer software packages, however, had one major design flaw. Due to the fact that these programs were installed on an individual’s PC or Mac, that one individual had the responsibility of recording all of the data into the system, and, other family members would not have access to the information.

With the introduction of the Internet, public interest in genealogy systems began to grow. The explosion of internet web sites gave the general public an easy means of researching their family history. There are many private and public web sites that make it convenient for anyone to begin collecting details regarding past family members. The Library of Congress web site [7] contains material relating to veterans. The Church of Jesus Christ of Latter-day Saints site [8] contains a large database of archived census data. The Ellis Island Foundation site [9] contains various helpful starting points for genealogy-beginners, including several printable forms for gathering initial family history data. While most people would need to hire a professional genealogist in order to find relatives from long ago, the internet is a useful research tool for anyone to use.

In the past few years, several web-based genealogy sites have become available for people to record their family ancestral tree. One advantage web-based systems have over software products is their ability to add features without requiring that the user purchase and install new software. A major advantage that web-based systems have is their ability to allow multiple family members to enter different portions of the family history, regardless of the family member’s physical location.

The Pace Genealogy System

The Pace Genealogy System is a secure, easy to use system that would allow multiple family members to contribute new data to the family tree. Given the private nature of the stored genealogical data, access to the system is available only to registered users via a password-protected login (*Fig. 1*).

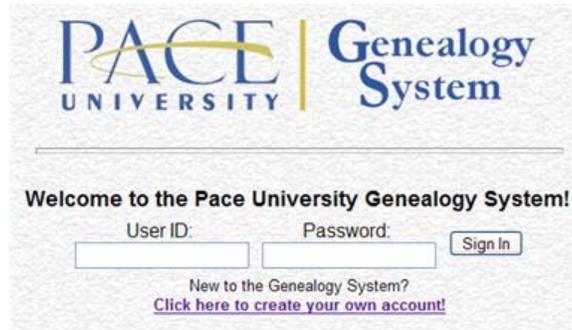


Figure 1 – Login Window

The individual who creates the initial family tree is considered the “administrator” of that tree. In order to distribute the laborious task of collecting and entering family history data, the administrator can grant access rights to other members of the family (Fig. 2). Requiring only access to the Internet, these family members can be physically located anywhere around the world.

Username	E-Mail	Access Rights
jr20552w@pace.edu	jr20552w@pace.edu	<input type="radio"/> Modification <input checked="" type="radio"/> View only <input type="radio"/> Remove
fa06team5	jr20552w@pace.edu	<input type="radio"/> Modification <input checked="" type="radio"/> View only <input type="radio"/> Remove

Figure 2 – Sharing Access Rights

When granting access rights, the administrator has the capability of specifying different types of access rights for each individual user (Fig. 3). To designate family members who will assist with maintaining the family tree, the administrator can grant ‘Modifiable’ rights, which would give those individuals the ability to add new members to the family tree, or update any of the family information in the system’s database. The administrator also specifies individuals who are granted ‘View Only’ access. Those individuals can view the family tree and all of the detailed information that is maintained about each member, however, they cannot change or add any information to the tree. There is no limit to the number of individuals who can be granted access rights by the administrator of the tree.

<u>Tree Project</u>	<u>Access</u>	<u>Entries</u>
Kennedy	Modifiable	12
The Tudors	View Only	28
Tom Hanks	Administrator	27

Figure 3 – Individual User’s Access Rights to Different Family Trees

preferences regarding how family information should be displayed. This updated version of the system warns the users if their browser settings are not set up properly (Fig. 6).

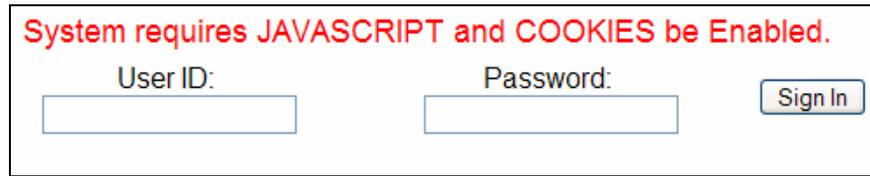


Figure 6: JavaScript / Cookie Error

Several enhancements were made to the latest version of the Pace Genealogy System in order to make the system more user-friendly and easy to use. Our primary objective was to reduce the number of steps required to complete specific tasks within the system. One such enhancement involved automatically linking a newly added child record to both parent records. Previously versions required users to perform a separate update action to link the child to the second parent. This version also includes a “Quick Link” mouse-over menu, designed to make several functions easier to execute for the user (Fig. 7).

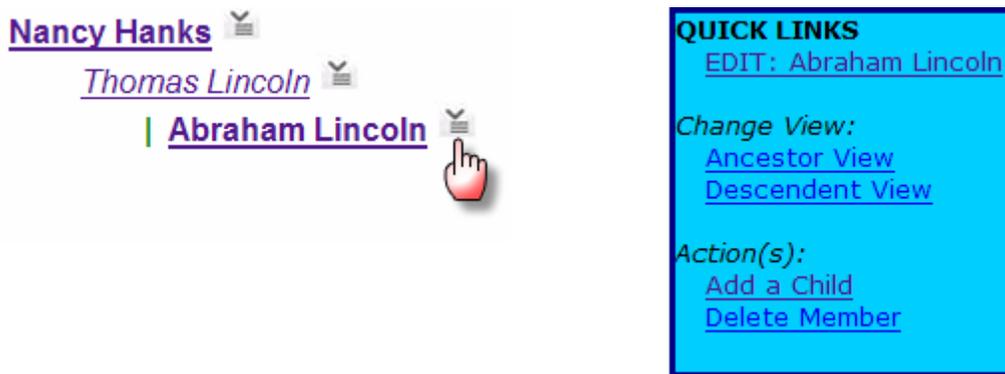


Figure 7: Quick Link Mouse-over Menu

Appearing next to each name on the family tree, the quick link menu allows the user to quickly change tree views from descendent to ancestor (or visa-versa), or to begin the process of adding a child for a given family member.

Feature Comparison

How does the Pace Genealogy System compare with other genealogy web sites? Several of the genealogy web sites offer a free trial period but then charge a monthly or annual fee in order to continuing using the site. Most sites charge higher subscription fees for the more advanced features within their system. For example, several sites not only allow the user to maintain a family tree, but for a “premium” membership fee, they offer tools for researching family history. The additional fee allows the site to compare information that was entered by the member, against other online genealogy sites and

government databases. Several of the sites offer different levels of subscription plans that give users advanced features, such as additional storage space for uploading more digital photo images.

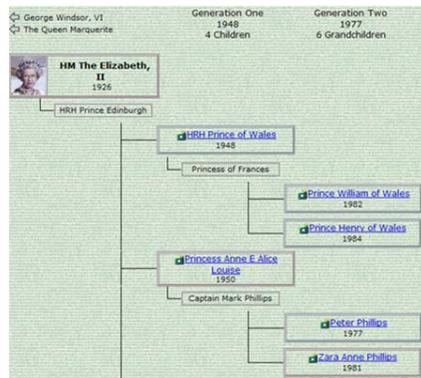
The advanced genealogy user would certainly take advantages of the features the premium sites have to offer. However the casual user would likely shy away from sites that charge annual or monthly subscription fees. With their busy schedules, they are only interested in storing known family history information. A system that is user-friendly and easy to get started is more likely to attract these new users. Figure 8 shows that the Pace Genealogy System compares well against other web sites regarding non-premium features.

	Ancestry.com	MyFamily.com	Genealogy.com	TribalPages.com	Pace System
Subscription Fee					
Annual	\$155	\$30-\$110	\$100	\$20-\$30	
Monthly	\$30		\$20		
Free Trial	14 Days	30 Days	14 Days	unlimited	unlimited
Add Multiple Trees	✓	✓			✓
Ancestor View	✓	✓	✓	✓	✓
Descendent View		✓	✓	✓	✓
Shared Access	✓	✓			✓
GUI Tree Display	✓	✓	✓	✓	
Upload Photos	✓	✓		✓	
Research Ability	✓	✓	limited	very limited	

Figure 8 – Genealogy Web Site Features

An ‘added’ bonus within the Pace Genealogy System is the Shared Access feature. This feature allows the administrator of the family tree to designate other family members who can assist with maintaining and expanding the tree. A few of the subscription sites advertise a shared access feature, however they simply make the family tree information available to the general public.

Most genealogy sites have a more “GUI-like” family tree display that makes relationships between family members easier to follow. The following screen capture was taken from a sample family tree that appears on the “Tribal Pages” [10] web site. It shows the descendent family tree for the Queen of England, Elizabeth II.



The Future of Web-Based Genealogy Systems

In 2005, the privately owned MyFamily.com web site generated \$140 million in subscription revenues, which was up from \$47 million in 2002 [11]. Annual subscribers who pay \$155 are renewing at a rate of about 60 percent, while monthly subscribers who pay \$30 are renewing at a rate of about 80 percent. Tim Sullivan, chief executive of MyFamily, indicated recently that figures are “on the upswing”. The target market for these subscription sites is likely to be the more advanced genealogy user.

It appears that the *next generation* of web-based genealogy search sites will include the introduction of a DNA service. Scott Woodward, executive director of the Sorenson Molecular Genealogy Foundation, believes that DNA searches will allow users to find more family connections than they would with the traditional document search [10]. The MyFamily site also plans to offer DNA searching as a future subscription service.

Conclusions

With its current functionality, the Pace Genealogy System compares well against the commercial web-based systems, and therefore could possibly become a commercially successful product. Functions such as uploading and storing digital photos, online help, and an improved GUI-like tree display, could attract the casual user. A subscription fee could be charged if the data storage exceeded a specified amount.

References

- [1] Fang, Y. and Stuart, I., "A Web-Based Genealogy System," *Proc. CSIS Student/Faculty Research Day*, Pace University,, May 2003.
- [2] Eastman, Dick. Early Genealogy Programs
<<http://genealogy.about.com/library/authors/uceastman1a.htm>>.
- [3] Clay, Betty. Computers and Genealogy: What Was, Is, and May Be. Oct 1999. Ancestry Magazine.
- [4] <http://www.familytreemaker.com/>
- [5] <http://www.legacyfamilytree.com/>
- [6] 2006 GENEALOGY SOFTWARE REPORT. 2006. Top Ten Reviews.
<<http://genealogy-software-review.toptenreviews.com/>>.
- [7] <http://www.loc.gov/>
- [8] <http://www.familysearch.org/>
- [9] <http://ellisland.org/>
- [10] <http://www.tribalpages.com/familytree.html>
- [11] Tedeschi, Bob (2006, October 9). Genealogy for the Living, the Dead, the Far Away.
The New York Times, p. C7.