Red Poppy Project Rationale

In response to the United States' ongoing involvement in overseas military conflicts, American society has embraced the memorialization of fallen Veterans as a public expression of patriotism. As any genealogist can tell you, despite the U.S. military's reputation for administrative red tape, currently there is no complete, centralized, public-access database of personnel records or Veteran burial sites. The Red Poppy Project will rely on cooperation from the National Archives; the National Park Service; private organizations such as the National D-Day Memorial; and state cemetery associations such as the Maine Old Cemetery Association, as well as crowdsourced contributions to collect information about deceased U.S. Veterans and the locations of their burials.

Kickstart Datasets

Open Source Data

There are 133 National Veterans' Cemeteries in 40 states (and Puerto Rico) and additional 22 American military cemeteries overseas. At present, there is only one significant, open access resource of Veterans' burial data. U.S. Veteran Burial Sites online offers CKAN Data API delivering information about 4,415,200 Veterans' burials from the National Cemetery Association. The CSV and API for this resource are available through Inventory.Data.gov and will form the initial data load for the Red Poppy Project.

American Military Cemeteries Overseas		Graves
Aisne-Marne American Cemetery and Memorial	Belleau, Northern France	2,289
Ardennes American Cemetery and Memorial	Ardennes, Belgium	5,329
St. James American Cemetery	Brittany, France	4,410
Brookwood American Cemetery and Memorial	Surrey, England	468
Cambridge American Cemetery	Cambridge, England	3,812
Epinal American Cemetery and Memorial	Dinozé, France	5,255
Flanders Field American Cemetery and Memorial	Waregem, Belgium	368
Florence American Cemetery and Memorial	Tavarnuzze, Impruneta, Italy	4,402
The Henri-Chapelle American Cemetery and Memorial	Liège, Belgium	7,992
Lorraine American Cemetery and Memorial	Saint-Avold, Moselle, France	10,489
Luxembourg American Cemetery and Memorial	Luxembourg City, Luxembourg	5,076
Manilla American Cemetery and Memorial	Metro Manila, Philippines	17,206
Meuse-Argonne American Cemetery and Memorial	Romagne-sous-Montfaucon, Meuse, France	14,246
Mexico City National Cemetery	Mexico City, Mexico	750
Netherlands American Cemetery and Memorial	Margraten, The Netherlands	1,722
Normandy American Cemetery and Memorial	Colleville-sur-Mer, Normandy, France	9,387
Oise-Aisne Cemetery and Memorial	Fère-en-Tardenois, Aisne, Picardy, France	6,012
Rhone American Cemetery and Memorial	Draguignan, France	861
Sicily-Rome American Cemetery and Memorial	Nettuno, Italy	7,861
Somme American Cemetery and Memorial	Bony, Picardy, France	1,844
St. Mihiel American Cemetery and Memorial	Thiaucourt (Meurthe-et-Moselle), France.	4,153
Suresnes American Cemetery and Memorial	Suresnes (Hauts-de-Seine), France	1,565
		115,497

Unfortunately, public access to the Department of Veterans Affairs, National Cemetery Administration electronic burial ledger through the National Archives & Records Administration is now controlled by a partnership with the for-profit company, Ancestry.com. As part of this agreement, Ancestry.com invested over 600 hours indexing contents of the ledger. To protect this investment, however, access to the ledger

and the 556,034 names it contains, requires subscription access and cannot be harvested *en masse* as the controlling corporate agreement with the U.S. government includes a Limited Use License restricting use to "personal and professional family history research" and prohibits the use of automated access tools to harvest information from the site. The unfortunate impact of this agreement is that there is currently no free, open, electronic access to U.S. Government documents that are technically in the public domain and record the names of Veterans from the American Revolution through Civil War.

Private Partnerships
Another potential sources for gravestone inscription data is the Tombstone Transcription Project (http://www.usgwtombstones.org/military.html). This resource will undoubtedly contain some data that duplicates the U.S. Veteran burial site database, but it serves as a potential net for catching information from smaller, state-operated Veteran cemeteries. Other potential data sources may be available from state-level organizations, such as the Maine Old Cemetery Association (MOCA), that have conducted statewide inscription projects and may provide access to older inscription records in exchange for copies of digitized records.

In an attempt to unlock access to Veterans' burials and provide a centralized, non-profit, open-source location the information, the Red Poppy Project proposes to develop a website that harvests content from the National Cemetery Association, the Tombstone project, and as many open-sources of gravestone inscription data as may be compiled to populate a burial and memorial database for U.S. Veterans.

Project Outline

The Red Poppy Project will accumulate as much publically accessible information about deceased U.S. Veterans as possible by compiling and aggregating information from the above mentioned resources into a single, centralized database that can then be used as a lookup resource. Red Poppy Project can then be utilized not only as a research tool for genealogists but also as a tool for researchers interested in the cultural treatment of American Veteran gravesites from the colonial period through modern, contemporary times.

The site will allow for the creation of virtual cemeteries, exhibits that explore evolving memorial practices and the evolution of military gravestones, and the reconstruction of U.S. Military units and divisions in a way that exposes the human face of war. The site also has potential to be made available for crowd-source contributions that will allow Veterans' descendants to flesh out service history details and attach portraits.

Metadata

The Red Poppy Project proposes to document metadata pulled from schemas that cross three specific 'types', as defined by Schema.org. Each listing will record metadata for a Person (the Veteran), Place (the cemetery and marker site), and Thing (the marker). Since documenting gravesites requires categories from all three schema, the metadata required by the Red Poppy project does not fit handily into any single metadata schema established to document creative objects or non-text objects. This being the case, the Red Poppy Project proposes to create a completely new metadata standard to provide full documentation of Veterans' burial and memorial records that can be adapted to digitally document any burial.

As a result, this project has identified 50 specific pieces of metadata for use in fully identifying deceased U.S. Veterans and their spouses, the type of marker, the cemetery, and the location of the marker within the cemetery. Not all data fields will be required for the creation of a record but all fields will be made available for the addition of information over time. Red Poppy Project metadata fields are listed in the chart below, in comparison to data fields currently available in the Veterans' Burial Information (VBI) database. Required fields are marked with asterisks.

Red Poppy Property	VBI Source Property	Type	Description
*markerId	id	Integer	Unique, computer generated, database identifier
orcidId		Integer	Persistent, personal digital identifier issued by ORCID
ssn		CharVar	Social Security Number
militaryId		CharVar	Unique military issued ID number
namePrefix		Text	Rev.; Dr.; Ofc.
*nameFirst	d_first_name	Text	Name or initial on marker
nameMiddle	d_mid_name	Text	Name or initial on marker
*nameLast	d_last_name	Text	Family/Sur Name on marker
nameMaiden		Text	Spouse Family Name on marker
nameSuffix	d_suffix	Text	Jr.; Sr.; III
nameAdditional		Text	Nickname on marker
*relationship	relationship	Text	Veteran, spouse, partner
inscription		CharVar	Full marker transcription
language		Text	Language of marker inscription
vetPhoto		Image	Portrait of Veteran
vetPhotoCaption		CharVar	Display caption for photo
birthMonth	d_birth_date	Integer	Numeric value for month = mm
birthDay		Integer	Numeric value for day = dd
birthYear		Integer	Numeric value for year = yyyy
deathMonth	d_death_date	Integer	Numeric value for month = mm
deathDay		Integer	Numeric value for day = dd
*deathYear		Integer	Numeric value for year = yyyy
branch	branch	Text	Military branch of service
division		CharVar	Division of military service
battalion		CharVar	Military battalion of service
unit		CharVar	Military unit
rank	v_rank	CharVar	Military rank at death
status		Text	Repeatable field for POW, KIA, MIA
decorations		CharVar	Repeatable field recording service decorations

honors		CharVar	Repeatable field recording service honors
conflict	war	Text	Repeatable wars served
theater		CharVar	Repeatable theater of action
serviceNotes		CharVar	Additional biographic information related to military career
*cemName	cem_name	Text	Name of cemetery
cemStreet	cem_addr_one	CharVar	Street address of cemetery
*cemCity	city	Text	City for cemetery
*cemState	state	Text	State for cemetery
*cemCountry		Text	Nation for cemetery
globalLocationNumber		Text	International Location Number; standardized 13-digit number
cemLat		GeoCoord	GIS coordinates for cemetery
cemLong		GeoCoord	GIS coordinates for cemetery
cemSection	section_id	CharVar	Section for marker location
cemRow	row_num	CharVar	Row for marker location
cemLot	site_num	CharVar	Lot number for marker location
cemGrave		CharVar	Grave number for marker location
graveLat		GeoCoord	GIS coordinates for marker location
graveLong		GeoCoord	GIS coordinates for marker location
graveType		Text	Burial or Memorial (memorial with no internment)
markerType		Text	Military or Private
markerCondition		Text	Good; Fair; In need of repair
markerPhoto		Image	Photo of marker
markerPhotoCaption		CharVar	Display caption for photo

Omeka

Omeka provides existing CSV import and Bulk Metadata Editor and catalog search features. It also offers a plugin that will utilize both the cemetery Latitude and Longitude and the grave Latitude and Longitude to provide mapping layers for cemetery locations as well as grave locations within specific cemeteries, when that information is available in the dataset. This will allow a map feature to be added to individual Veteran profiles.

The Flickr Import plugin will also provide a means of importing of vetPhotos and markerPhotos from contributors to the program. Additionally, the Derivative Images add-on will utilize content in the Veteran and marker photo fields to generate necessary thumbnail images for galleries and profile images. Although Omeka also provides a Digital Object Linker add-on, in the interest of the long-term stability of the project site, the decision has been made to not embed external sources into the displays. This

decision will eliminate the potential for broken links, should content delivered via third party sites disappear.

Omeka currently lacks a plugin to handle the calculation of the age of a Veteran at the time of death, so this simple calculator must be created. The calculator will function in a similar manner to the Tombstone Birthday Calculator available at Ancestor Search (http://www.searchforancestors.com/utility/birthday.html), only the add-on will operate behind the scenes and will be set to generate calculations based on the Gregorian calendar utilizing the calendar months. The calculator function will be called to execute when data exists in both the birthYear and deathYear fields. The add-on will be fully fleshed out, however, to return an age at death in terms of years, months, and days for display on the Veteran's profile page when numeric data is available in each of the fields for birthMonth, birthDay, birthYear, deathMonth, deathDay, and deathYear fields. If any data element is lacking, however, the calculator function will not be called to execute.

The nature of the Red Poppy Project being to memorialize Veterans for their military service, a new add-on will be created to utilize information entered in the branch, or Military branch of service, field to deliver an image of the official emblem of the branch of service to each Veteran's profile page. Standardized gifs of the official emblems for the U.S. Army, Navy, Air Force, Marines, and Coast Guard will be stored in the system to be called based on uniform identifiers. For quality-control, interactive public, data collection forms will provide standardized verbiage as a dropdown menu option, eliminating the potential for incompatible data entry.

Similarly, an add-on will be created to launch the display of known division insignia (such as the Seabees, Signal Corps, or Cavalry) when this information is available in the division data field. Like the branch emblem, the division insignia will display on the Veteran's profile page. Again, a library of known military divisions will be constructed to ensure quality control. Given the expansive nature of division information, however, users will be provided an option to key in an "Other" category which will not trigger an insignia display.

Utilizing information from the Defense Technical Information Center, the Red Poppy Project will construct an exhaustive exhibit of personal, campaign, and service decorations and medals, both current and obsolete. Images utilized in this online display will also be available for use by an add-on that will use information recorded in the repeatable decorations and honors fields to trigger the generation of graphical ribbon bars, in the appropriate order of wearing, for display on the Veteran's profile page. Given the breadth of potential service decorations, data will be collected for this field via a graphical, check box-style interface that will provide both award names, in alphabetical order, and graphical depictions.

Though it is beyond the scope of this specific assignment—because it relies heavily on datasets gathered from a variety of open access sources—the Red Poppy requires the development of a robust plugin to identify and prevent, aggregate, and/or remove duplicate records from the resources being harvested. Briefly, such an add-on will require a significant number of field matches between imported datasets. Among fields that have potential for use in this matching process are the non-displaying ssn and militaryID fields, in combination with the nameFirst, nameLast, birthMonth, birthDay, birthYear, deathMonth, deathDay, and deathYear fields, branch, cemName, cemSection, cemRow, cemLot, and cemGrave.

Fieldwork

While the Veterans' Burial Information database provides good, basic information for over 4.4 million Veterans' burials, it lacks a number of key data elements (See the comparative chart above). Though development would be complex, the creation of a mobile interface add-on that would support a real-time cemetery survey would optimize the true value of the Red Poppy Project.

Such an add-on would allow the project to seek grant funding to underwrite fieldwork utilizing smart technology with GIS capabilities to conduct cemetery site surveys. Look up features would enable fieldworkers to call up existing listings based on any available metadata field, and supplement available data in real-time by recording geo-coordinates for markers, taking photos, and transcribing marker inscriptions. Fieldworkers could also record information about a gravesite's general condition. Data gathered in the field, whether domestically or abroad, would immediately populate the appropriate data fields.

The mobile app would also allow crowdsourcing of information by volunteers with an interest in documenting Veterans buried in small community or rural cemeteries by allowing the creation of a new cemetery as well as new Veteran burials. The mobile app would also provide an opportunity for researchers to update Red Poppy Project records while working in research archives with primary sources.

Project Summary

1. **Primary goal:** To create a centralized database that records the gravesites of all U.S. Veterans, whether domestically or overseas. The site will:
    a. Record Veteran names
    b. Record birth and death dates
    c. Record gravestone inscriptions
    d. Record cemetery and marker location (plot #; GIS, when available)
    e. Record branch of service, when available
    f. Record service decorations, when available
    g. Display photographs of gravestones, when available
    h. Display portraits of Veterans, when available
    i. Provide a forum for memories, when available (invitation to family & comrades to contribute)
2. **Secondary goal:** U.S. military history is well-documented and the subject of many books, exhibits, and film documentaries. What is lesser known is the identity of the millions of men and woman who served and often died in the service of the Country. The Red Poppy Project compiles the names and profiles of Veterans who, through research of public-access service records can be associated with specific units, squads, and operations, allowing for the creation of exhibits that put a human face on war.
3. **Primary audience:** Family and professional genealogists, and descendants of the Veterans included in the database. The site will invite this primary audience to contribute to the database including uploading listings for Veterans not present in the database, adding gravestone photos, adding portraits of Veterans, and providing service information. In this way, family members and

comrades are provided an opportunity to recognize and honor fallen loved ones in an open access, digital environment.

4. Secondary audience: Secondary and post-secondary age students who may be better able to connect with U.S. History if it is provided in association with the personal stories, ages, and photographs of Veterans. Exhibits will be constructed in compliance with Common Core goals and standards and will provide a series of suggested lesson plans for secondary-level instruction across the spectrum of U.S. History from 1754 to present day. Lesson plans will emphasize interdisciplinary instruction and include opportunities to address such areas as genealogical research, storytelling, and historic, cemetery preservation.
5. Website breakdown:
    a. *Theme*: A customized theme will be created to deliver a consistent header, menu, and color scheme across the site.
        i. *Colors*: Light blue, gray, and subtle gold accents with black text will be utilized throughout the site. The chosen colors, in combination with the scarlet poppy logo, deliver a nod to the official colors of each branch of the U.S. Military. Colors will be subtle with black text to provide optimal on-screen access.
        ii. *Directory*: The site will incorporate tab navigation which will include the following menu:
            1. About this Project: Defines the purpose, scope, and data sources for the site.
            2. Exhibits: This landing page will serve as a portal to an index of exhibit titles; a rotating feature exhibit display. Each exhibit listing will include a brief synopsis. Exhibit-specific lesson plans will be incorporated within the navigation options for each exhibit.
            3. Veteran Cemeteries: Listings of National, State, and International U.S Veterans' Cemeteries, including a Google geolocation map and links to asp-delivered directories of interments included in the database.
            4. Veterans A-Z: Alphabetical list of individual Veterans' names with links that generate profile pages on the fly. This tab includes a search feature allowing users to search for individual Veterans by name. On the fly profile pages will display all publically-viewable Veteran data (indexing ID numbers, Social Security numbers, and Military ID numbers will not display), cemetery and marker location data. When a spouse is associated with a Veteran marker, that information will be displayed, as well. Profile pages will include military branch emblems, division insignia, and decoration ribbons, when this information is available in the database.
            5. Add Memories: An interactive form that allows users to upload new Veteran listings and inscriptions, gravestone pictures and geolocation, Veteran portraits, obituaries, service record information, or narrative memories. Obituary, service record, or narrative memories will be archived in the serviceNotes field.
    b. *Omeka Plugins*: Archive Repertory; Bulk Metadata Editor; Catalog Search; Collection Tree; Commenting; Contribution; Contributor Contact; Corrections; CSV Import; Derivative

Images; Dropbox; Exhibit Builder; Facet by Metadata; Flickr Import; Geolocation; Honor Thy Contributors; HTML5 Media; Item History Log; Item Relations; Record Relations; Redact Elements; Search by Metadata; Simple Pages; Social Bookmarking.

c. *Custom Plugins*: Service Branch Emblem (see above); Service battalion (see above); Service Decorations (see above); Dup Checker; Pages on the Fly (asp generated Veteran profile pages).

d. *Custom Mobile Omeka Plugin*: Location-based search; Contribution Mobile; Send to Mobile; Enhanced JSON Output. (See discussion above).

6. Building the Site:

a. *Metadata schema*: customized

markerId	Integer
namePrefix	Text
nameFirst	Text
nameMiddle	Text
nameLast	Text
nameMaiden	Text
nameSuffix	Text
nameAdditional	Text
relationship	Text
inscription	CharVar
language	Text
vetPhoto	Image
vetPhotoCaption	CharVar
birthMonth	Integer
birthDay	Integer
birthYear	Integer
deathMonth	Integer
deathDay	Integer
deathYear	Integer
branch	Text
unit	CharVar
rank	CharVar
status	Text
decorations	CharVar
honors	CharVar
conflict	Text
theater	CharVar
serviceNotes	CharVar
cemName	Text
cemStreet	CharVar
cemCity	Text
cemState	Text
cemLat	CharVar
cemLong	CharVar
cemSection	CharVar
cemRow	CharVar

cemLot	CharVar
cemGrave	CharVar
graveLat	CharVar
graveLong	CharVar
graveType	Text
markerType	Text
markerCondition	Text
markerPhoto	Image
markerPhotoCaption	CharVar

b. *Dataload*: Once defined, metadata, available in CSV format from the National Cemetery Association, documenting 4,415,200 U.S. Veterans' burials will be loaded into the database driving the site.
c. *Mobile Data*: A custom mobile app will provide an opportunity for fieldworkers and researchers to enhance existing records and create new records while conducting onsite cemetery surveys or while working with primary sources in research archives. The mobile app will allow for the real-time addition of cemetery and marker information, including GIS coordinate readings, and marker photographs.

Sources:

https://inventory.data.gov/dataset/418c770d-3427-4b26-b31f-e3ec97508a98/resource/53a0824d-2236-4c22-9dc8-9ac59b05285d
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