## **Alberta Historical Cemeteries Project: Use Case Scenarios**

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Scenario #1: Teacher (Public User) looking for specific Data

- Demonstrates basic gravestone search.

Jenny (age 24) is a college graduate with a Bachelors of Education Degree (specializing in Elementary Education) who just started working for a Catholic Elementary School in the Northwest of Edmonton, Alberta. She is currently teaching a class of grade 4 students and wants to do some background research on a few famous Albertans. One in particular, named Sam Livingston, is considered to be the first "Calgarian" in Alberta. He came from Ireland to California to take part in the gold rush of 1849, but with little success he moved north to Alberta where he eventually settled and set up a trading post and farm in where Calgary now stands. One bit of information that Jenny doesn't pose on Sam Livingston however is where he is buried.

The night before her class on famous Albertans, Jenny was doing some research on the Web. After browsing a couple of cemetery websites and coming up with nothing remotely related to persons of that era, she stumbles upon the Alberta's Historical Cemeteries Project webpage. To her surprise she is greeted with an interactive map of Alberta, with different pinpoints for various historical cemeteries located around the province. While she isn't completely convinced that this website may have the information she seeks, she quickly reads the project description and notices that many different organizations contribute their resources and records to this project. Based on this fact she gives searching for Sam Livingston's name a try using the basic search features offered for individual gravestones on the main map page. After typing in his name, to her surprise, she is redirected to a specific results page, displaying a plethora of information on Sam Livingston she didn't (including the sought after location of his gravestone in Union Cemetery, Calgary). Jenny is delighted to discover the wealth of information displayed on the webpage she could use. From his nationality, occupation, and even to the translated inscription on his tombstone, and not to mention a few images of his gravestone and surroundings that she might be able to use for her slideshow presentation. With the sought after information retrieved, and more resources and knowledge for her class from a few simple clicks and a quick search, Jenny is now prepared. Thinking this web service will come in handy again, she bookmarks the website for later use.

## **Scenario #2:** New resident (Public User) interested in finding out more information about a nearby local cemetery

- Demonstrates visualizations and basic cemetery search.

Gary (age 31) and his wife Marly (age 29) are newlyweds who have recently moved to a small town called Raymond in Warner County Alberta, because of Gary's work. The town's only cemetery, called Temple Hills Cemetery, is said to be somewhat of a local attraction. The hill itself is the location for other local event such as motocross amateur races.

Intrigued by the cemetery and the local history that is said to surround it, Gary decides to browse the web for any information relating to this cemetery on one of his off days. With little luck finding much historical data on this specific cemetery, Gary stumbles upon the Alberta Historical Cemeteries Webpage. Used to interactive map interfaces, it was no surprise Gary quickly locates the town of Raymond on the map, and the cemetery of Temple Hills. Upon clicking the pin-point on the map, Gary is brought to a Overview page for the cemetery depicting an topographical layout of the cemetery, and pinpoints for all the graves. Immediately, a few buttons on the map catch Gary's eye. Noticing they say Visualizations, Gary feels inclined to click the animation button. Right away the maps pinpoints are cleared, and readded piece by piece in order to depict the emergence of graves within the cemetery. Gary notices that many pinpoints are added simultaneously to the same spots, almost like a mass grave. Prompted by his observations, he peruses the historical description of the cemetery and factual data relating to the cemetery that he missed while playing around with the map. The description is thorough and conveys that there are several mass memorials relating to the fallen Canadian soldiers of WWII, and one related to those forcibly removed Japanese residents on the BC coast during the pacific attacks of WWII in the 1940's. It goes on to reveal why there is a Japanese memorial in Raymond Alberta. The ashes of many deceased loved ones from cemeteries in BC were shipped to one of the only temples near the Rockies during the exile of all things Japanese. Thus to settle Gary's curiosity about the memorial, this explains why the remains of over 100 Japanese persons are housed in this cemetery and why the memorial exists. Satisfied with his findings about this unusual observation, he begins to plans to visit the Cemetery with his wife the next day.

**Scenario #3:** Trusted Public User carrying out various cemetery and gravestone searchers to accumulate some factual information about their family tree.

- Demonstrates how information from different cemeteries can uncover underlying links

Sarah (age 23) is in her last semester of her Bachelor of Arts degree with an major in Anthropology, and is currently enrolled in ANTH 498 (Individual Study) to complete her last major requirement. After much debate on what to write her term thesis paper on, in consultation with an overseeing professor, she decides on investigating the settlement patterns in early Alberta in order to depict why some cultural groups have prospered and some have dwindled, over the past 100 years of Alberta history. With a very broad topic and a wide span of time to research, her professor refers her to Alberta's Historical Cemeteries Project website which he has found very helpful and that might help her collect insight into Alberta's past.

So on a typical school day afternoon, after the initial proposal for her term paper and after reviewing and researching a couple different articles on the topic, Sarah decides to give the Alberta's Historical Cemeteries website a try. Like all other public users, she is greeted with an overview map of Alberta with different pin-points for on demand information about the various historical cemeteries situated within Alberta. Not knowing where to start, Sarah clicks a few cemeteries around the Canadian border. Using the visualization features to depict the grave dispersion overtime and the relative ages of the graves she becomes intrigued as it seems that these graveyards spring up almost in a pattern, maybe even depicting the creation of settlements over time. After a an hour or two of extensively studying the individuals that make up these cemeteries using the main and related lists of individual on each cemetery and individual gravestone page, she is able to find out many of them were related to those who fought against Native rebels during the 1885 Northwest rebellion. Placing many of their families to be from Eastern Canada, expanding into the west to take advantage of its vast natural resources. She also noticed many of these deceased came from towns close to the CPR railroad, and based on the time period she may be able to deduce that many of these residents could have been part of the 500,000 or more Americans who led the way in settling early Saskatchewan and Alberta, enticed by both the agricultural and lumber industries during the late 19th century and early 20th. Excited by the useful and provable results from her findings, she presses on to dig more "in between the lines" information.

She notices that all these individuals from most of the southern, eastern and central historical cemeteries come from many European backgrounds, all pertaining to the time period where many continental Europeans were advertised to settle and work to colonize the west. Germans, Ukrainians, British, Americans and the Welsh were all part of Alberta's diverse cultural amalgamation by the early 20th century. As well, other key attributes such as religious

beliefs defined many of the groupings and location of certain types of individuals across Alberta. For example, Sarah noticed that many Mormons from Utah settled in some of the most Southern parts of Alberta, where their irrigation techniques increased the revenue and production of many agricultural crops during the 1920's and 1930's.

While she didn't find much information on aboriginal burial grounds, it is clear that interrupting and recognizing patterns in the data can be very useful for her paper. Satisfied with a good days work, she emails he overseeing professor with the good news that his suggested resource has helped her gain background knowledge and acquire evidence for settlement patterns in earl Alberta. She is off to a good start and is ready to dive into her term paper and construct her thesis.

## Scenario #4: Independent Researcher creates an account

- Demonstrates account creation process to gain access to more features.

Dr. Flint (age 39) is an independent researcher and professor who is a member of the Archaeological Society of Alberta, and has a Masters of Arts degree with a major in Anthropology. He has travelled to various countries on various archeological expeditions in South America and Africa, and now resides in his current position as an Anthropology professor at the University of Alberta. Always interested in the valuable insight that people of the past can provide to the people of today, Dr. Flint collects historical information from around the world (mostly from cemeteries) in Excel form which he then manually inputs into a local database at home. Dr. Flint is currently searching for historical information from any historical cemeteries with which to teach his new Anthropology class, centered around Alberta and its history.

After grading midterm exams one evening, Dr. Flint decides to take a quick look on the web for resources that he might be able to present to class, or use publically with his own database. He is aware of a few organizations and their information, and has access to all the records from the Archaeological Society of Alberta. After viewing a few organization's websites, he comes across the Alberta Historical Cemeteries Project webpage. Noticing its referenced by many of the organizations, he feels reassured that this information will be reliable. After doing a few basic cemetery and individual searches, Dr. Flint realizes how useful this website can be, especially after playing around with the **visualization tools** for different cemeteries. His trained perceptions with which he can parse out underlying patterns from raw statistical data coupled with the tools at hand make this a very useful resource. Excited over his new finds, he notices that there is still a lot of information not accessible to him (ie genealogical), as it is reserved for users with account access. Wasting no time, he clicks on one of the sign up links and is greeted by an informative sign up and member login page. The page displays a brief description of the project, and the different types of access to information that is offered with each account type.

After filling out the general information and choosing the account type **researcher**, in order to gain access to more information and features such as "**exporting records**", which Dr. Flint plans to incorporate into his own database, he notices a disclaimer appear. For a researchers account, an accredited organization must give permission to the individual to use and or export the sensitive information before making an account. Already a member of the Archaeological Society of Alberta, Dr .Flint fills out a detailed request form (including information about the organization, position in the organization, contacts, etc..) and sends his request to generate a researcher account.

About a week later, he checks his email early one morning email and notices an email from the Alberta Cemeteries Project, confirming his status as a reliable member of the Alberta Archaeological Society and giving him his login details as a researcher type member with access to the website. From here Dr. Flint is able to export almost any cemetery and gravestone information he desires for personal use, as is his hobby to store this information for use with his research and lectures.

**Scenario #5:** User submitting cemetery data to database after filling out formatted survey form.

Demonstrates how comprehensive information is added to system.

John (age 67) has retired from teaching and become interested in genealogy. He lives on a farm that his family has owned for over 150 years. In an attempt to trace his heritage back, he has utilized available internet resources, but he has found that his local cemetery, where his family has been buried for many generations, is not recorded in detail on any of the existing resources. Currently, the cemetery is listed and some of the individual graves have been recorded, but many are missing and many of the records are incomplete. John conducts an internet search for 'detailed cemetery survey' and finds himself at the Alberta Historical Cemeteries page on the survey recording forms sub page. He downloads the pdf document and prints out the forms. John spends the next two weekends going out to the cemetery with his wife and filling out the forms to document the cemetery.

The forms that John uses are split up to describe the important levels that exist within a cemetery. He has a single form to describe the cemetery with variables such as the location of the cemetery, it's proximity to churches, towns, or physical features, the general condition of the cemetery, and many other variables. The second set of forms that John uses describe the monuments that are contained within the cemetery. Details such as condition, dimensions, cultural symbols, materials, number of burials listed, etc. are included. The final set of forms that John has, describe the individual burials in the cemetery and relating to the monuments

that list the burials. This form has variables such as date of birth, date of death, name, inscription, etc.

When John returns home after collecting the information, he has many paper documents describing the cemetery at a high level of detail. He returns to the Alberta Historical Cemeteries website and navigates to the submit survey information page. Before he can submit information, he must create a user account by entering some basic information such as name, email, and the community he lives near. Once he has created a user account he logs in and is directed back to the survey entry page. Here he finds digital copies of the survey recording forms beginning with the cemetery information and progressing through until he has entered all of the information that he has collected. When John submits information, the records are flagged as needing validation. At some point in the future a trusted user will view Johns data and decide whether the records are sufficient to be approved or need some changes. Also, if he submits a record that the system calculates to be a possible duplicate, a flash will ask John if he thinks his record is a duplicate. John will say yes or no and further validation will be required for that record to be submitted.

John is now able to view the records that he has submitted and feels good about making a positive contribution to the cemetery records in Alberta and preserve his heritage.

**Scenario #6:** Administrative user approving submitted records and removing user account.

- Demonstrates admin user responsibilities.

Philip (age 42) is a researcher at the University of Alberta in the department of History. He has become involved in the Alberta Historical Cemeteries project as an administrator and mainly looks to approve records or indicate that the information is incomplete. When Philip logs onto the project website, he navigates to a page containing a list of un-approved records. Clicking on the top record takes him to the full record listing where he can review the submitted information. Philip looks at the user who submitted the information, whether the forms are filled out correctly, and several other factors to make an informed decision to approve the record or not. In this case, Philip decides that the record is missing some information. He flags the fields that are not filled out appropriately and closes the review form.

When a record is flagged as having been reviewed but not approved, a notification is sent to the individual who originally submitted the record. The user can then correct the insufficiencies.

Philip then navigates to the user pages. Here he finds lists of users and their various levels of responsibility. He finds that a user has requested an upgrade in access to researcher level. In order to acquire this upgrade, a user must describe their professional status and

reasons why it would be useful to have greater access. Philip decides that the user has provided sufficient information to achieve an upgrade. Philip modifies the user's role and closes the window.