Wiki SaGa: an Interactive Timeline to Visualize Historical Documents

Daniel Yong Wen Tan[1], Bali Ranaivo-Malançon[2], Narayanan Kulathuramaiyer[2]

[1]University College of Technology Sarawak, Sibu Sarawak Malaysia
danieltan@ucts.edu.my
[2]Universiti Malaysia Sarawak, Kota Samarahan Sarawak Malaysia
{mbranaivo, nara}@fit.unimas.my

Abstract. Searching for information inside a repository of digitised historical documents is a very common task. A timeline interface that represents the historical content which can perform the same search function will reveal better results to researchers. This paper presents the integration of *SIMILE Timeline* within a wiki, named Wiki SaGa, containing digitised version of *Sarawak Gazette*. The proposed approach allows display of events and relevant information search compared to traditional list of documents.

1   Introduction

Timeline is a common method used to display events with respect to time. The earliest timeline system was introduced by Joseph Priestley, in 1769, when he published "A New Chart of History". Timeline was presented on physical paper in the past. Today, timeline is also available as a computer-based tool. According to Allen [1], utilizing a timeline interface to visualize events provide several advantages for a user. First, a timeline can inform as it shows basis information such as the title of an event and when the event itself occurs. Second, a timeline shows the context of events, which allows the comparison of these events across time. Third, a timeline encapsulates as "an event may be part of a bigger event". And fourth, a timeline can show links illustrating the attributes shared by events "or a hypothesized causal relationship."

The domain that utilized timeline the most is historical domain. History consists of events and their respective date. Timeline could, for example, display these events in a chronological way based on their date. The hidden relationship between events can start to emerge [2]. Thus, a timeline as a graphical representation provides a more interesting insight of historical events. This can be true for historians working on *Sarawak Gazette*, called henceforth SaGa, if this is displayed in a timeline. SaGa is the oldest newspaper published in Sarawak. The first publication was on August 26, 1870, during the reign of the first White Rajah, James Brooke. The gazette was published monthly and was edited by the Rajah's Civil Service. The published articles reflected the official thinking