

Learning History with Time-lines

The Author



Akshay Mathur is a seasoned startup professional and entrepreneur. He has been associated to many software product startups since their conceptualization.

The Associations



Akshay currently spends most of his time with **ShopSocially**. ShopSocially provides widgets to online retailers for enabling social experience at their online store.



Earlier he used to work with **AirTight Networks**, pioneer in providing Intrusion Prevention Systems (IPS) for Wi-Fi networks.



Digital Gangetic Planes project of Media Lab Asia at **Indian Institute of Technology Kanpur** has setup a long haul outdoor Wi-Fi link between Kanpur and Lucknow cities extending LAN of IITK to the remote villages.



At **Pt. Deendayal School** of Kanpur, Akshay was responsible for creating study material and enabling usage of computers in teaching.

The problem

History as a subject forms a very important aspect of academic curriculum. However due to the way it is taught in the educational institutions, it does not enhance the interest of students. The methods employed by the history teachers encourages student to mug up the dates of historical events. While doing so the students generally fail to appreciate the significance of an event and its corresponding causes/ outcomes. It is therefore important to look history from a fresh perspective.



Simply said, history is just a bunch of events spread over time. If one looks to memorize the history in the context of dates, it becomes very cumbersome to remember it. Moreover such an approach only focuses on passing exams.

The main problem is that we need to remember the events with which we cannot relate. Typically, we do not even have visual clues about the events happened in

past. This remembrance of events starts getting mixed when volume increases and we need to remember history of different places, people, objects and subjects e.g. history of India, Mugal dynasty, earth, literature, astronomy or mathematics.

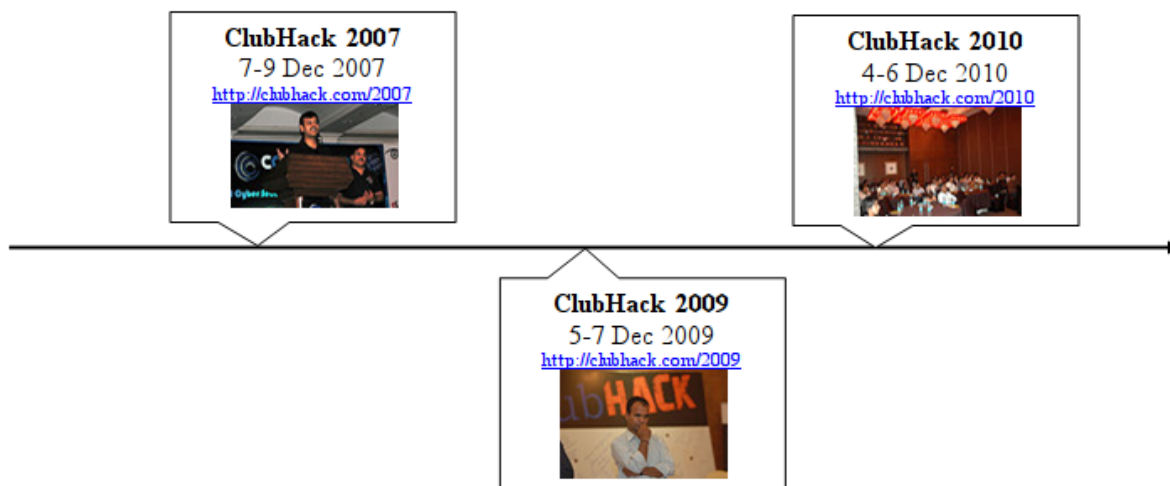
History becomes more complicated when one tries to relate two events which occurred around the same time. Since the current teaching methodology focuses on learning events separately, there is no straightforward way for a student to find out the impact of one event on another. For example, there is no simple way to explain how Marathas and Mughals impacted each other.

Proposed Solution: Learn History through Time-Lines

This paper proposes a novel approach to learning history by combining visualizations to historical events with the help of time lines.

Visualize Order of Events

As they say that a Picture speaks a thousand words. It is a proven fact that visual aids help a lot for remembrance. Following this fact, historical events are presented visually on a time-line. It helps people remembering them in sequence. This ensures that the events are visually separated even if they are of same type. For example, on the time-line of revolutions, British Revolution, American Revolution and French Revolution are present but their relative placement clearly communicates that they happened at different times.



Time-line of ClubHack Conference

Each item has its own time-line. This connects events related to one item together. This also helps eliminating confusions. For example, both Akbar and Bahadur Shah Zafar were Mugal emperor but Time-line of Delhi does not show Akbar and Time-line of Agra does not show Bahadur Shah Zafar. This makes it clear very easily that the two Mughals ruled from different cities.

Add Visual Clues to the Event

Again the event itself requires visual clues for better remembrance. So it is required to have an image for the event description. Links to other images, movie clips and documents providing more information about the event are added plus.

Any historical event described in form of a visual media not only multiplies the understanding of the event; it also increases the curiosity of the student by creating excitement. One such instance can be quoted here from my own personal experience. I understood very well why Pearl Harbor was considered a very safe

station and the reasons of Hiroshima atomic blasts after watching the movie called 'Pearl Harbor'. Though the teacher tried explaining it well but visualization had a different impact.



Original photo of Pearl Harbor



*Place surrounded by hills and sea
(Similar to Naval Base at Pearl Harbor)*

It is also observed that human brain sometimes visualize any past event with an absolutely unrelated image. You never know what actually clicks in the mind and helps in understanding and remembrance. For example, I remember that in the first ClubHack Conference was in 2007 when we had a hands-on session on wireless sitting on ground with a mess of laptops and wires. ClubHack 2010 was in a Hotel room having very good red color decoration on ceiling and the person who presented keynote wore Indian 'Pagdi' in spite of being a foreigner. .

Interacting with Time-line

Time-line of most items is very long and different people may be interested in different types of events at different times. This requires a few interactions on a time-line.

First and foremost is scroll so that the user can bring the time period he is interested in to the screen and move back and forth as needed.

Users may be interested in really long or really short time periods. Not being able to see all the events in the given time period or looking at extra events is not a very good experience.

This requires zoom feature on a time-line. Zooming-in on a time-line shows more granular events. Zooming-out either hides some events or shows a grouped event. For example, Zooming in to the conference's timeline, shows different talks and zooming out shows dates of announcement, submissions and the event.

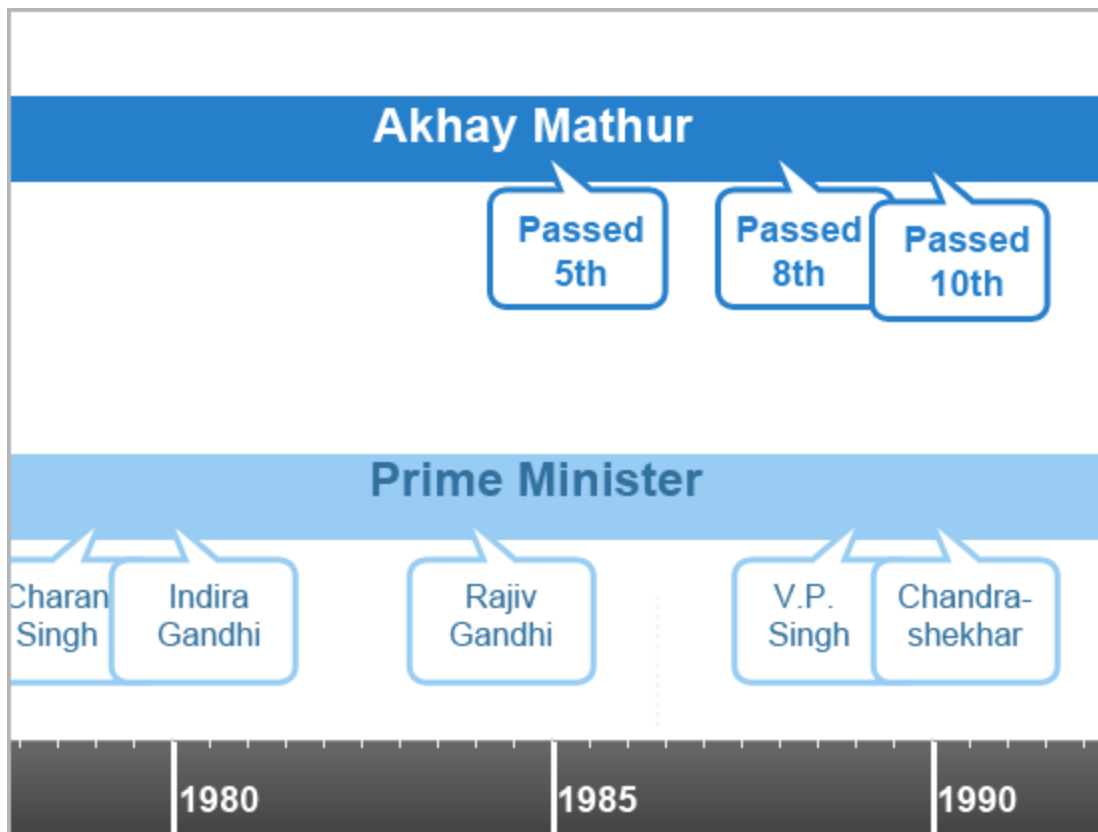


Time-line of ClubHack Conference Zoomed in for 2010

Studying Multiple Time-lines

While Time-line of each item is isolated, the same is not true for events. Each and every event belongs to more than one timeline. So it is required to study more than one timeline together. For example, this conference stays on the timeline of all the people, places and topics involved in the conference. This helps in understanding why and how different people and things came together for an event and what happened to them afterwards.

Some people may be interested in studying time-lines with no event in common. This helps in understanding what was happening with different items in the given time frame. Other reason may be just to remember the dates of unrelated events with the help of related events. For example, Indira Gandhi was assassinated when I was in class 5th, so the year was 1984.



Studying Two Time-lines

Conclusions

The learning method described here provides a great opportunity to teachers and student communities. This method inculcates a holistic understanding of history to the present and future generations.

Acknowledgements

I am thankful to Mr. Nitin Chaturvedi and Mr. Rajesh Unde for their help in writing this paper.