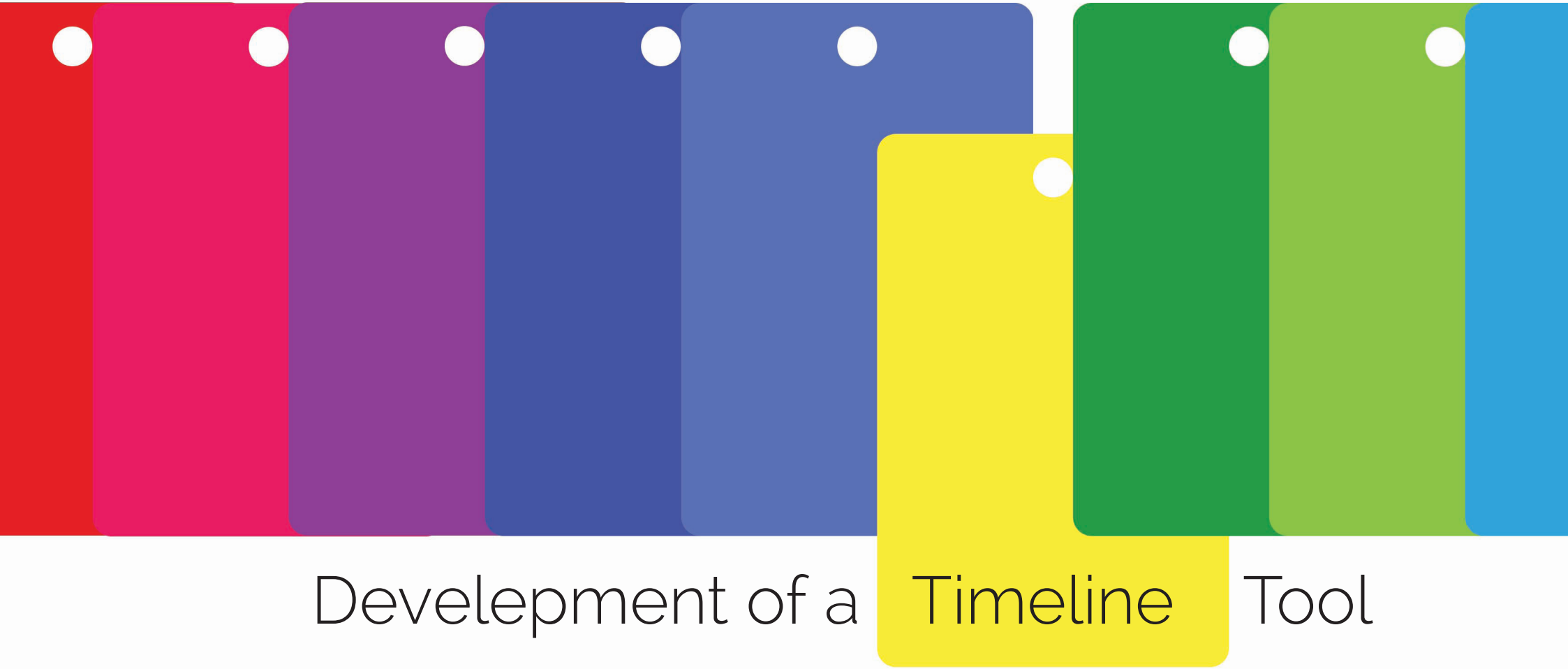

Develepment of a Timeline Tool

IDC
IIT Bombay

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Interaction Design
136330010

Maharaj Arumugam
Interaction Design
136330009

Declaration

I declare that this report titled " Development of a Timeline Tool " represents my and team mate Maharaj Arumugam Ideas. In my own words and where others ideas or words have been included, We have adequately cited and referenced the original sources.

I also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission.

I understand that any violation of the above will be cause for disciplinary action by the institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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Acknowledgment

It is extremely important to have like minded people on the team with set of skills which can fill up for each others less travelled roads. ***Maharaj M.A.****, my batchmate and teamate for this project has been my right brain when I was using my left and vice versa.*

I would like to thank colaba for wonderful lunch breaks beside the Arabian sea and middle eastern eating spots.

Our P1 project was based on a product introduced to us during our "Interaction Design" module by Mr. Sudhir Bhatia in 2nd semester.

The goal was to add new content to the Mobile Computing Timeline created bRnd Studio and document the design process. Then sketch out and prototype a web based Timeline tool that can be used in conjunction with the physical Timeline.

We were given opportunity to ideate and print cards for the Timeline Tool. We got a first hand experience on how to add content to the Tool. We were given full freedom to express our ideas.

I would like to thank-

- **Prof. Anirudha Joshi** for connecting us to Sudhir Bhatia.
- **Sudhir Bhatia** for valuable inputs and for giving us a direction from time to time. For introducing us to the history of Mobile Computing and its future.

- Rajumar for carpentery jobs, Sachin for the timely water bottles and chai.

Contents

About bRnd Studio

bRnd Studio is a boutique research and design studio that applies an integrative thinking process towards the development of product strategies for new and established markets. Our experiences lead us to understand that the seeds of success lie in well executed ideas found at the intersection of user context, market awareness, and technology alignment. Our value lies in the ability to mine the internal wisdom, identify opportunities, inspire creativity and make tangible solutions that add value to businesses. We have consulted with design teams at Motorola Solutions, Microsoft and BlackBerry.

The studio is located at 5/7 A-8 Grant Building, Arthur Bunder Rd, Colaba, Mumbai 400005. It is directly opposite Cafe Basilico on the first floor.

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Design Brief

In this internship requires to gain knowledge to develop an opinion on the past and future of mobile computing. This objectives will be achieved by adding significant events to the existing Mobile Computing Timeline developed by bRnd Studio. Using the lens of hardware, software and services to tell each story. This exercise will lay the ground work for the next phase of the internship.

Based on the learning of the first exercise, sketch and prototype a web based research tool that assists in gathering and visualizing historical data. To do this start by benchmarking existing timeline tools and other applications like pintrest, flipboard etc. Then brainstorm what a Timeline Tool would look and feel like. Follow that by creating a flow analysis of the tool in mind. Develop screen shots and animations of the interactions the tool will offer. The tool should assist the user in archiving facts found on the internet at the time of discovery, while also giving them the ability to add a written summary, images, audio or video to the finding before saving them to the database.

Once the content has been added to the database the user should have the ability to view the data in multiple ways such as timelines, lists, 2X2 matrixes etc. In addition users should be able to add comments and share events with others directly from the tool. The aesthetic of the online solution should complement the physical Timeline cards developed by bRnd Studio.

The tool should have a clear, simple and effective interface while being easy to use. The initial target user for such a system are members of a design research and development teams.

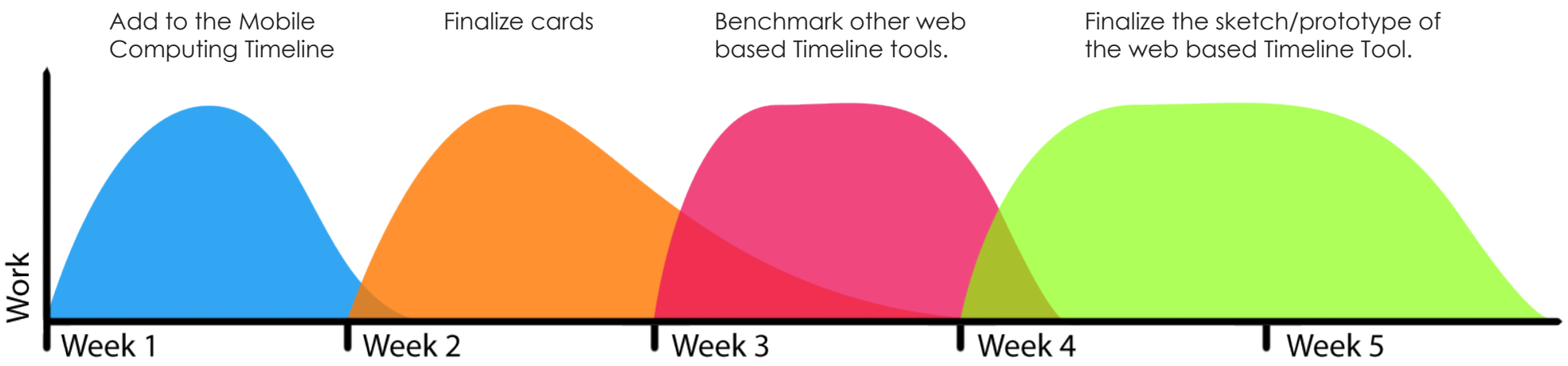
Goals

There are two main goals.

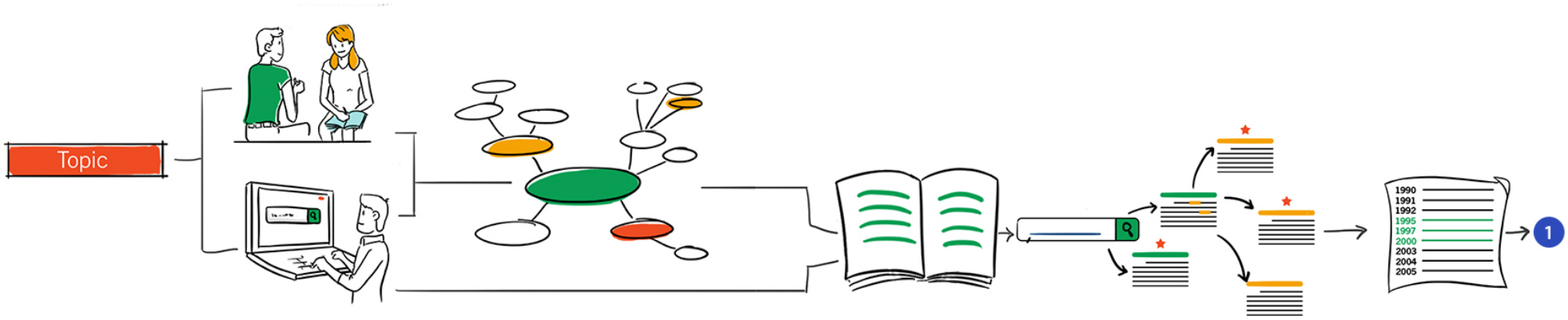
1. To add new content to the Mobile Computing Timeline created by bRnd Studio.

2. Sketch out and prototype a web based Timeline tool that can be used in conjunction with the physical Timeline.

Project Time line



Design Process

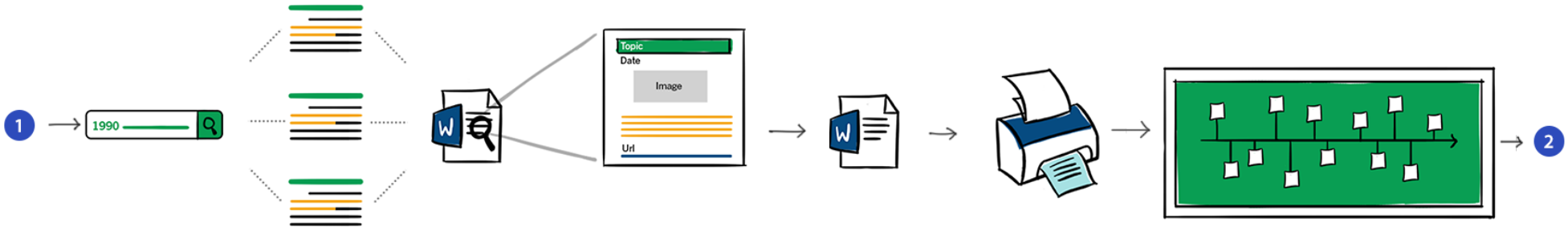


This project required the documentation of the design process to create the timeline cards. It could give a better understanding of the steps involved in the process and time consumed to make one card. Also this could provide insights which can be used in making the digital version of the timeline tool.

So once the topic is decided, its followed by a quick discussion on the topic for keywords based on primary knowledge. Then search over the net for more keywords. A mind map is created of these keywords. Also these keywords are listed in a notebook. Each keyword now is searched one by one on the internet for related information.

This results in collection a large no of articles realted to the keywords. The important ones are marked. Also in the process some new keywords are discovered. All this keyword realted information is now arranged in a vertical list format in a cronological order. This was a list of events is generated in a timeline format.

Design Process



Each event from this list is searched for different articles and sources, to validate the event details and find out new details. These Infomation is extracted from the article and put in a word document. This was done in a format with topic,date, image, content and urls. this process is repeated for all the events on the list. If in the process some new event is discovered then its added to the list and the same process is repeated.

The events are now in a crude format in a word file. Now take the print outs of each event. Put it up on the board in a timline format. This way you can have a clear idea of how many events are there on the wall. We could make connections already between different events and also some gaps were there in the timeline.

Design Process

After the board is populated we had a discussion about the existing events, if there are some missing links which could help complete the story. These missing events are then searched on and added to the timeline.

Now from this word document the content is transcribed and refined. Proper images are finalised for the cards, which are relevant to the event, are not pixaleted and are copyright free. This finalised content is then transferred to Indesign and put into the designed format of cards. These final cards were then printed and put on the timeline wall.

This completes the process.

Sample Card

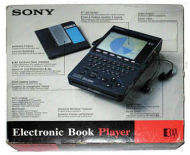
1992.01 Sony DD-8 Data Discman

Sony DD-8 Data Discman

1992

A Data Discman is an electronic book device introduced in 1992 by Sony Corporation

1992.01 Sony DD-8 Data Discman



Sony DD-8 Data Discman

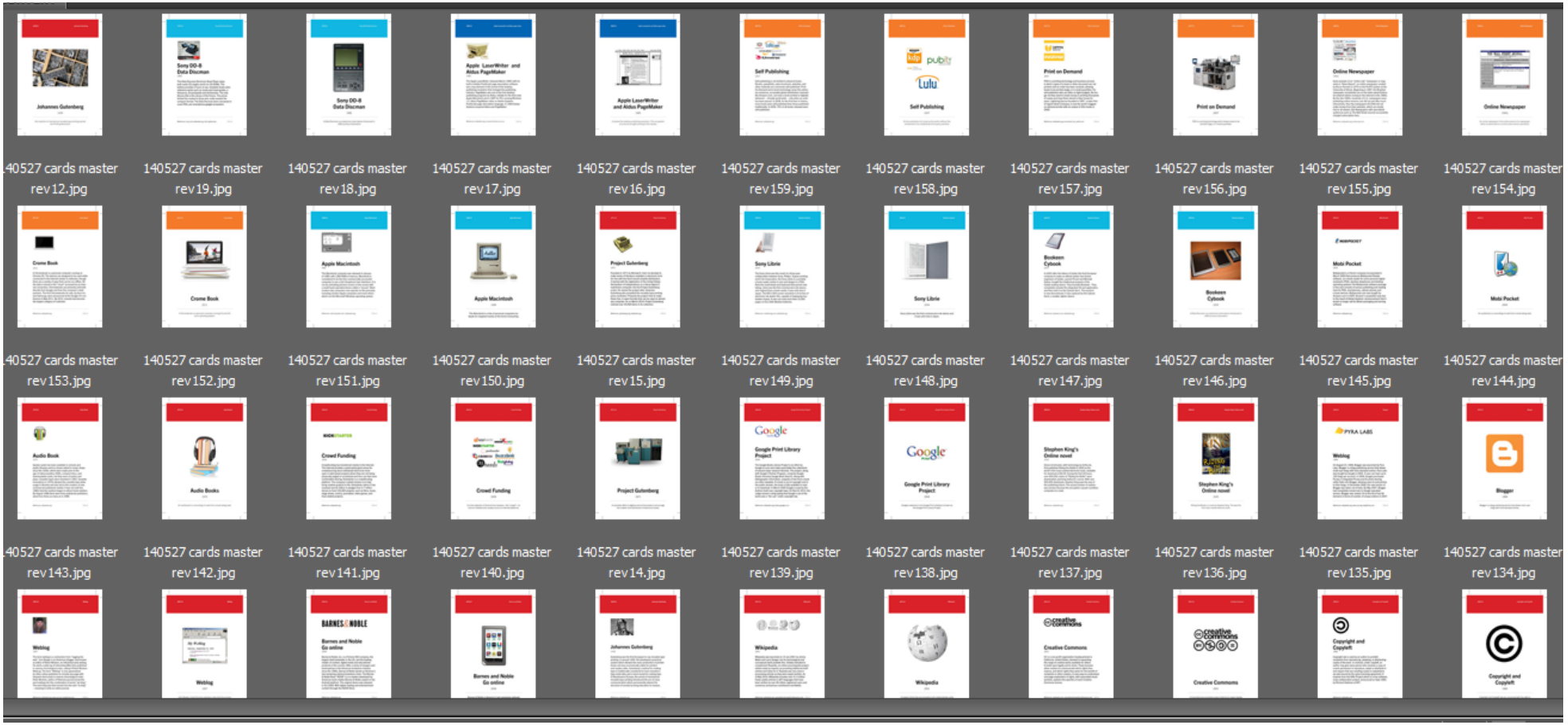
1992

The Data Discman Electronic Book Player plays both audio CD singles and 8 cm CD-ROMs. The battery provides 3 hours of use. Available books were reference works such as movie and travel guides, a thesaurus, Encyclopedia and dictionaries. The only literary title is the Library of the Future. The prices limited the market to those who really needed the compact format. The Data Discman were conceived in a pre-PDA, pre-smartphone gadget ecosystem.

Reference: sony.net, wikipedia.org, iath.virginia.edu bRnd

X 30 Cards

Added Card


140527 cards master rev12.jpg
140527 cards master rev19.jpg
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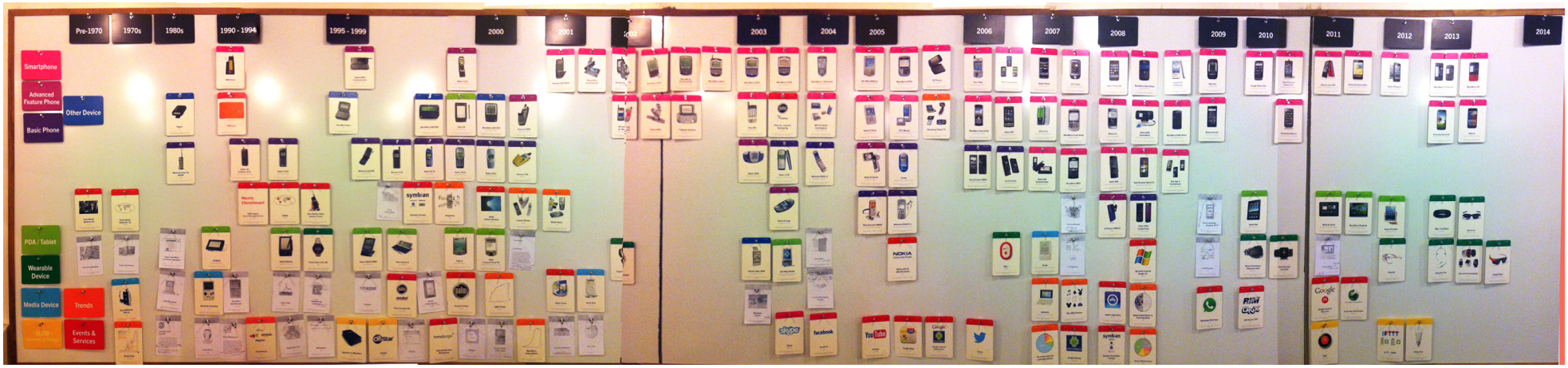
Physical Timeline

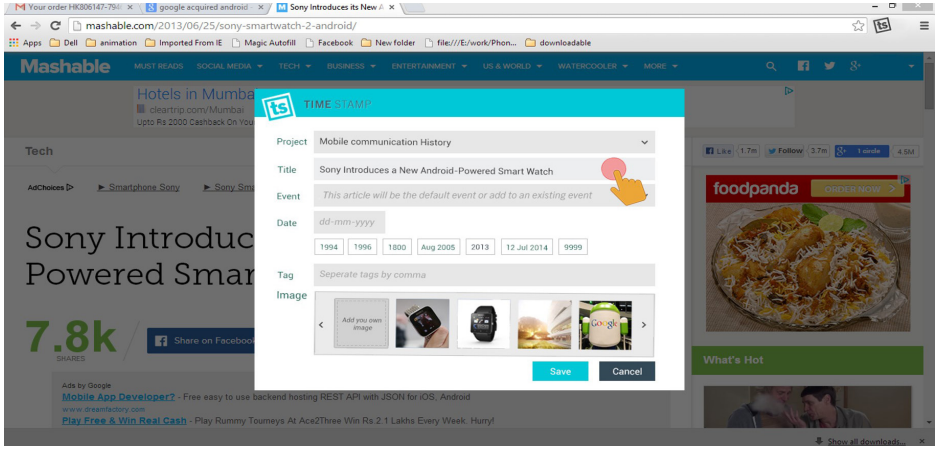


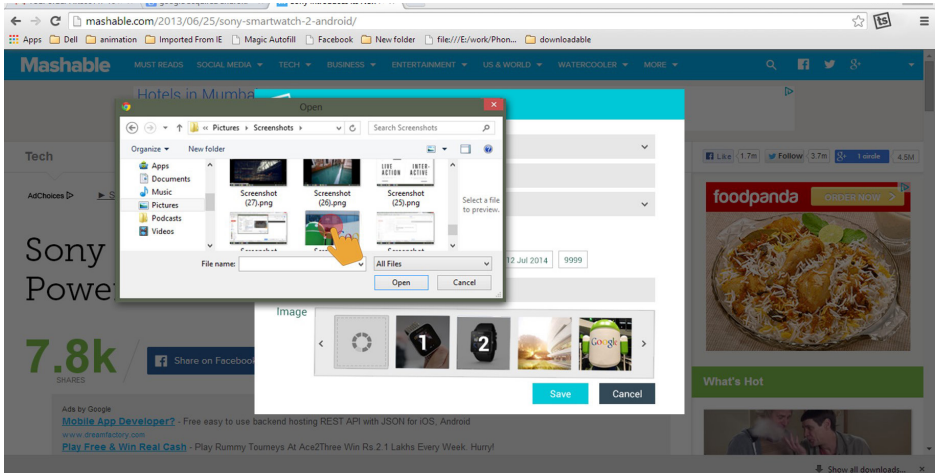
This is the picture of the final wall. The printed cards are placed in a cronological order. The cards with similar events will have same color and are placed together.

This timline helps create stories and insights ragarding the event that can occur in the future based on the pattern observed in the existing events.

Plugin Interaction

Digital Timeline





The reason we worked on the physical timeline is to understand the method of this research discussed before and to know the lags, disadvantages and advantages, so that we can minimize these flaws while designing the digital version.

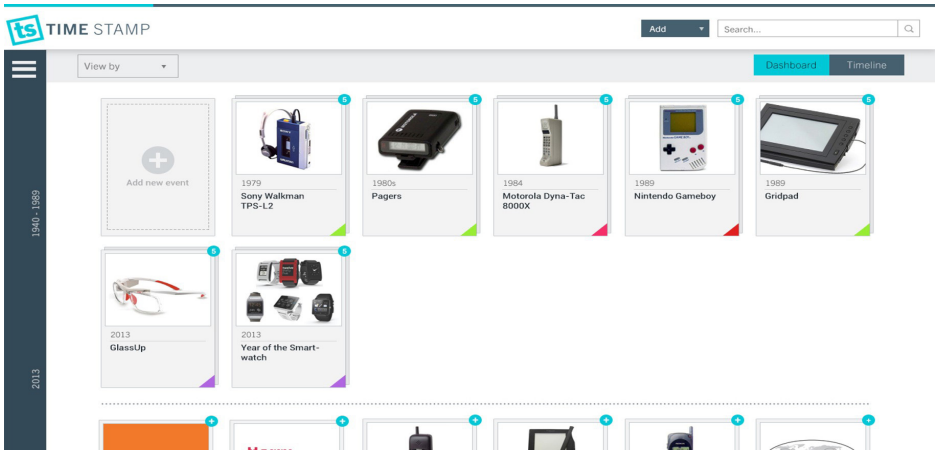
The main source of this research technique is internet. So we decided to make a plugin instead of doing an application software. So this plugin will be installed in the tool bar of the web browser. It is similar to book marks but here it is more detailed and it doesn't save only the url but the whole content from that page. This is done because there is a high possibility of losing the data easily.

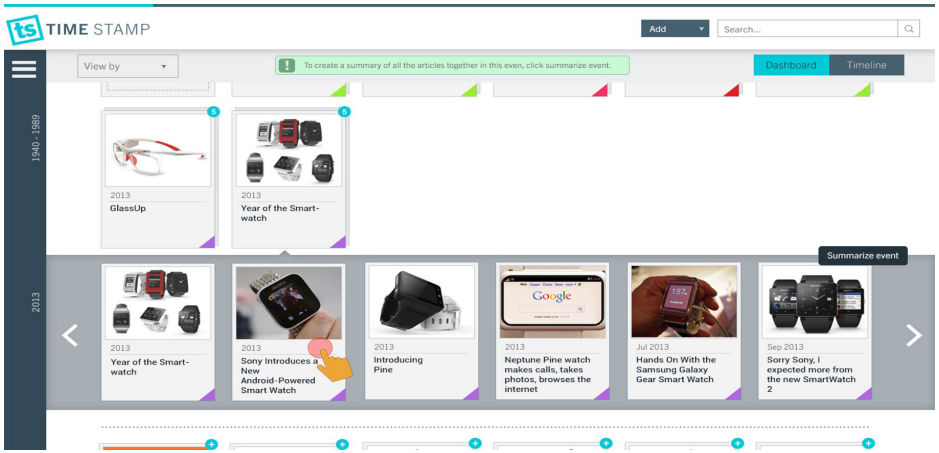
So this digital version is a direct translation of the physical version with more features to easily maintain and follow the data collected.

It starts with the plugin where we save the needed webpage, and a pop out appears where we are required to fill in the details to save the page to the dashboard (dashboard is the personal data space where all saved webpages are collected). Most of the details are already auto filled, like the title pictures or the project under which we are saving the page.

Dashboard Interaction

Dashboard

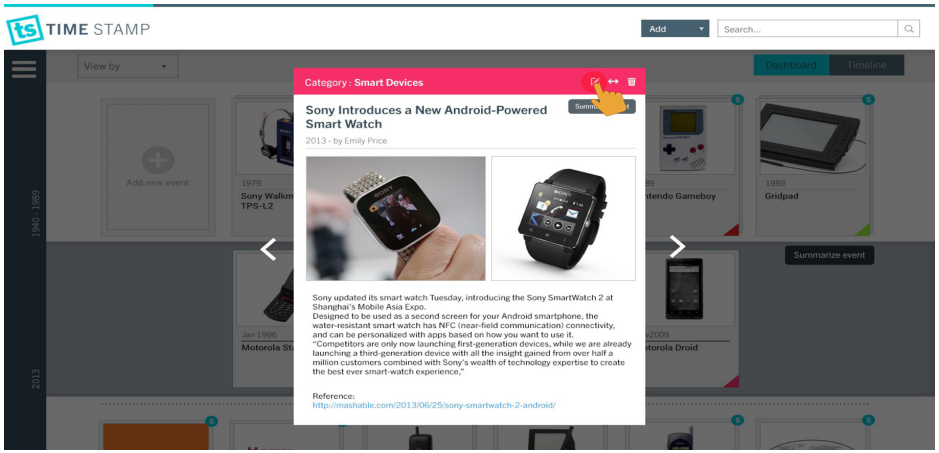


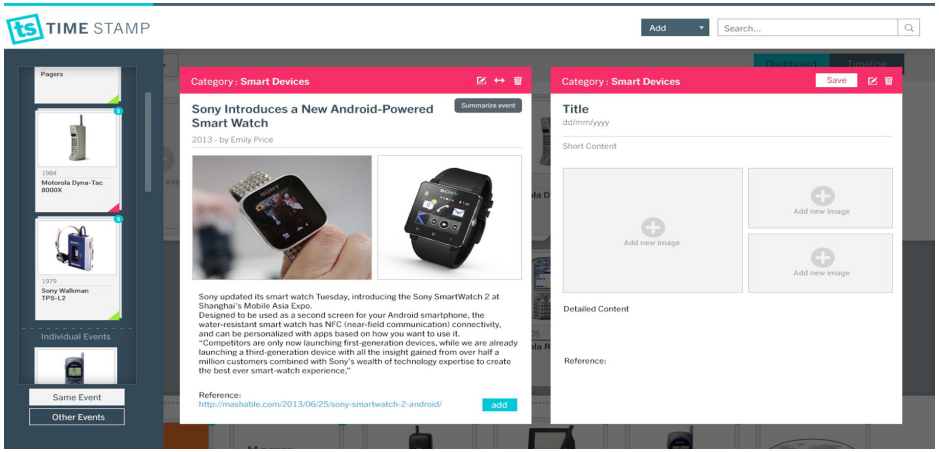


The dashboard is the place where all the saved pages are collected, based on project and events. Basically we were working on a board pinning all the events according to dates and related events, so it is a direct simulation where the same kind of technique is made to arrange the saved files in a sequence or order which we want. By default the events are arranged in year wise.

While doing the secondary research most of the time we are in a hurry saving the page and reading it later on and we might not even name it or categorize it properly. So dashboard is the place where we edit the saved contents rename it, add images, categorize it etc. But the application limits the user from editing the original content from the page. To say if the user is allowed to edit, the user will edit and as day goes he might not remember what the actual content was or the user might not even remember that he edited the content. So to avoid this the user are restricted from editing the content alone.

Dashboard





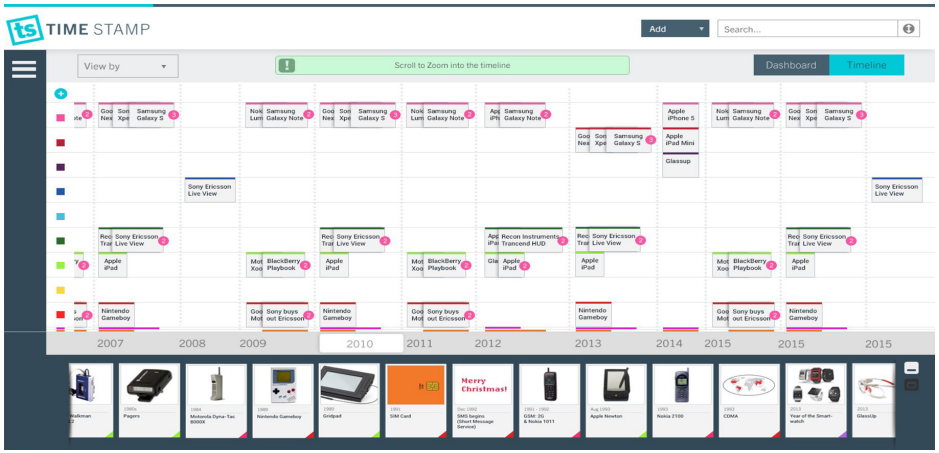
An additional feature of adding the url from the dashboard to save a page is also added. Adding to this feature the user is allowed to add an article by uploading his own content and images.

To make a concrete content for each event we just not collect only one article, we will collect three to five articles on the same event and confirm it. So here in dashboard we will have number of articles been collected under one single event. But for us to see in the final thing, the abstract is only required with the proper information. In real time what we do is we collect all the article print it out, highlight the important content from the articles and write it separately and with a required content, and then use it further in the time line.

Same way here we have an option to summarize the event from the articles, We select the articles which all has to be summarized or we just select the article which has already been collected under and event and summarize it. Here while summarizing we can create it in our own writing or drag and drop the important contents and images from the articles. After summarizing the articles only it is allowed to go to the Timeline wall.

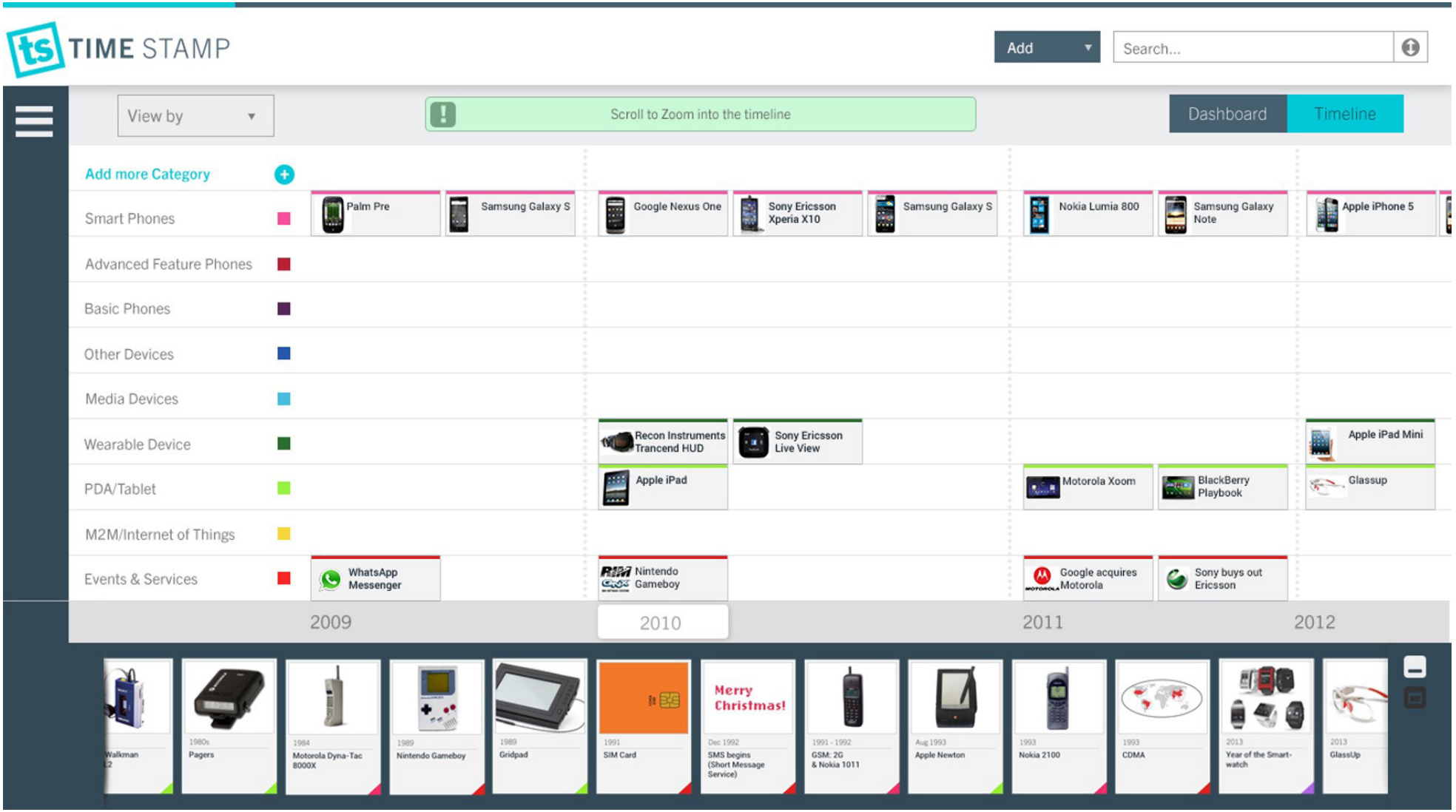
Timeline Interaction

Timeline



The main aim of the wall installation of the time line is to see the collected data as a whole. Zoom in to a particular event and zoom out to the whole project whenever needed. This will give us the whole idea about what has happened up-to-date and it is also possible to see patterns in it and plan the next events based on it.

Here in the virtual time line we have tried to imitate the same feature. After we collect the events in the dashboard the summarized events go to the time line automatically. And when we switch to timeline mode from dashboard everything is arranged in year wise and based on categories. With the help of mouse scroll the user will be allowed to zoom out and zoom in to a particular area and click over an event and check it out.


TIME STAMP
Add
Search...
View by
Scroll to Zoom into the timeline
Dashboard
Timeline
Add more Category
Smart Phones
Palm Pre
Samsung Galaxy S
Google Nexus One
Sony Ericsson Xperia X10
Samsung Galaxy S
Nokia Lumia 800
Samsung Galaxy Note
Apple iPhone 5
Advanced Feature Phones
Basic Phones
Other Devices
Media Devices
Wearable Device
Recon Instruments Trancend HUD
Sony Ericsson Live View
Apple iPad Mini
PDA/Tablet
Apple iPad
Motorola Xoom
BlackBerry Playbook
Glassup
M2M/Internet of Things
Events & Services
WhatsApp Messenger
Nintendo Gameboy
Google acquires Motorola
Sony buys out Ericsson
2009
2010
2011
2012
Walkman
1980s
Pagers
1984
Motorola Dyna-Tac 8000X
1989
Nintendo Gameboy
1989
Gridpad
1991
SIM Card
Dec 1992
SMS begins (Short Message Service)
1991 - 1992
GSM: 2G & Nokia 1011
Aug 1993
Apple Newton
1993
Nokia 2100
1993
CDMA
2013
Year of the Smart-watch
2013
GlassUp

Takeaway

From this Internship period we learnt alot. The major difference between this project and the projects which we have done is that we first went through the manual research process which was time taking and very hard to document, then we were made to work on the digital version of the system. It was a totally different approach.

As we used to do user studies and come to know about the problem and then we give a solution for it. Here we went through the problem by ourself and then we came out with a solution, this was more effective and also a great experience.

We also learnt to do intraction prototyping, this internship was like and extension to our last module of the semester which was 'Intraction Design'. So luckily we were able to go deeper into the subject during this internship time period.

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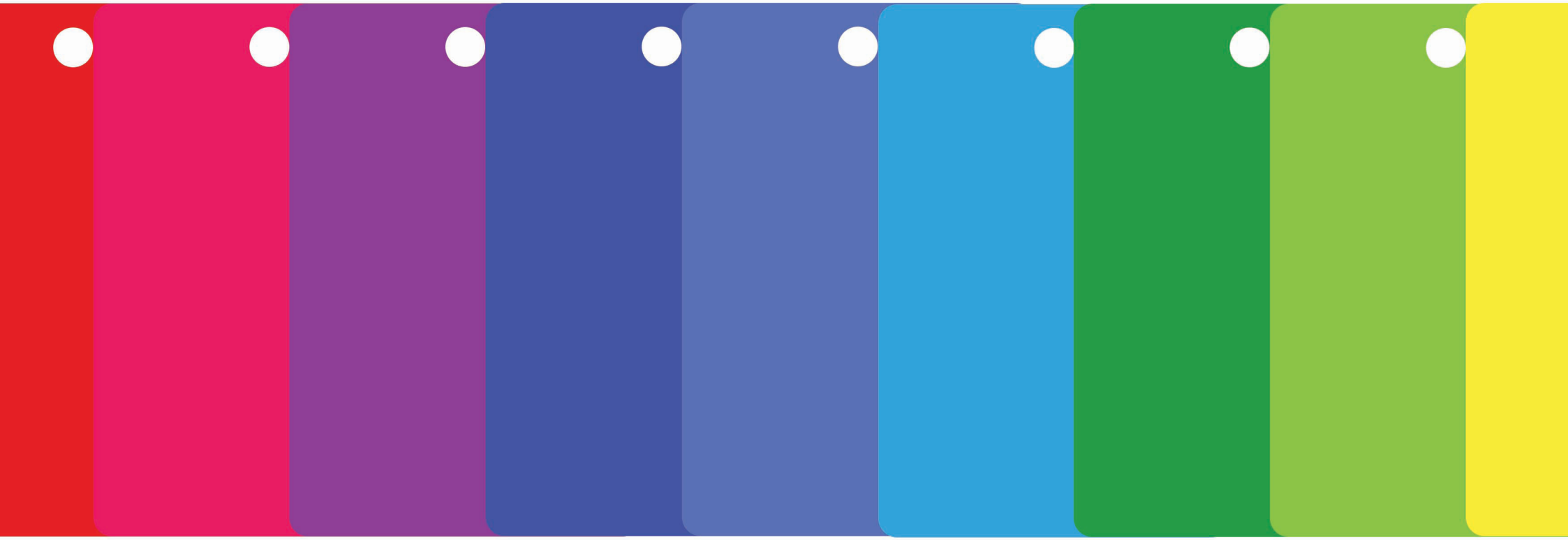

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