Curricular Learning for Secondary School Students

M. Des Degree Project (Stage 1)

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Approval sheet

The Interaction design project 2 entitled
'Curricular Learning for Secondary School Students' by Shreyasi Roy (76330020) is approved, in partial fulfillment of the requirements for Master of Design degree in Interaction design.

Guide :

Chairman :

Internal Examiner :

External Examiner

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Contents

Abstract

The Education system in India is fast evolving and is facing enormous challenges. This project is a step to know the possibilities and design oppurtunities available in the field of education in India.

The project is an attempt to discover and design a system that would enable students to use technology to enhance their knowledge and to continue to learn.The project is aimed to help the young minds access any piece of information imagined.

It tries to explore and provide a new source of inspiration to learners, keeping in mind the Indian context. The project is about making the content 'relevant' for the learner. Final concept is web based and it gives the learner a climate that encourages exploration, collaboration,excitement and competition. It provides alternative learning experiences to the child who currently do not have options other than textbook as a learning tool.

Education is not preparation for life; education is life itself.
-John Dewey

Introduction

About project
Why this project ?
Methodology
Timeline

About

Imagine learning in a classroom changes to such a situation where students collaborate with each other on solving a problem, maintain and update contents and resources online, receive teacher feedback online, or just discuss their school project, homework, complete their notes and share them among an entire school or across schools.

Similarly, there are millions of ideas floating around. Personalised education could be the biggest change to teaching and learning. It has the potential to re-engage the interest of thousands of unmotivated learners.

There are many who are fortunate to be able to use new technologies in schools. Sadly there is still a very large digital divide in our country. According to studies conducted - there is a relatively better availability of older technologies like the TVs or RCPs, in Indian schools than newer technological products like Multi-media projectors,Laptops and PDAs, which make learning more student-centric, are scarce.[Ref : 4]

After so much fever with the technology advancement, what happens with our schools? Not much. They continue to slog on with pleasure, passing out paper-based textbook after paper-based textbook, keeping the classrooms nearly free of the technology saturating the students' lives.

Why this project ?

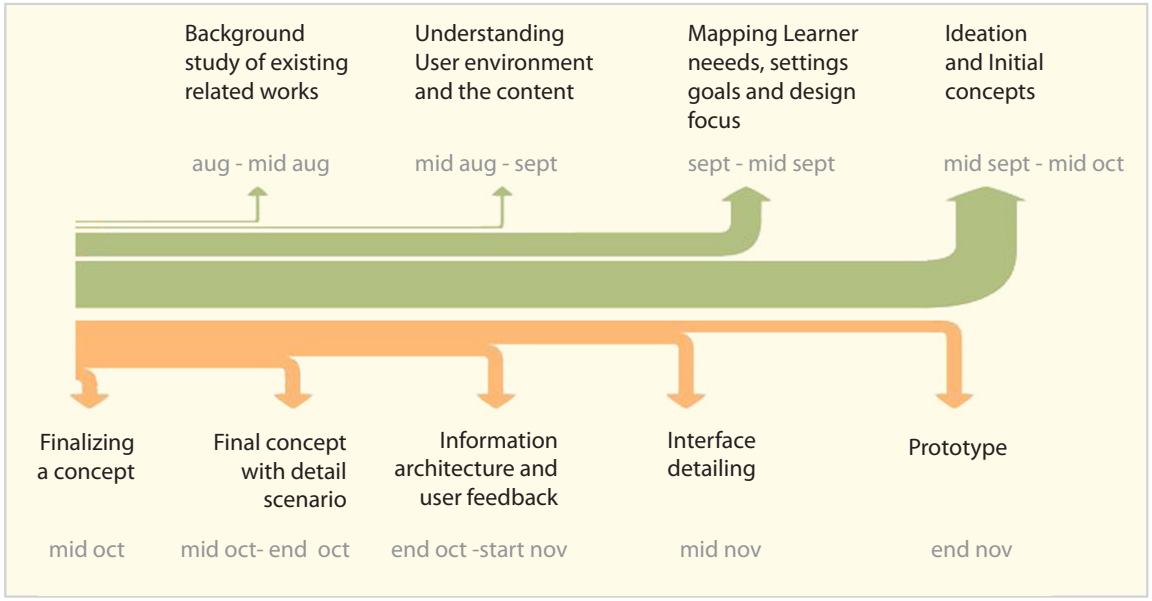
Learning is continual. It is not an activity that occurs outside of our daily lives. It is the product of experience and the goal of education. [Ref : 2] So a project that is a part of our daily lives and which will help achieve a goal was the aim.

With this project I wanted to grab the opportunity of understanding the needs of a student and create a student-centred environment. Motivating the learners by making the content taught to him relevant and interesting was the key objective. I also aimed to come up with a design solution that is implementable and applicable in today's scenario of education pattern.

This project was taken so that I could come up with ideas that can give an impetus to those students who have less guidance and assistance in understanding their curriculum. The attempt was to create a learning environment which is interactive, student centric, authentic and on-demand.

Our mind is a network…an ecology. It adapts to the environment

Methodology and Timeline



1. Background study : I studied the existing related works

2. User Studies : To undestand my learner I went to my user in schools and also looked at the user envioronment.

3. Analysis : After knowing the learner, I found out the problems and mapped the needs of the user. Based on the needs, goals and design focus was set.

4. Initial Concepts : Brainstorming sessions and ideation was done based on the design brief fulfilling the keywords

5. Concept Finalization : Selection from all concepts to finalize one of them

6. Scenario explaining Final concept : Making a detailed scenario of the final concept

7. Information architecture : To make the information architecture explaining the whole conceptual model

8. Interface detailing : Making the wireframes of the interface

9. Prototyping : Making a final prototype of the concept.

Background Study

Learning theories
History
Existing Technologies
Available Insights

Learning Theories

The study of the Learning theories helped me understand how people learn.It made me know how learning happens to change according to age. It told me the various process and purpose of learning.

1. Piaget's Stage Theory of Cognitive Development

It is a description of cognitive development as four distinct stages in children:

Sensorimotor - (Birth to 2 years old). The infant builds an understanding of himself or herself and reality

Preoperational - (ages 2 to 4). The child is not yet able to conceptualize abstractly and needs concrete physical situations.

Concrete - (ages 7 to 11). The child begins to think abstractly and conceptualize, creating logical structures that explain his or her physical experiences.

Formal – (beginning at ages 11 to 15). Cognition reaches its final form.[Ref: 3]

Jean Piaget (1896-1980)

During the 1970s and 1980s, Piaget's works also inspired the transformation of European and American education, including both theory and practice, leading to a more 'child-centred' approach. Mainly, Piaget influenced two parts of education: early education and moral education.[Ref : 3]

How Piaget's Theory Impacts Learning

Curriculum--Educators must plan a developmentally appropriate curriculum that enhances their students' logical and conceptual growth.

Instruction--Teachers must emphasize the critical role that experiences or interactions with the surrounding environment, play in student learning. For example, instructors have to take into account the role that fundamental concepts, such as the permanence of objects, play in establishing cognitive structures.[Ref :17]

Learning Theories

2. Constructivist theory

It is based on building of new ideas or concepts on current and past experience aspect of learning. Constructivist theory views each learner as a unique individual with unique needs and backgrounds.

It incorporats the new experience into an already existing framework without changing that framework. Here the internalized concepts, rules, and general principles may consequently be applied in a practical real-world context. [Ref : 3]

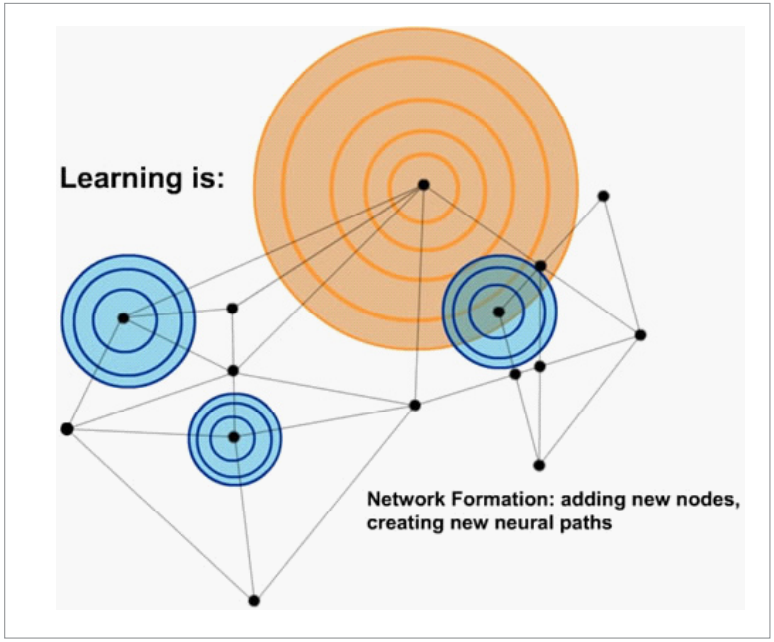
In the constructivist perspective, knowledge is constructed by the individual through his interactions with his environment. How one perceives knowledge and the process of coming to know provides the basis for educational practice. [Ref : 9,10]

3. Vygotsky

Vygotsky investigated child development and how this was guided by the role of culture and interpersonal communication

CULTURAL MEDIATION:
How child learns the habits of mind of her/his culture including speech patterns, written language, and other symbolic knowledge

SELF REGULATION:
Vygotsky referred to the development of social rules that develop through play. [Ref.3]



5. Learning as Network Forming

Learning is the process of creating networks (see Figure) Nodes are external entities which we can use to form a network. Or nodes may be people, organizations, libraries, web sites, books, journals, database, or any other source of information.

Connectivism is a theory describing how learning happens in a digital age. Connectivism is driven by the understanding that decisions are based on rapidly changing facts. New knowledge is continually being acquired.

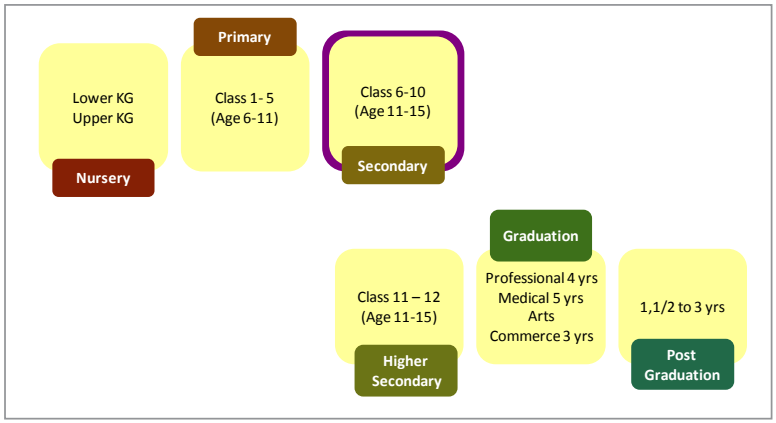
Drawing distinctions between important and unimportant knowledge is vital. The ability to recognize when new knowledge arrives is the key. When academic environments change, adjustments need to be made in ones thinking. The assumptions should ensure that one is basing his decision on an accurate foundation.[Ref :7]

History

Education in India has a very long history. Ancient India had the tradition of 'Gurukuls'. Under this system students have to live at the 'Ashram' (abode) of the teacher and get the education. This form of the education is known as 'Guru-Shishya Pramapara'.

At that time education was treated as a matter of personal concern and it was not at all emphasized on mass production like modern education industry.

The present educational system of India is an implantation of British rulers. Before the advent of British in India, education system was private one.[Ref : 4]



Today education system in India can be divided into many stages :

Nursery - It consists of children of 3-5 years of age studying in lower kindergarten and upper kindergarten.

Primary - It includes the age group of children of 6-11 years studying in classes from first to fifth.

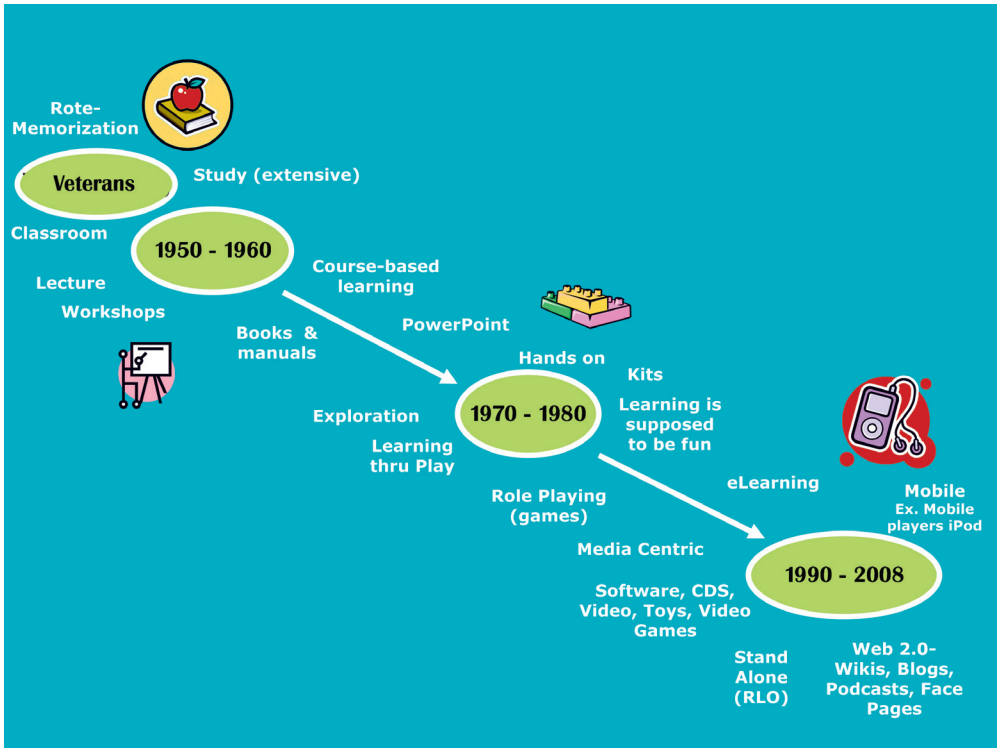
Secondary - it includes students studying in classes sixth to tenth.

Higher Secondary - Includes students studying in eleventh and twelfth classes.

Undergraduate - Here, a student goes through higher education, which is completed in college. This course may vary according to the subject pursued by the student.

Postgraduate - After completing graduation a student may opt for post graduation to further add to his qualifications.

Changing Phase in Education



The image [Ref : 11] beside shows the change in phase of education, with the multiple learning styles. Here each learning style has its preferences and is influenced by time.

The four main generations in the workforce:
1.Veterans
2.1950
3.1960-1970,
4.1980-1990.

The main goal of this image is to show the spectrum of learning methods and media that all the generations referred and to emphasize the importance of making all of these media available to students when appropriate to the task or content being taught.

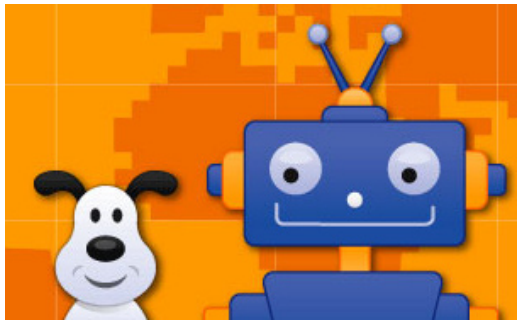
The advancement in technology and its effect in the cycle of learning styles is evident in here.

Existing Technologies

Interactive Whiteboard

Attachable Devices -These utilise existing classroom whiteboards. These technologies use an attachable receiver to interact via infrared and or wireless technology to receive input via 'pens' that have inbuilt technology. Connection and eventual computer control is then made via cable or wireless connections.

Boards - These boards are touch sensitive (i.e. can use finger, stylus or pen for imput). The ability for students to interact easily with the boards, especially the touch sensitive versions create powerful motivating and learning experience.
[Ref. 18]



Thinkquest.org

ThinkQuest is a protected, online learning platform that enables teachers to integrate learning projects into their classroom curriculum and students to develop 21st century skills. It includes the following: a project environment where teachers and students engage in collaborative learning; a competition space where students participate in technology contests; the award-winning ThinkQuest Library, a learning resource visited by millions; and a professional development program for educators. [Ref. 15]

Available Insights

‘Constructivism - Emerging Model of Pedagogy’

This came out very strongly during interactions with students. The emerging model of pedagogy is called constructivism, where students learn through a process in which they actively engage themselves, manage and play a large role in determining what they are going to learn and how and also assessing whether they are doing well or what they need to do to improve.

Today classroom lectures are given with Power Point presentations and students solve problems on computers instead of books, there are ways the computer can make this model more efficient and extend access. [Ref : 5]

Nurturing the New World Trends in Education

Its not about the magnificent building with its lush green fields, well-lit ventilated class-rooms, the library, and the mathematical labs. Its about the well designed effort to fulfill the needs of a twenty first century learning environment that equips all to keep pace with multiple learning methods of the future. [Ref : 19]

Knowledge Seeking and sharing

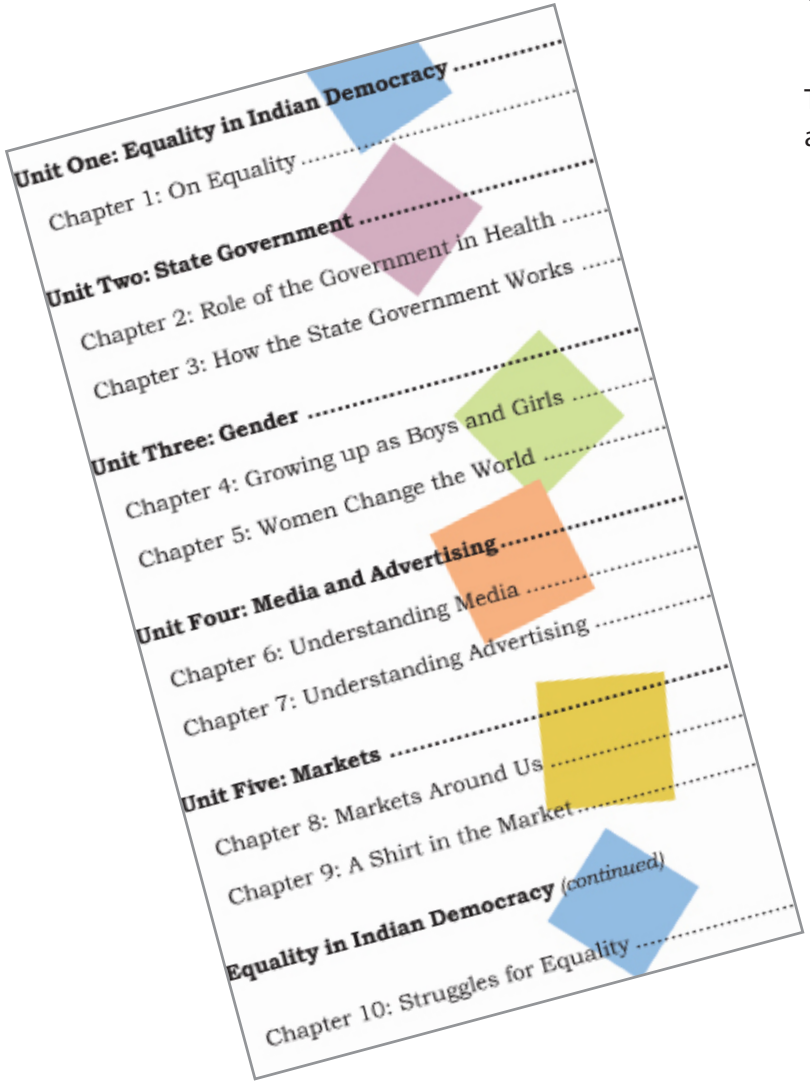
Vannevar Bush[1945] observed that people don’t think or learn in a linear fashion, but rather take off in all kinds of different directions as they integrate what they are discovering into what they already know. Hence taking what is available on textbooks and then applying personal touch to it makes it more meaningful for the learner. And when this piece of work is shared with other learners it creates a big potential system of seek and share. [Ref: 20]

Content and User

Content study
User Identification
User Environment

Content Study

The curricular textbooks of NCERT of class 7th std were taken as the 'reference' content for the project. [Ref : 21]



About the Content

The NCERT (National Council of Educational Research and Training), sets the tone for India's education process,and they have recognized the learning disparities between school knowledge and everyday experience.

They are coming up with new philosophies and vision. The Content in NCERT textbook tries to teach concepts to learners by experiential learning and learning by fun.

In 2006, a major survey of India's top private schools spread across five metros was jointly conducted by a research organization called Educational Initiatives, Ahmedabad and Wipro Applying Thought, Bangalore. The study tested over 32,000 students of Classes IV, VI, and VIII on learning and understanding of key concepts. It was basically conducted to assess the quality of education imparted in elite schools. The results were quite disquieting. Some trends highlighted were:

- Students appear to be learning mechanically rather than truly understanding the content in the textbooks.
- Learning is rote-based and does not focus on real knowledge.
- The ability to apply learning to real life situations-essential for competence building-was extremely poor.
- Indian students fare poorly in comparison to International counterparts. (Source: India Today)

The survey strikes at the core of what is increasingly going wrong with the approach to education - the focus on high value scores in board exams rather than concentrating on imparting real learning. [Ref: Sanen Imchen, Morung Express]

Sometimes one looks at our current society in which social problems seem to be getting worse. Just learning more mathematics, geography, or history does not seem to be equipping youngsters better to face life.

The need for the children to learn other skills through currricular is considered vital by parents as well. They are also concerned that the present system of education and the content in the curriculum is not moulding their children into wholesome well rounded personalities. The content is not helping a learner to adjust to the changing circumstances.It is not building on his adaptive qualities.

The content although being skill and task based,seems superficial. It lacks the feeling of going through a joyful experience and accomplishing something that is real and lifelong.

Content and User

Problems with the Content

'What then is the purpose of education? Rather than devise complex theoretical interpretations, it is better to start by looking to the child who sits on your lap and ask yourself: What can I do to assure that this child will be able to lead the happiest life possible?"
- Tsunebaro Makiguchi (a reformist educator, author and philosopher
The above qoute tells us that learning or education is not just about imparting knowledge, but training young minds with skills which lead them to betterment of self and society. It is also about making their fundamental channels for learning such that it becomes their learning style later in life.

NCERT books content is very well organised in terms of cognition and it being a national-level curriculum has a structured approach.

But then they are overloaded with lot of information and are not open to subjective interpretation. They miss out on regional contents that the child must know. Also the chapters cannot be understood without the help of a teacher or someone elder.

Content which are chunked appropriatly in curricular textbooks into chapters are sometimes boring and have very less scope for exploration. Although the textbooks have lot of tasks for the learners,they are still lacking relevancy.

User Identification

Student – Class 7th Age- around 12 years of age

According to Piaget's Stage Theory of Cognitive Development the User is in the fourth stage which is the Formal – (beginning at ages 11 to 15). where cognition reaches its final form.

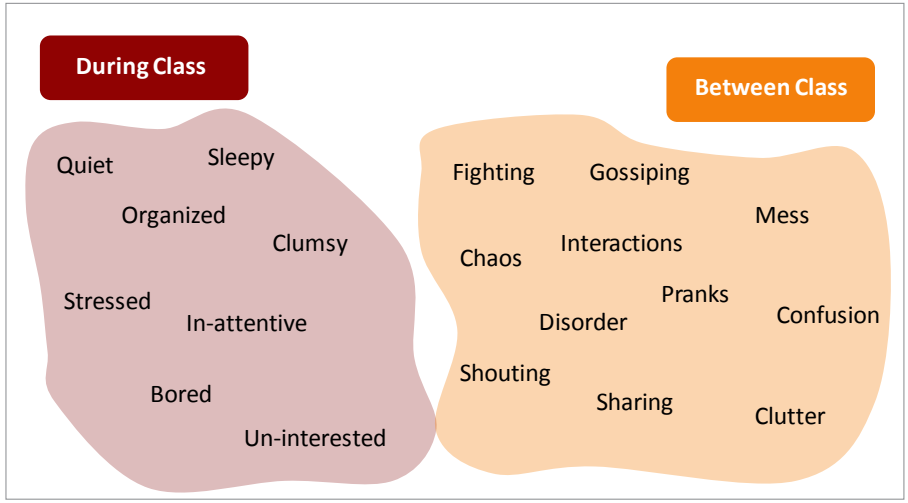
They have the ability to think, resolve and draw conclusions from the information available.They can understand such things as love, "shades of grey", logical proofs, politics and values. Biological factors may be traced to this stage as it occurs during puberty.Some do not develop this form of reasoning fully enough, so they remain, even as adults, concrete operational thinkers. [Ref : 3]This age group was identified as most of the drop outs from shcools happens at this stage.

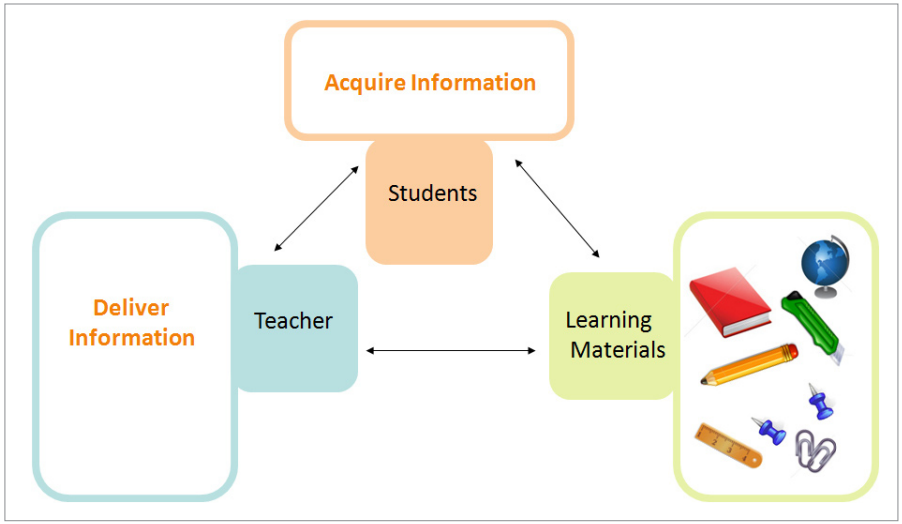
User Environment

To understand the user group and his environment I went to few schools and spent time with them interacting and attending classes with them.

(Location) Kendriya Vidyalaya, IIT Powai campus

Classroom Environment





Understanding the classroom environment was fun and helped me know the learners closely.Attending few classes with the learners, made me know what are their needs.I realized that the learner is sometimes so confused and un-interesed in whatever is taught to him as they do not realize its importance.They finds no relevance to the content being taught.

The classroom can be clearly divided into 3 parts:

The Teacher - who delivers information
The Students - who acquire information
Learning Materials - help in providing information

Understanding my Learners

Ku. Mahi Patil
(7th Std Student)

She is intelligent and very enthusiastic in knowing about new things happening in and around her.Enjoys to interact with her friends and discuss with them about different movies and games.

She uses internet when she has been given science projects or has to download any music.

Learning for her is not fun, if she doesnt like a particular subject. So just memorizes the subject without knowing what it means or its context.

Ishaan Chauhan
(8th Std Student)

He is an average student in terms of studies, naughty and very talkative but very good in sports.He loves to play pranks on other students and tease them. Fond of playing Fifa, Road rash, Counter Strike.

In classroom, he is not keen on what is being taught but very much interested if it is related to making something in 3-D.

According to him learning is very boring. He feels opening a textbook and reading it is not at all adventurous or exciting.

Summary - Gist of User Studies

School Perspective :

- Schools are run on lean budgets and limited resources
- Private and even public schools are looking at technology with an open mind
- Advancement in technology in education is categorised as a necessity rather than a luxury
- Willing to put initial investment to become technology savvy and improve the quality of their education higher
- Being a teacher will be more fun and challenging than before, therefore the quality of the teacher will have to be much more superior.

Learners Perspective :

- Students want to be online in the various platforms that are made available to them.
- They are aware of the social networking communities or sports and entertainment blogs, websites.
- Every student wants to execute their ideas and create massive amount of content.
- Un-motivated learners need a new technological backing to inspire them and re-engage their interest.

Analysis

Problems Identification
Needs Mapping
Goals and Oppurtunities

Analysis

Problems Identification

Based on the interactions with the learners and after knowing the user environment some of the following problems were identified:

- The student is not able to understand that how the things learnt will be helpful to him in future.
- The student is not motivated to go to school in the morning
- Students do not get time to interact with students of other classes
- The student does not identify or understand the context of the information given in the textbook
- The student cannot understand the concepts when absent in class
- They misunderstand and misinterpret concepts and information, but does not discuss it with friends
- They are bored if the teacher doesnt teach them in an interesting manner
- They are unable to know what is being taught in other schools and thereby compare understanding
- Classroom environment is dull and lacks tech-savvy gadgets

Tehnology savviness is one more parameter which is very important to be considered as far as complexity of the solution is concerned. Although the learners today prefer to receive information quickly, be adept at processing information rapidly, prefer multi-tasking and have a low tolerance for lectures and rely heavily on communications technologies to access information, the solution has to cater to their age-group. The New Generation has totally embraced the use of emerging technologies to enhance their understanding of the subject-matter, to complete their daily assignments, homework and projects.

Needs Mapping

Goals

Student goals :

- The student should be able to explore different fields and identify with the real world.
- The student should be motivated everyday to go to school
- They should be able to learn collaboratively
- The information or content provided to them should be made relevant to him
- The concepts should be made easier to grasp even if the student has missed a lecture
- The common misunderstandings and errors should be minimised
- They should be able to compare their understanding of a particular concept with other students

Teacher goals :

- The teacher should be able to understand the capabilities of the students
- The teacher should be trained and maintain expertise in the subject he teaches
- The teacher should know how to assess a particular learner and also be able to guide accordingly.

Opportunities

- Content generation as per learners requirement and understanding
- Involve learner in the Content creation
- Enabling the content to update and change dynamically, after recognizing the specific learner.
- Learners don't want to generate content from scrap.So giving them readily available information and data which they can re-organise,explore and play with it.
- Making content sharing possible among learners
- Building social networks across learners to evoke collaborative learning, competition, motivation
- Integrate technology in learning to add excitement and fun.

Initial Concepts

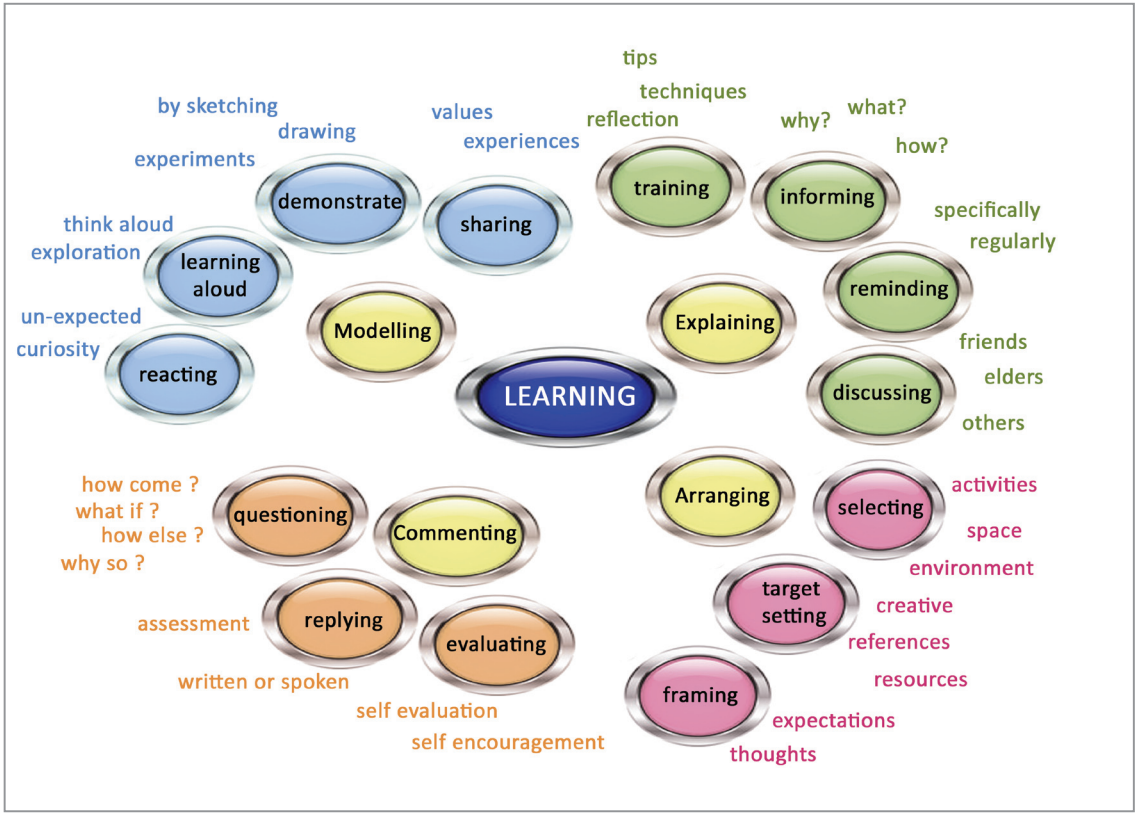
Brainstorming
Ideation
Concepts

Brainstorming

Understanding Learning

Learning can happen in four ways :

- Explaination - By discussing with others, explaining ideas and informing new thoughts, giving training of what one already knows
- Arrangement - By self arrangement of knowledge aquired and catogorization of those things in terms of space, environment,activities for remebrance
- Comments - By learning through questioning self or other and remebering them through making notes or writing it down in books



- Model Making - By sharing past experiences and making visual in mind. By exploration and also learning happens most of the time out of curiosity and experimentation. [Ref : 22]

Initial approach

After understanding and taking in consideration the Content and knowing the needs of the learners the initial approach was to make the content personalized and match it with the real world.

The content that is given on textbooks is static and not dynamic. A learner can't do anything as far as the content of the textbook is concerned. Looking at the need of the learner to have content change dynamically according to time and space was one of the initial approaches.

I went through different curricular chapters which were more textual and tried to present the same content in a way that it becomes dynamic and exciting to the learner.

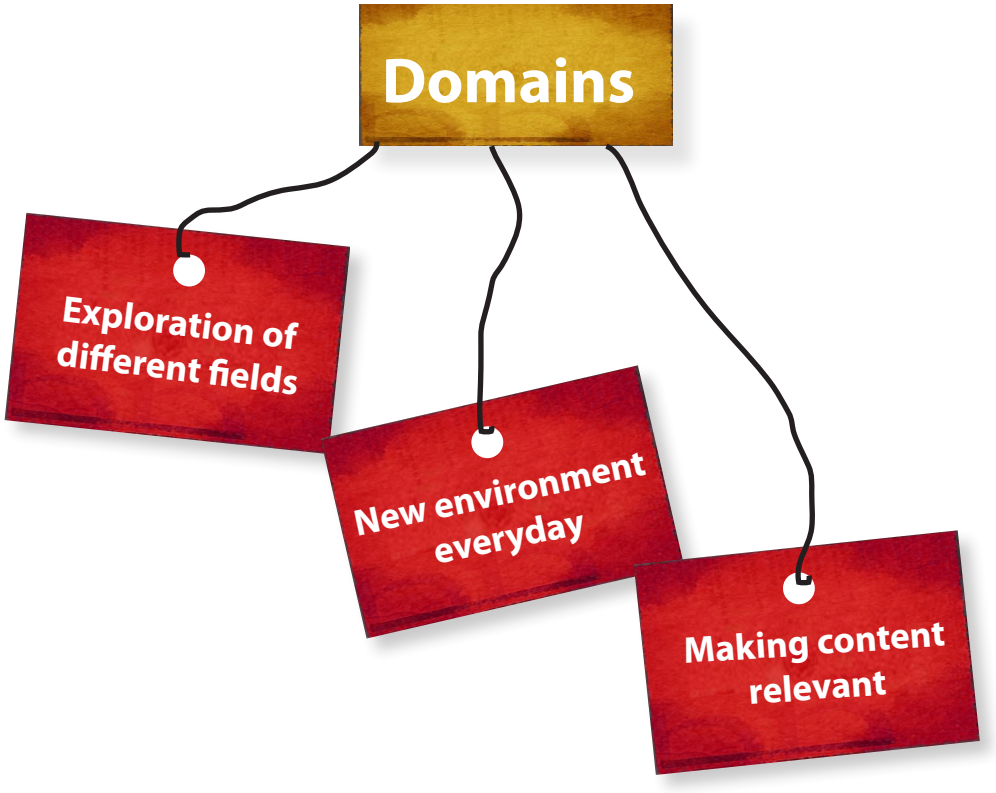
Going through the content and ideation for new approaches also helped me analyze my learner better.

Keywords

Some of the keywords taken for brainstorming ideas are :

- collborate
- share
- socialize
- exciting
- entertaining
- logical
- personalized
- unforced

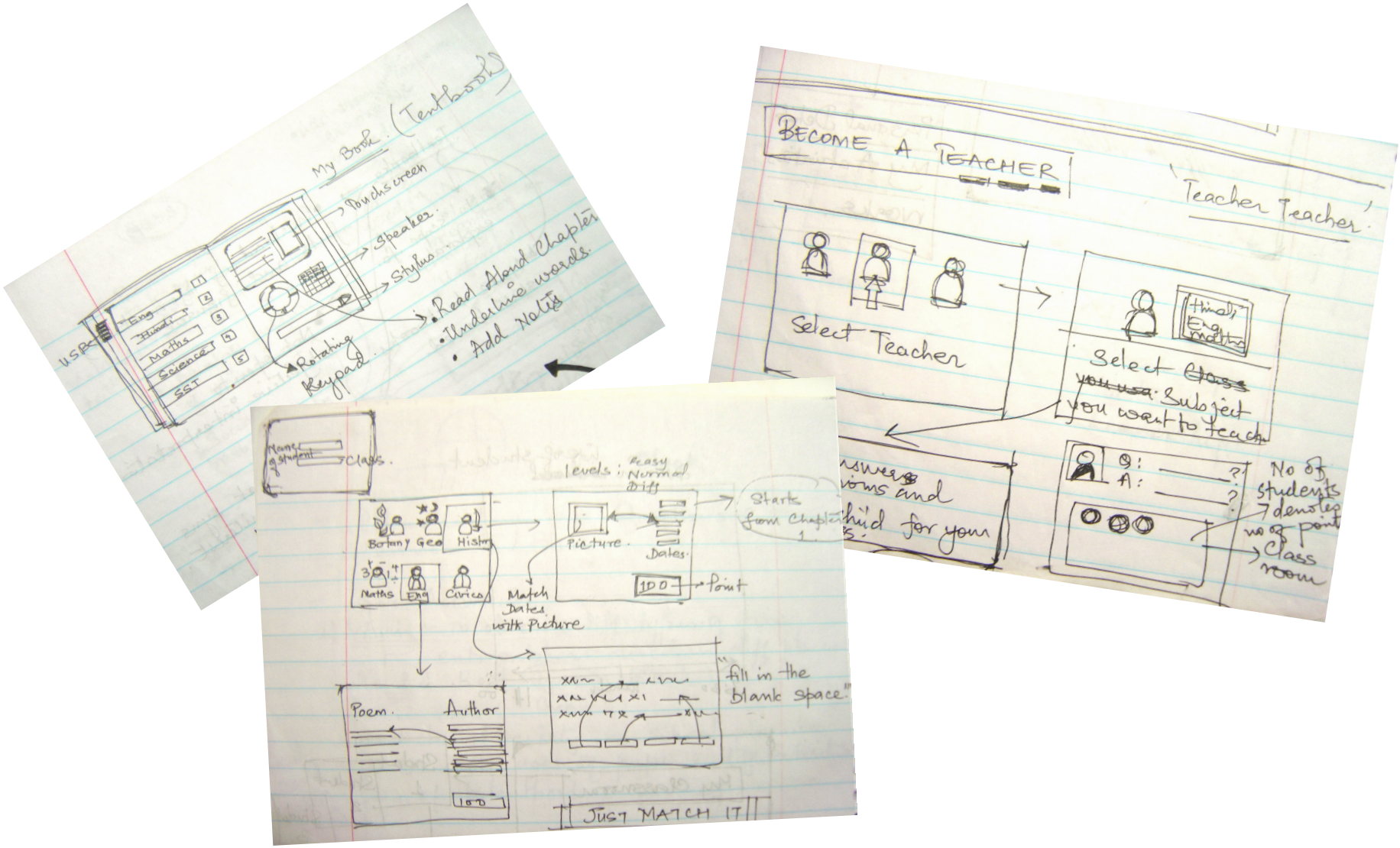
Domains for ideations



Based on the problems identified and goals, the following domains for ideation were considered. The solution should try to solve some of the below and include the keywords in them.

- A system that will help him access his own field and explore and make a career focus
- A new environment where the student is motivated to participate and not miss even a single class
- An interactive system that connects and makes collaborative learning possible between different classrooms in same school or different schools
- A system where the information is personalized for the student according to his needs
- A system that enhances Iterative learning(one which can be seen multiple times) without setting too much of cognitive load on the student
- A system that help the student identify the errors in his learning

Initial doodling



Initial Concepts

Concept 1 :

Exploration of different fields

Every student is very much keen to decide on what he will like to pursue as his career during his teens.

A game that will enable the learner to indirectly know about the different fields and career aspects.

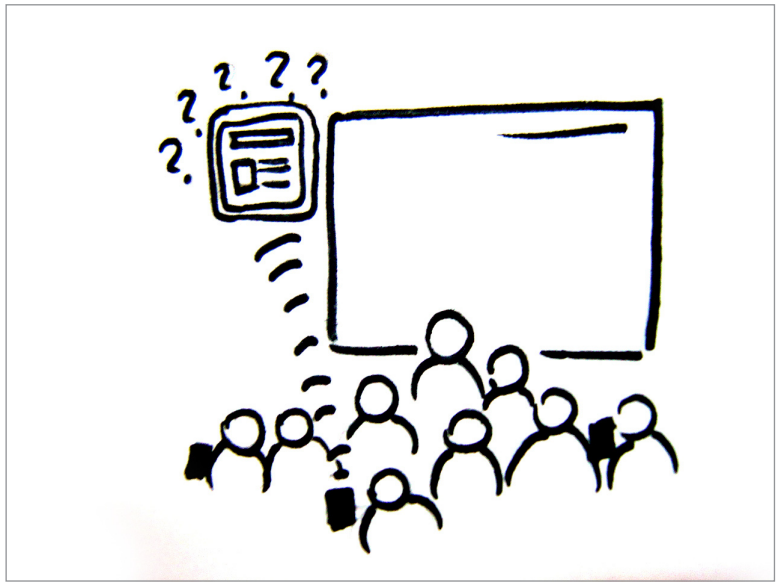
Here in this game the learner shows interest in a particular field or career of his interest and according to that the questions pop-up to him relating it to a subject of his curriculum.

As questions are answered correctly, the learner slowly moves to becoming the master in that particular career.

Eg. If the learner shows interest in becoming a doctor.
He becomes a doctor and he is shown the clinic where he has to answer the questions asked by the patients.

Here the learner is encouraged to answer so as to see how successfull he can become in that particualr career.

Concept 2 :



New Environment Everyday

An interactive display screen is put up in the classroom and every student is given a personal device attached to the screen through wi-fi.

Everyday in the morning when the student enters the class-room, a set of random questions appear to float in the screen. Each student whenever interested and free can answer those questions.

The questions can be updated by the students themselves and answers can be evaluated by the teachers.

Concept 3 :

Making Content Relevant

The content that is available in the textbook is not relevant to all my learners. Making the content relevant was the main design focus.

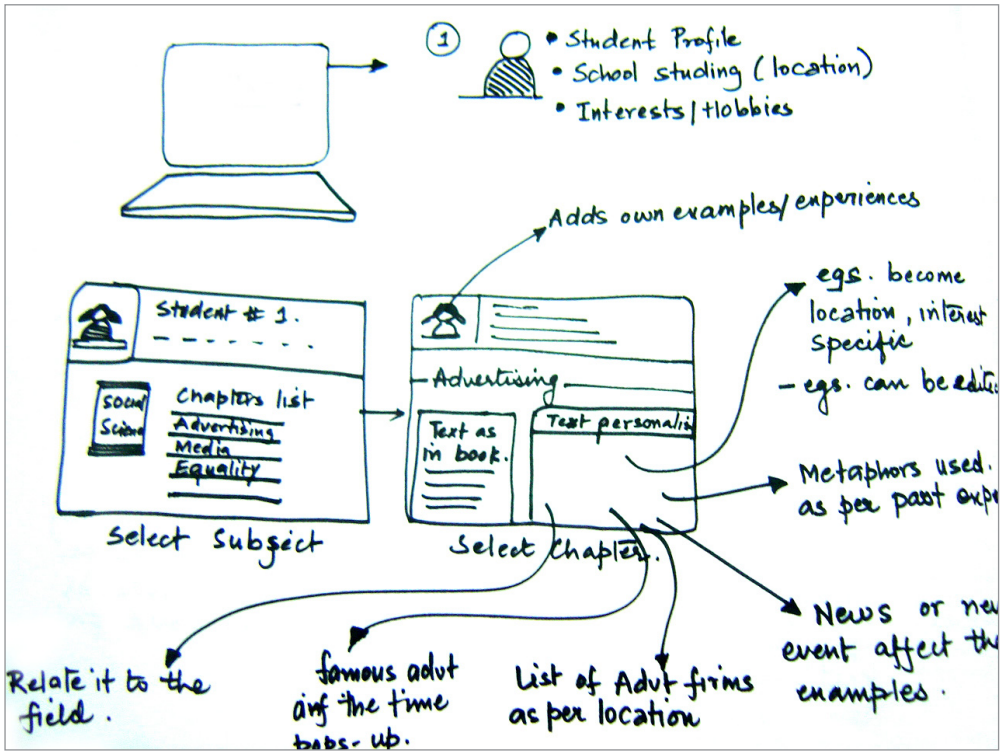
Relevancy by making it time based, space based and interest based is the idea.

Final Concept

Product Profile
Concept Scenario
Concept Map
Information Architecture
Website Interface

Final Concept - My Textbook

Concept 3 : Making Content Relevant



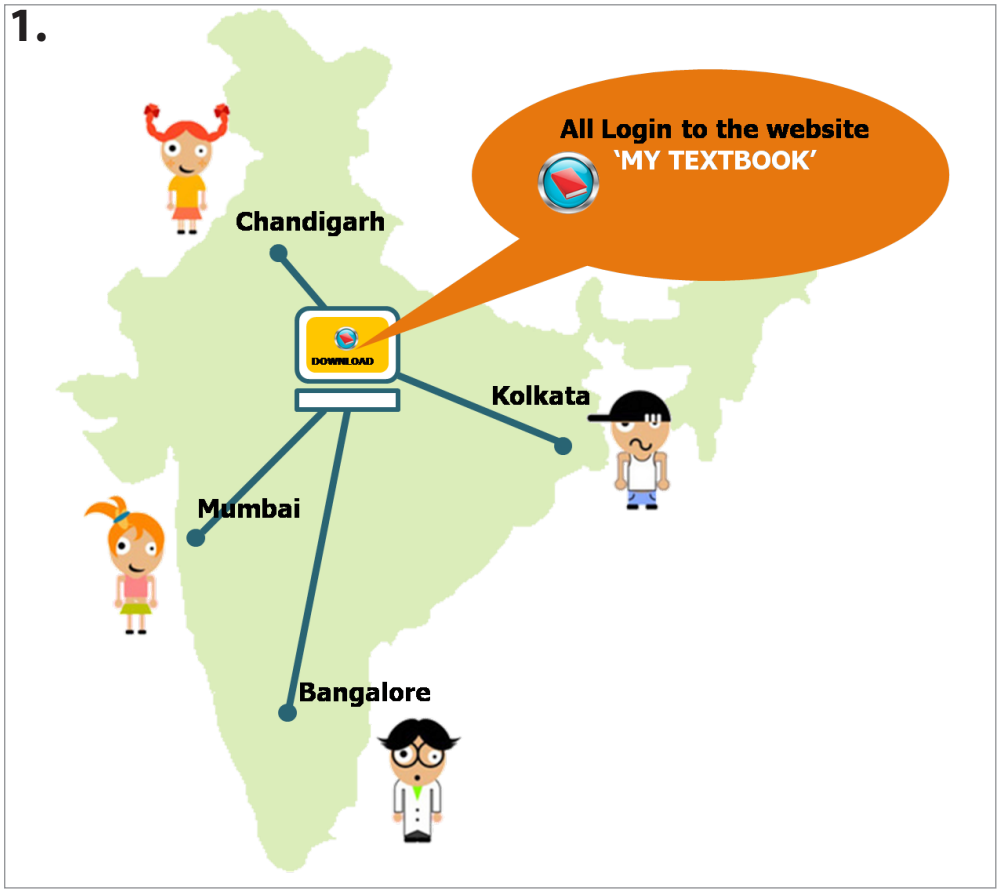
Introduction

After the initial concepts I decided to finalize the 3rd concept which was based on making the Content relevant.

Product Profile :

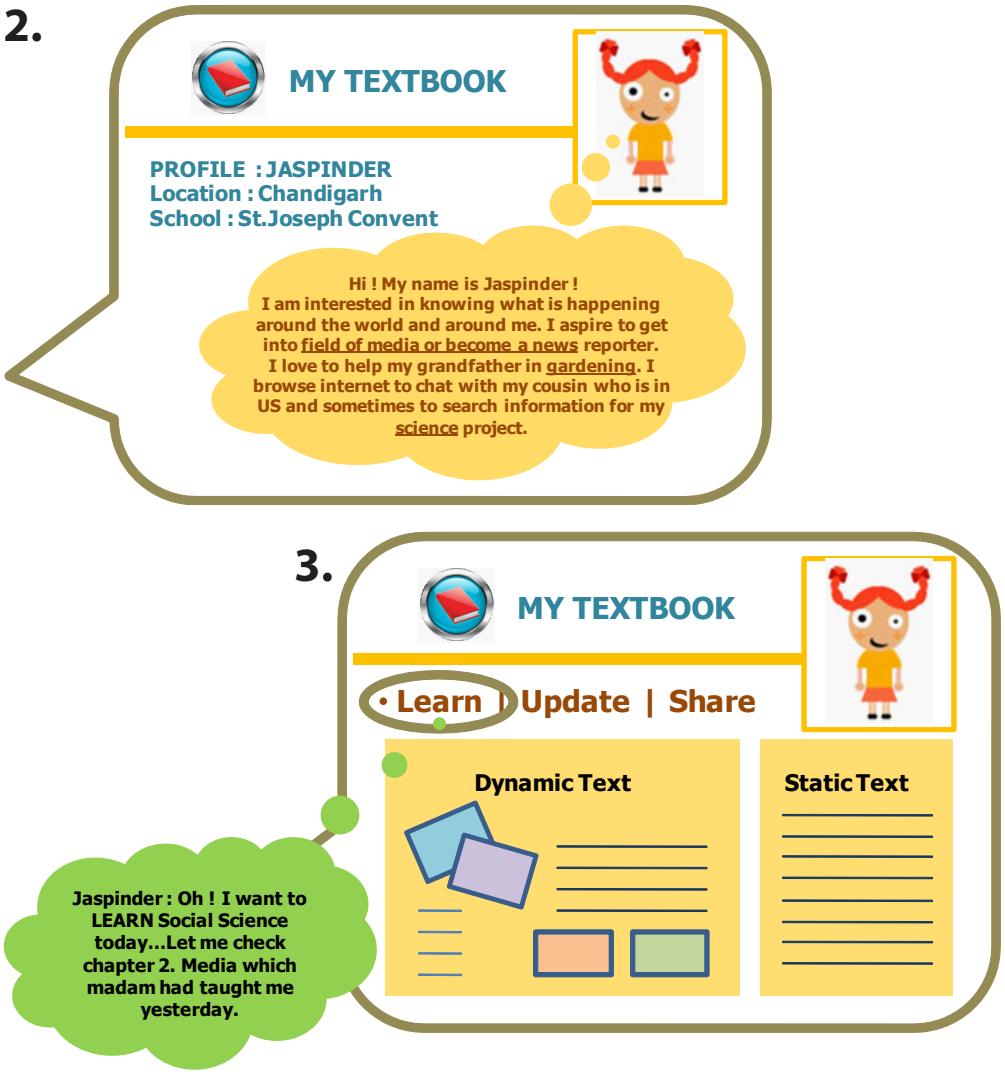
- The product- 'My Textbook' is a website and it comes under the goal -oriented domain, where the product tries to acheive the goal of providing the learner with content which is relevant to him and which gets dynamically updated
- It is free to use and the learner can use it as per his own wish
- It is a web based product and it can be used through Desktops,Laptops, mobiles etc.
- The main user of the website are the students and the teachers are the secondary users.
- Thelevel of the complexity of the product is expected to be moderate.
- The nature of the market is wide market across segments
- The product provides motivation for a learner and creates options other than books.

Concept - Scenario



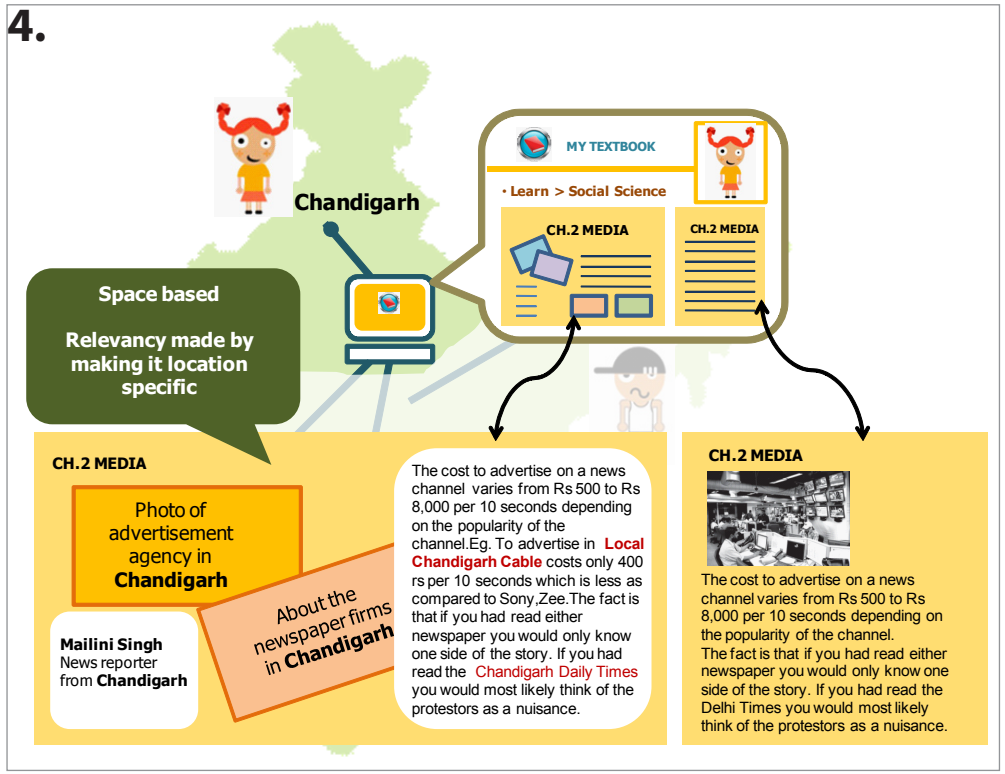
Learners from different locations login to the website MY TEXTBOOK.com. All of them make their profiles in it.

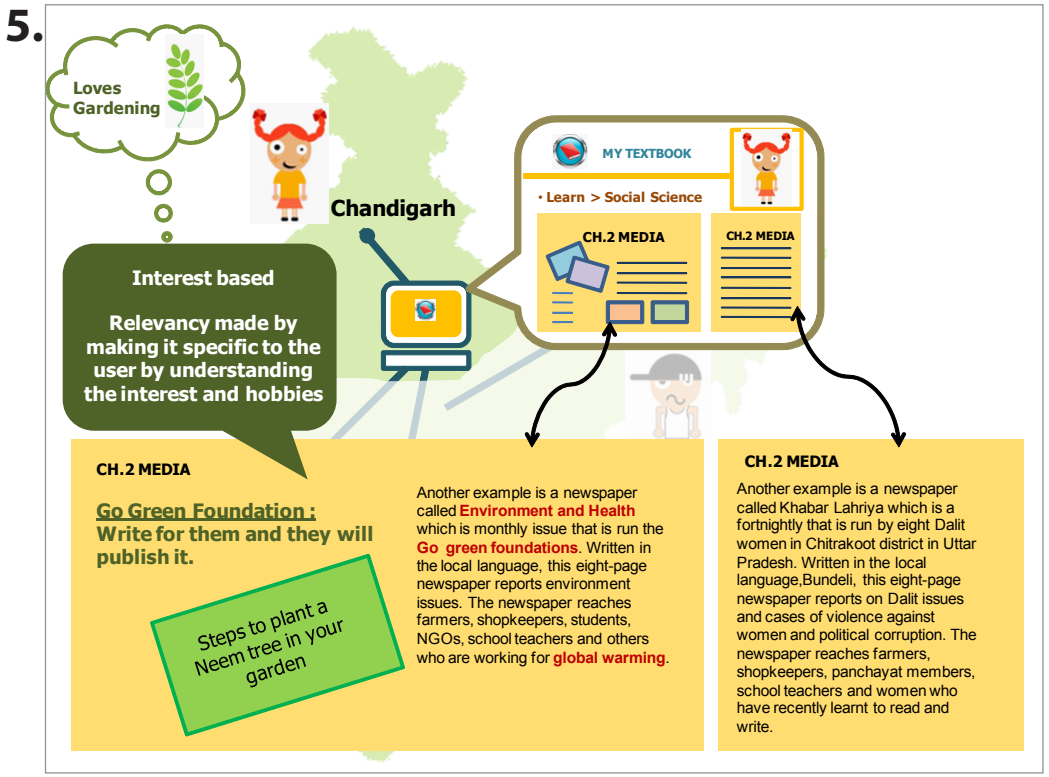
Jaspinder is a learner,who has created her profile and logs in to learn Social Science.



Final Concept

Concept - Scenario





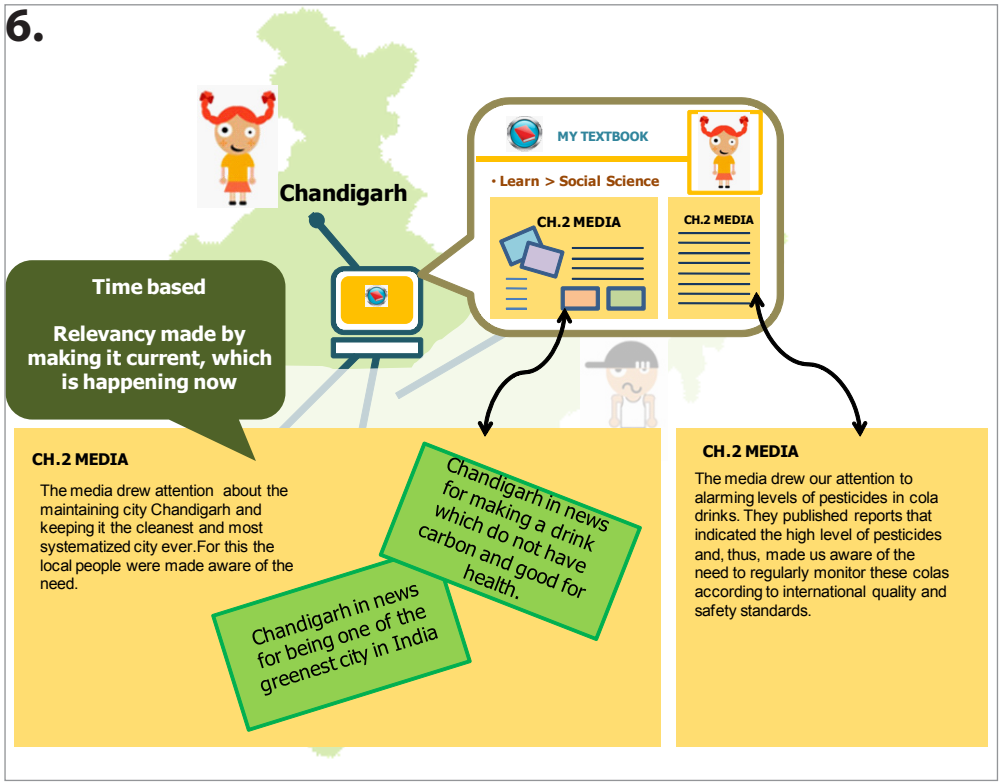
Jaspinder wants to ***LEARN*** a chapter called Media, so as soon as she searches for the keyword 'media' the system throws content which is relevant to Jaspinder

Space Based - here the relevancy of content is made by making the content location specific to the learner (image.4)
Interest based - here the hobbies and likings of the learner is considered to make the content interesting and exciting (image.5)
Time based - here the relevancy is made by making it current, which is happening now, so that the learner is able to connect the content with the real world and gain knowledge about what is current and in the news. (image.6)

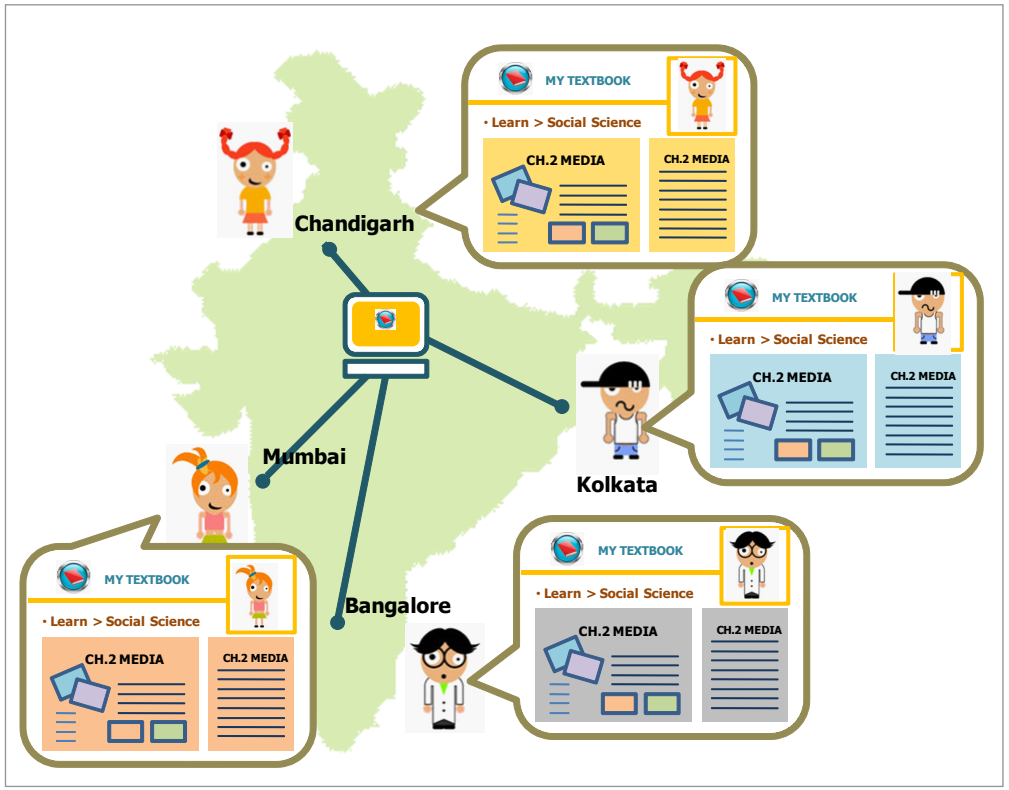
Final Concept

Concept - Scenario

6.



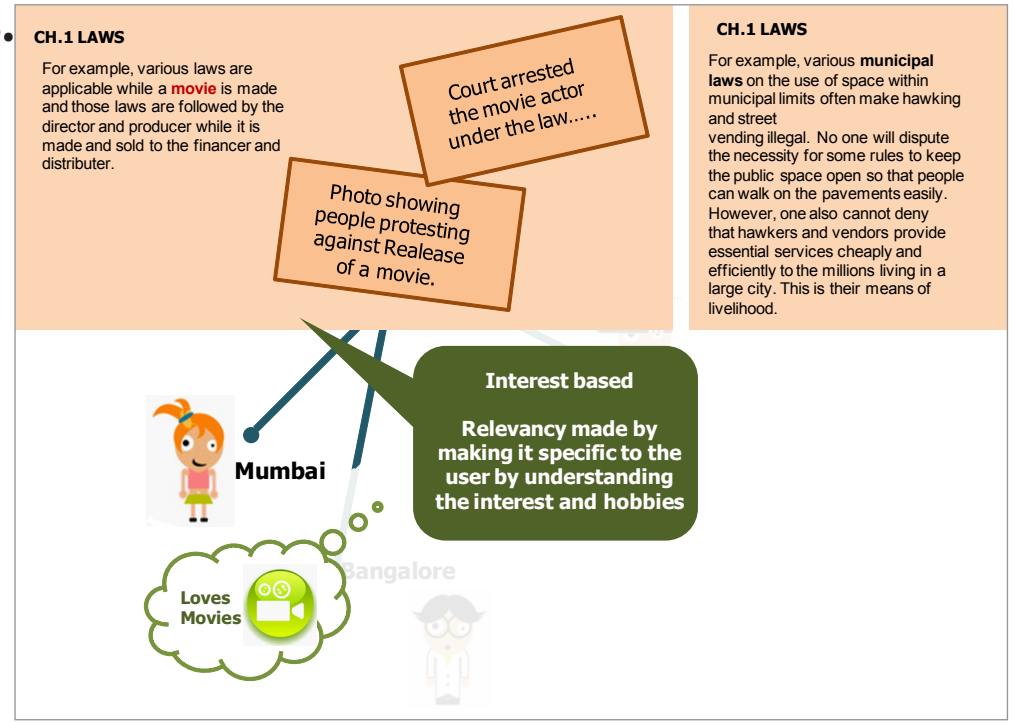
7.



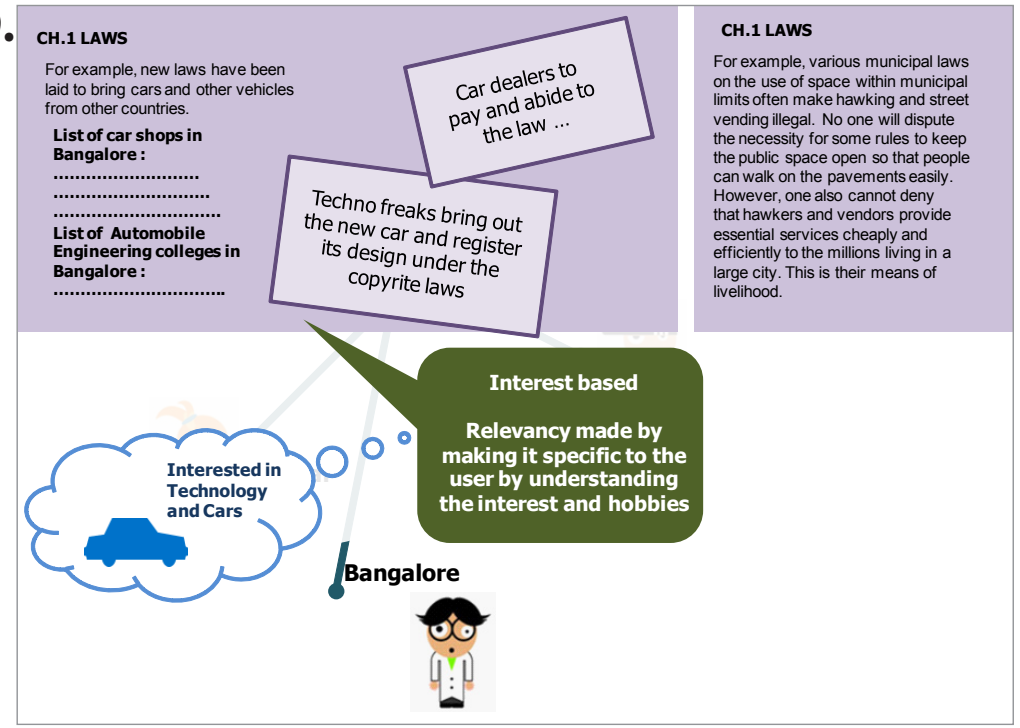
Here, we can see that the same chapter media is searched by many learners at different locations. But the search for same keyword gives different answers and different content by understanding the learner. (image.7)

Concept - Scenario

8.



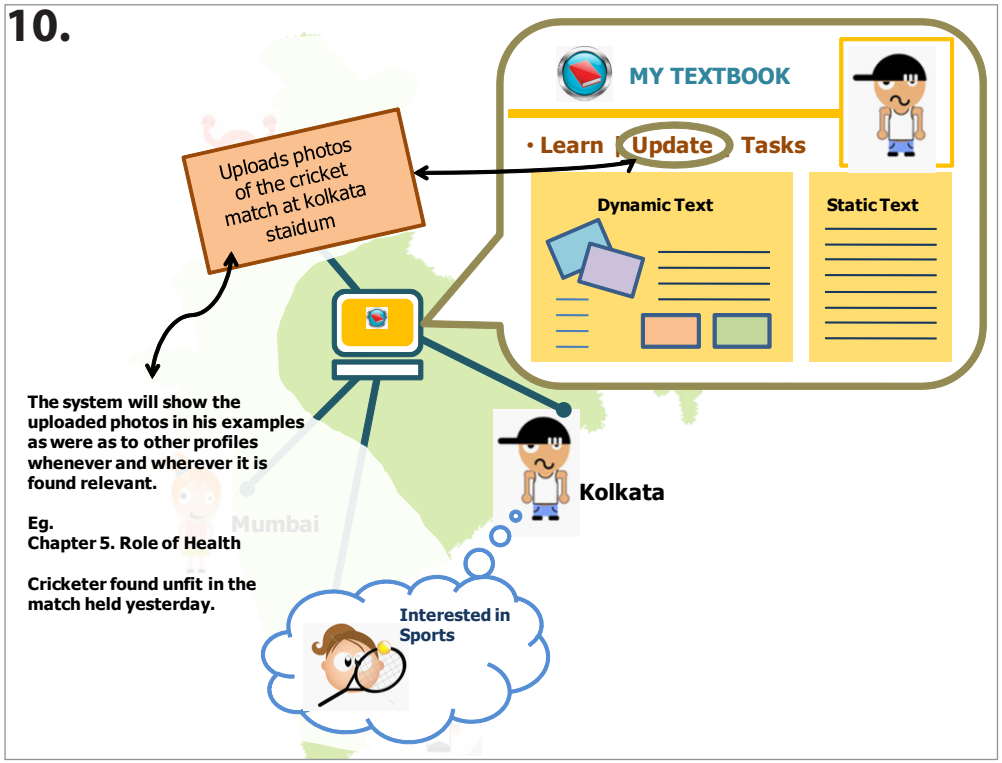
9.



As explained in image 7, here we see how a learner from mumbai and a learner from bangalore have searched for a keyword Laws but the content provided to both vary as per their needs and relevancy. The above scenario shows the content to be different according to the interest of both the learners.

Concept - Scenario

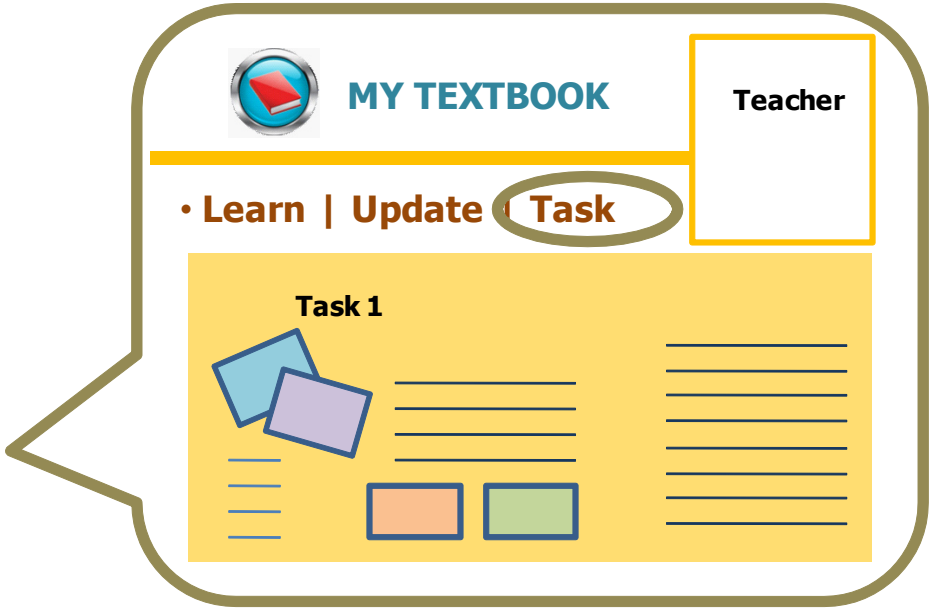
10.



Here in (image10) the learner uploads content which he has and this uploaded content is added to the existing content and shows in the learners profile,that how much content has been added by him.

The content uploaded will be used whenever it is found to be relevant to a particular search.

11.

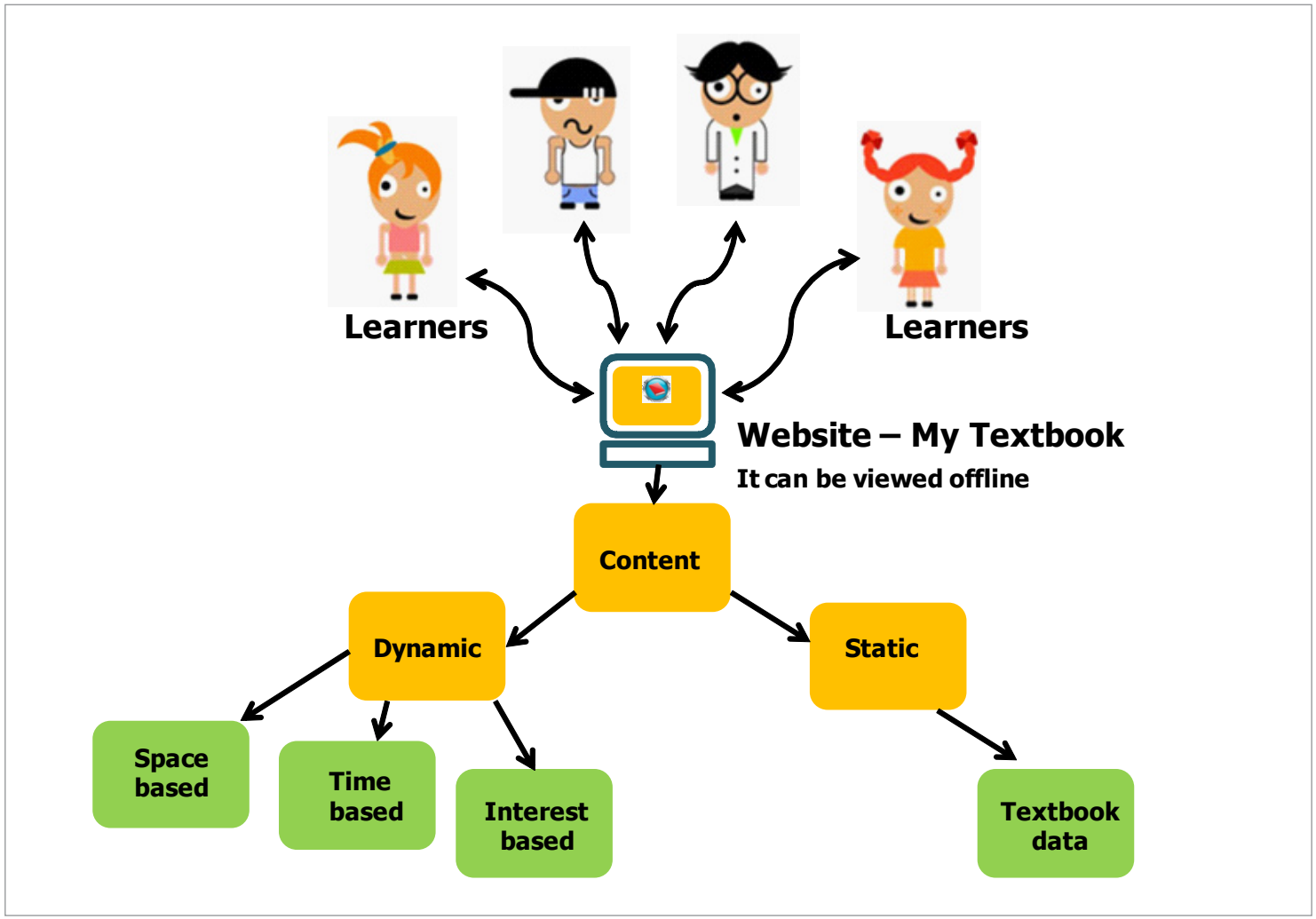


Here in (image11) the teacher profile is shown and the teacher is shown putting tasks in the website. The learners can browse tasks uploaded by a particualr teacher,on a particular subject or to tasks that are recent and new.

The tasks solved by a learner also gets added to the profile of the learner.

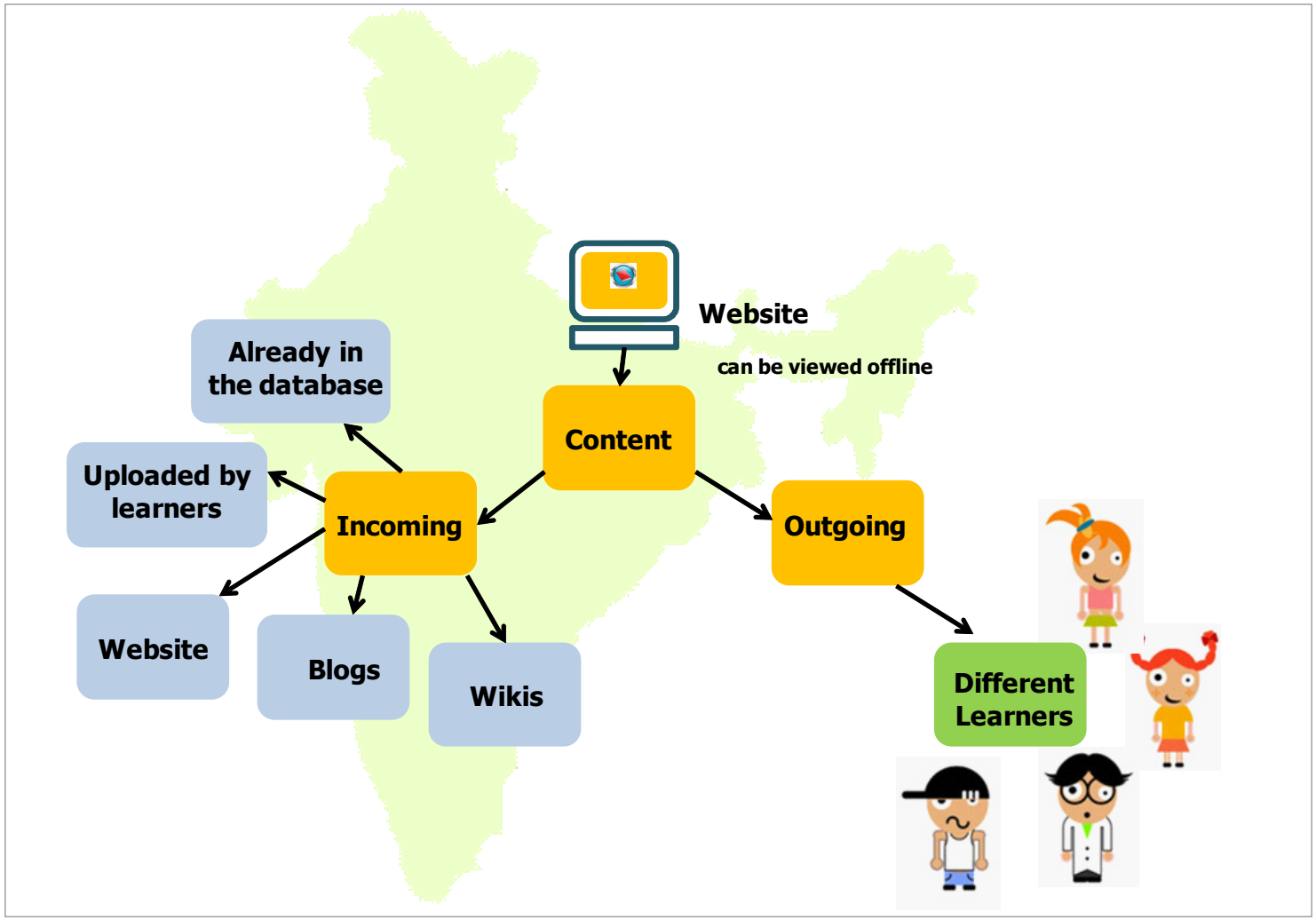
Final Concept

Concept Map



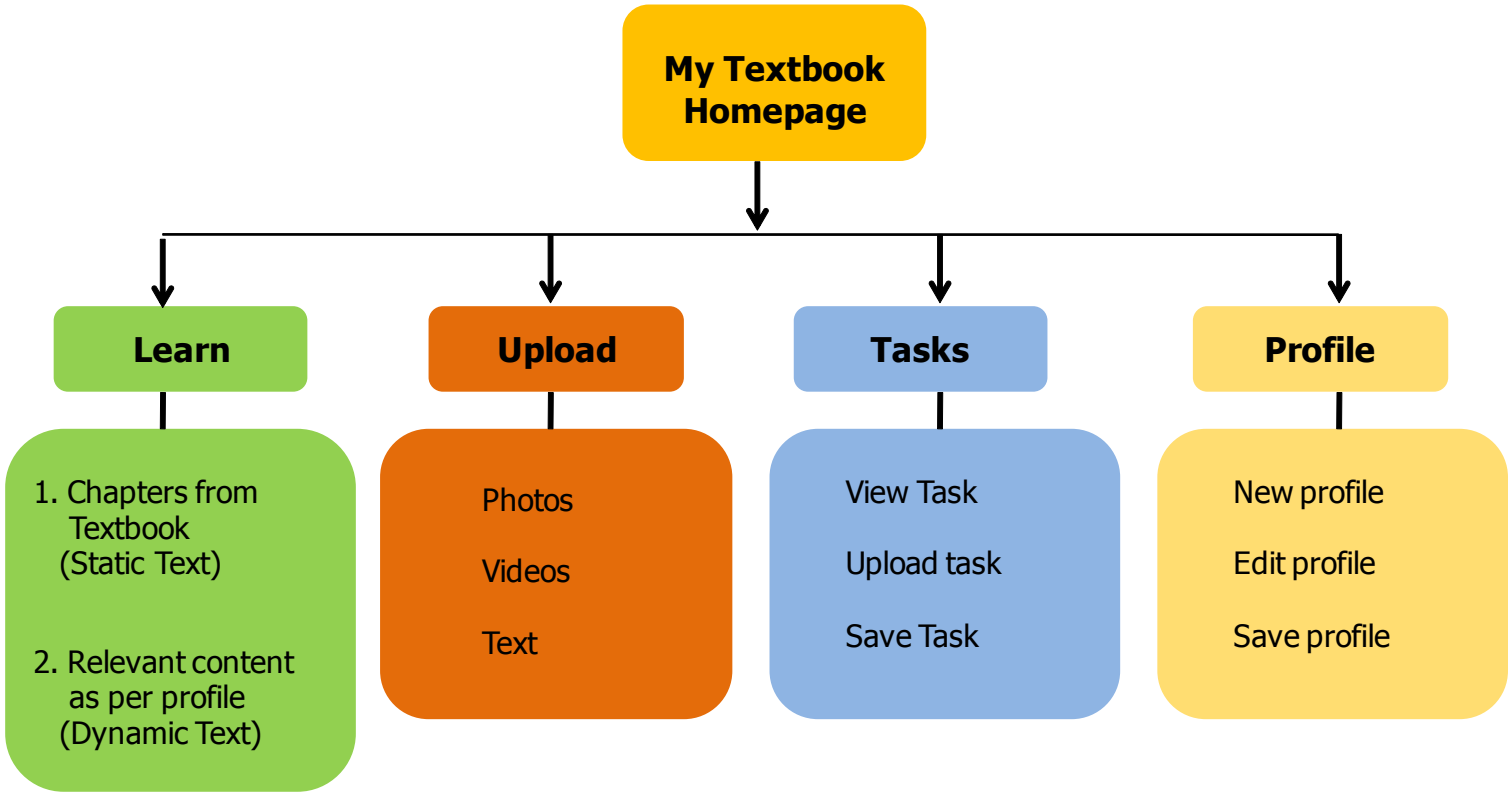
Final Concept

Content flow



Final Concept

Information Architecture



My Textbook scenario

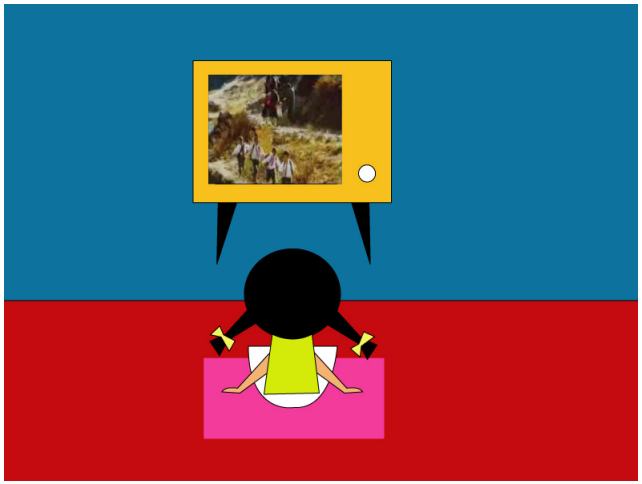
Mini has come from school and she is tired and bent with the load of the books. In the evening, mini sits to study and she is studying the chapter LAWS from civics… The Parliament has an important role in making laws. The Parliament has an important role in making laws. The Parliament has an important role in making laws.

(Repeats again and again) After an hour passes by mini is bored and sleepy and falls asleep on the study table.

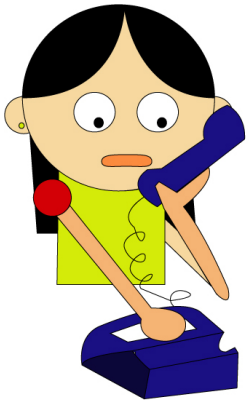
She is now dreaming " books have become monsters and they are running behind her and teasing her…you can run from me but you cannot hide..i am your textbook.. hehehehahahahaha

Mom sees mini sleeping and shouts…Mini..wake up..u don't study at all and do time pass all the time.You are not studying at all since we have shifted to Mumbai.Your grades will come down and down.Come on take a 15min break and get back to studies.

My Textbook scenario



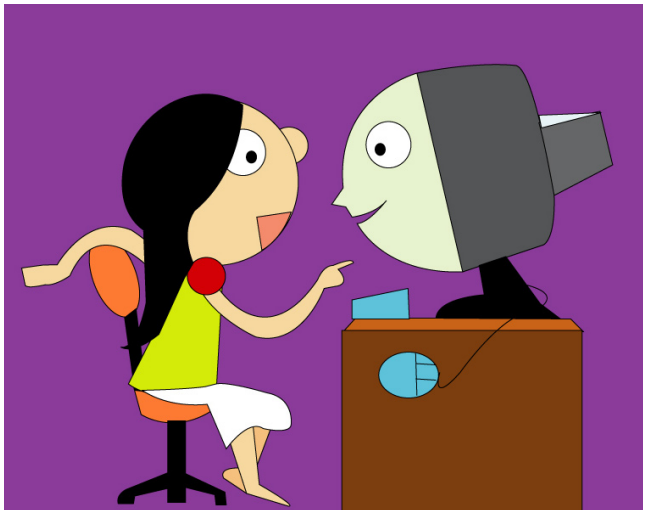
Mini takes a 15min break and watches TV … school chale hum…(song playing)and thinks…
"Why did dad shift from Nagpur to Mumbai..it was so much fun there with all my friends tikku,rina,mohini… we used to do so many projects together and all the homework.We used to go for photography and do lot of shopping.
And kirti maam was so nice and she liked me so much.I wonder what she must be teaching now to my friends.



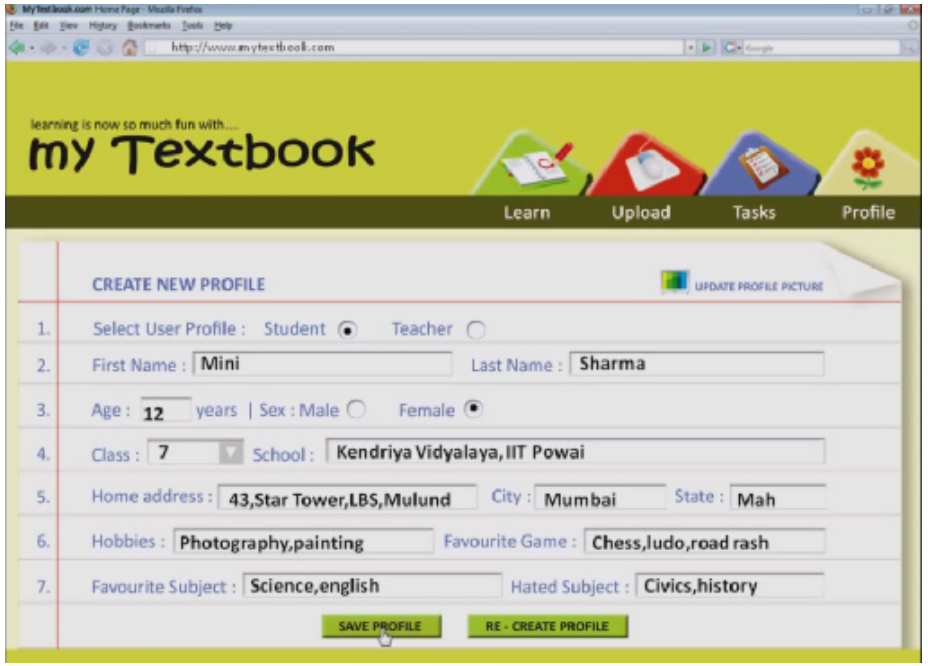
Let me call Tikku and find out…

Mini: Hi tikku
Tikku: Hi mini….how r u?????
Mini: nothing yaar..i m bored of studying alone…
What are you studying now.
Tikku: Aree I am doing kirti maams task online…
Mini: what is that…???
Tikku: Kirti maam is so good…she gives us tasks to do online and it is so much fun do those..
You know my grades have also become better..hehe…It has upgraded from last in class to second last in class…hahaha…
Mini: hahaha…that is too good…I also want to know what is this online website all about..
can you send me the link through e-mail or sms..
Tikku: ya sure…y not…
Mini; ok thanks bye…

My Textbook scenario



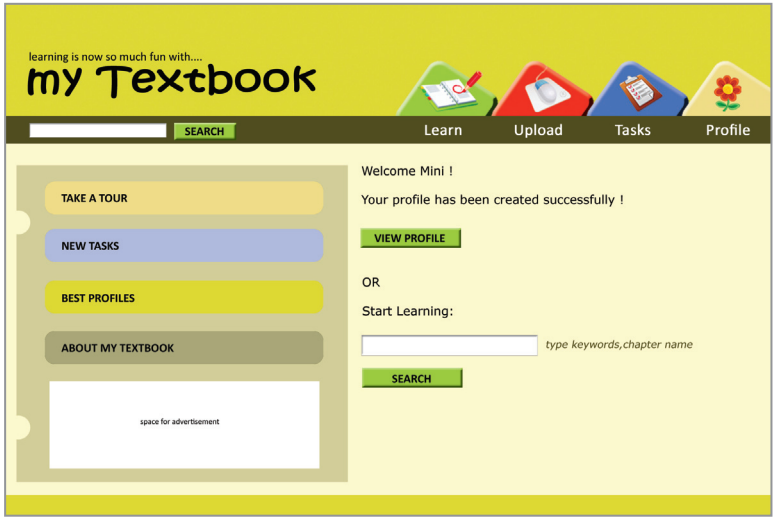
Mini quickly logs into the website to check out what MY TEXTBOOK.com is all about..



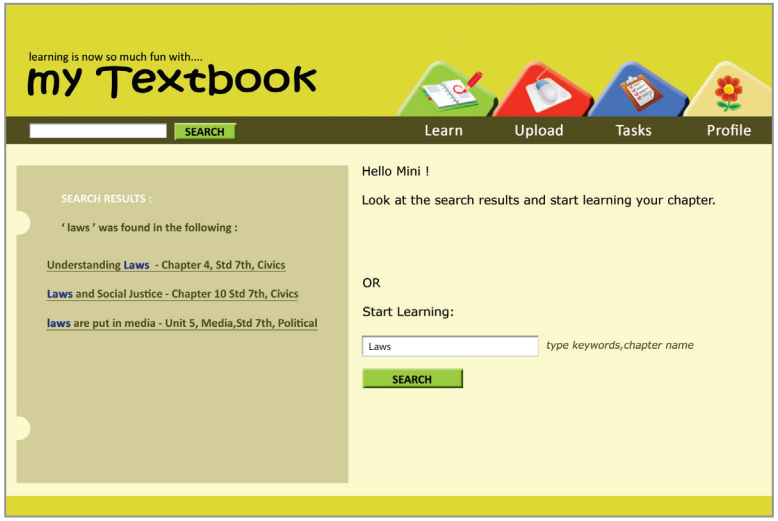
Mini Logs in (log in page1) new user/existing user
She creates her profile with all details of school,student or teacher, class, hobbies, favorite subject, hated subject,etc

Final Concept

My Textbook scenario



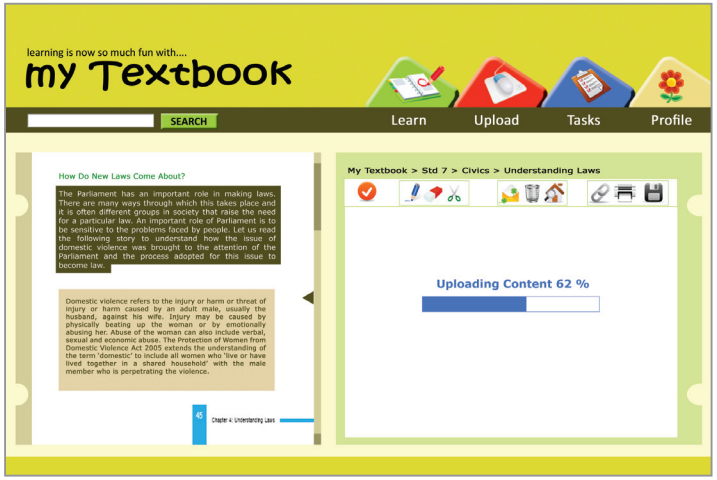
Welcome page !
Hi mini you have successfully created your profile..start learning with fun…search for chapters



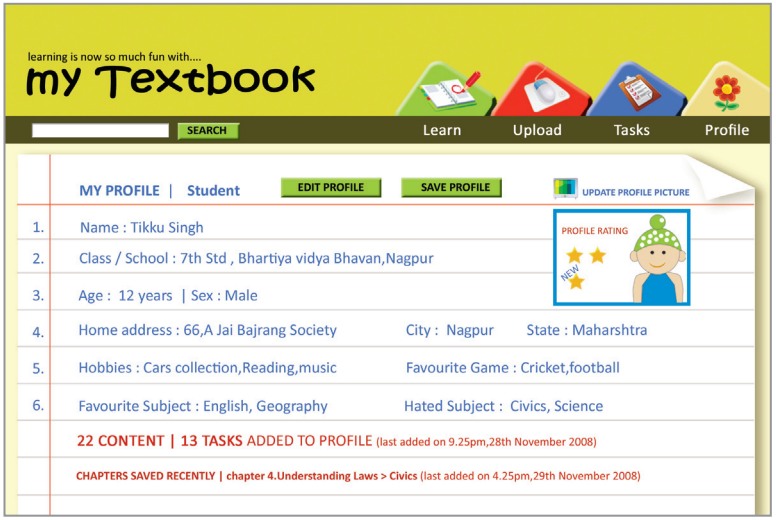
Mini types LAWS in the search bar and clicks on learn:
Learn page results LAWS was found in the following subjects ..select subject....Mini selects CIVICS…

Final Concept

My Textbook scenario



Text is visible in the left side as in the textbook and right side shows mini relevant text as per her profile.



She checks tikkus profile and sees that he has done lots of uploads and solved lot of tasks given by kirti maam.she sees that he ranks 3rd among the students in Nagpur.

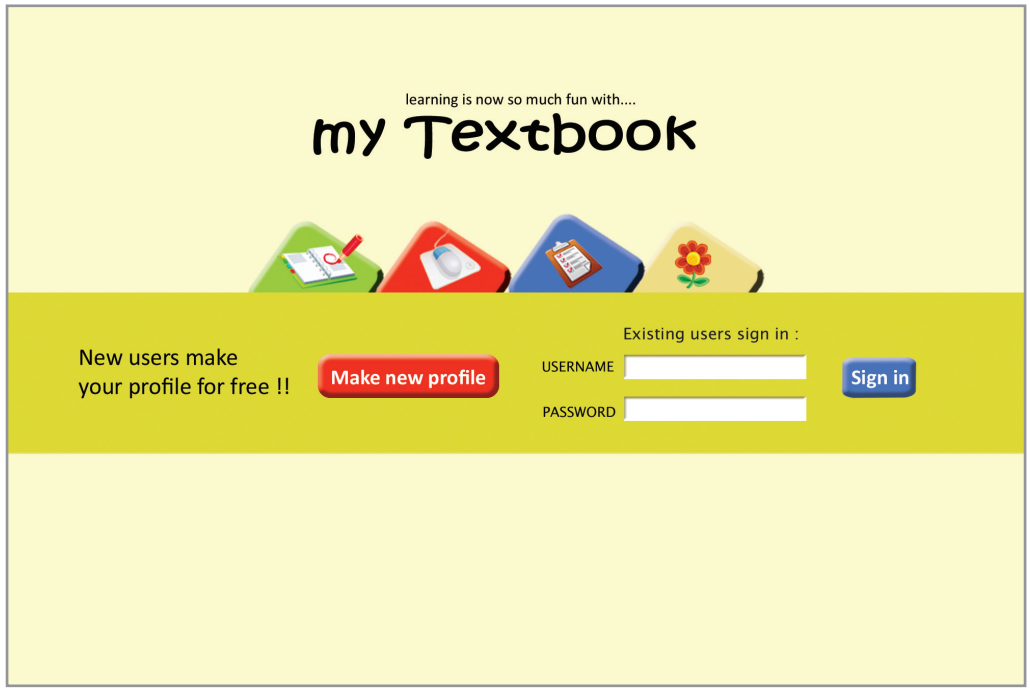
She logs into Tasks and sees newly fed tasks in the system ..searches tasks by Kirti maam…finds them....and add kirti maam in her favorite profile list.

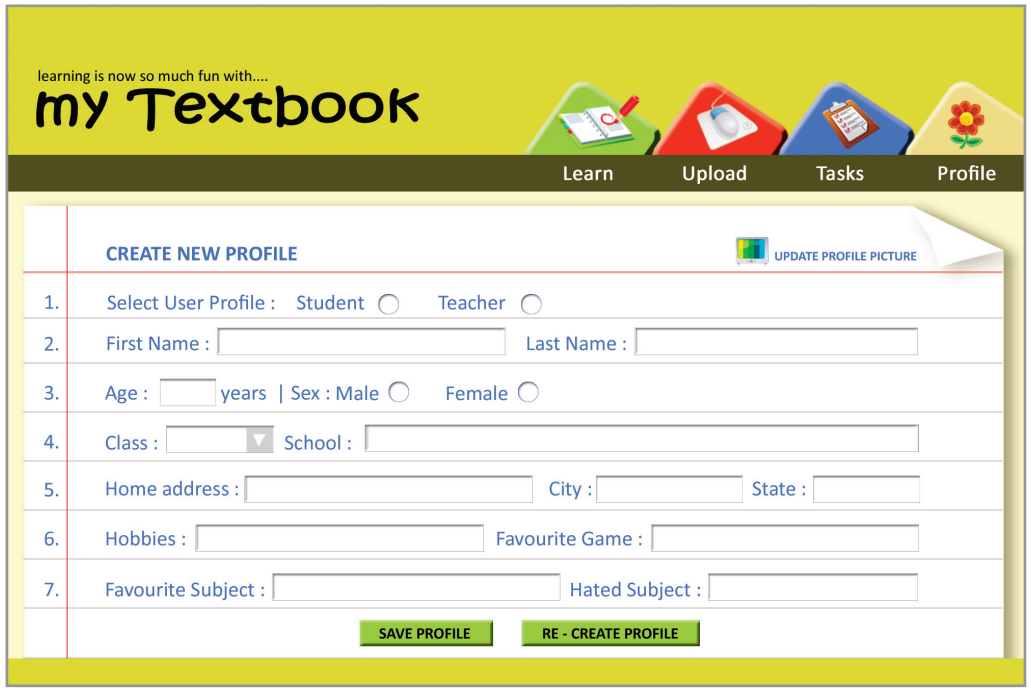
She is so happy that although she has shifted from Nagpur to Mumbai she can now keep link with what her friends are studying and solve tasks given by her favorite maam.

Next morning she tells about this website to her classmates and class teacher.

Final Concept

Website Interface





Login Page

- New users can make their profile by clicking on Make New Profile Button
- Existing users can proceed to learn or browse by signing in with username and password they have registered with.

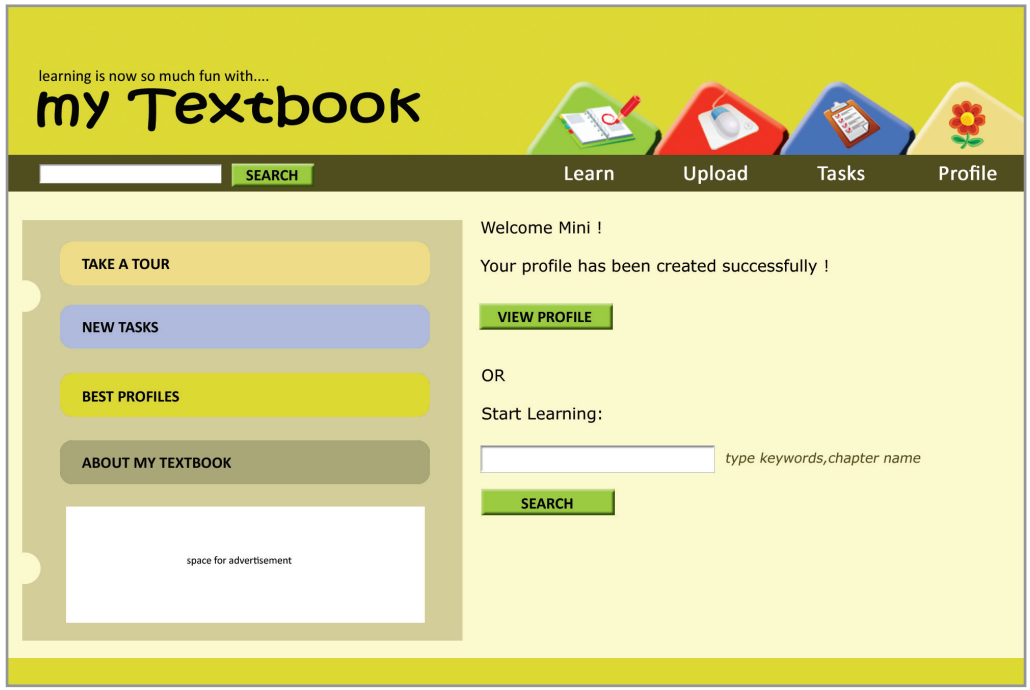
Profile Page

- New users make their profile by filling in the details in the form given.

The profile mainly has information of the user location, age, school, interests etc.
The information in the profile is used to upload relevant content later in the learn section.

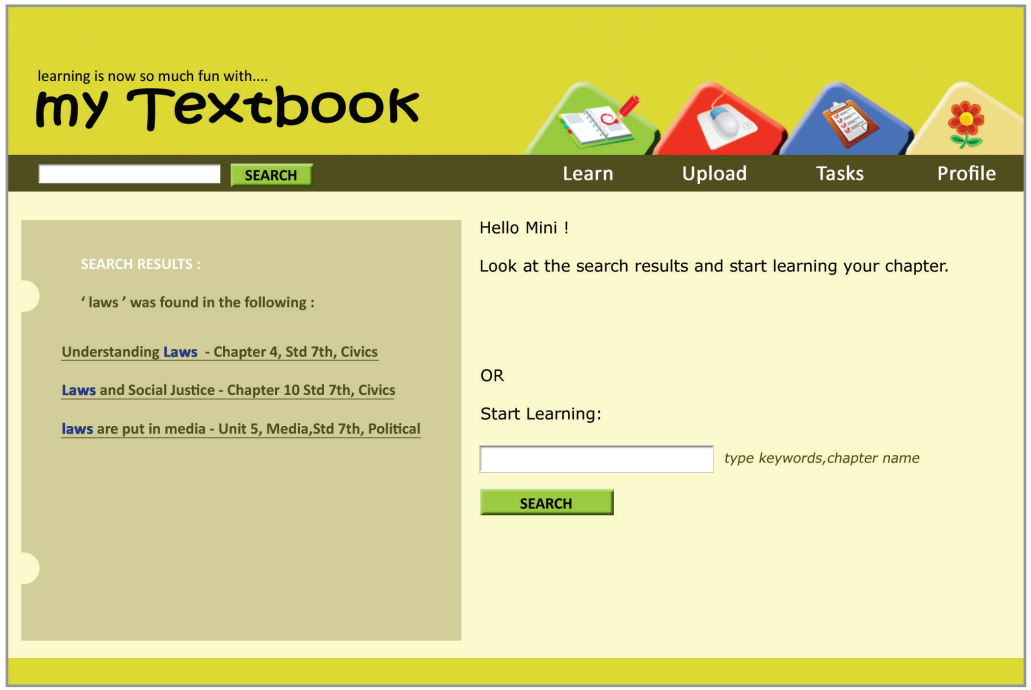
Final Concept

Website Interface



Learn Page

- New users can start with taking a tour of the website, viewing tasks, best profiles or start by searching keywords in the search option.

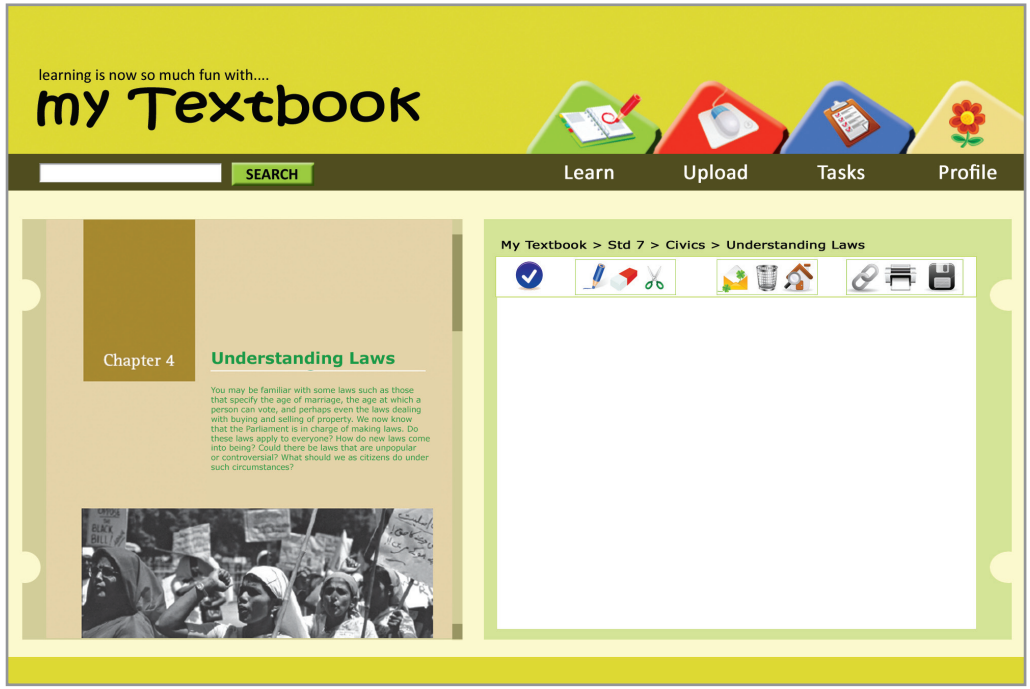


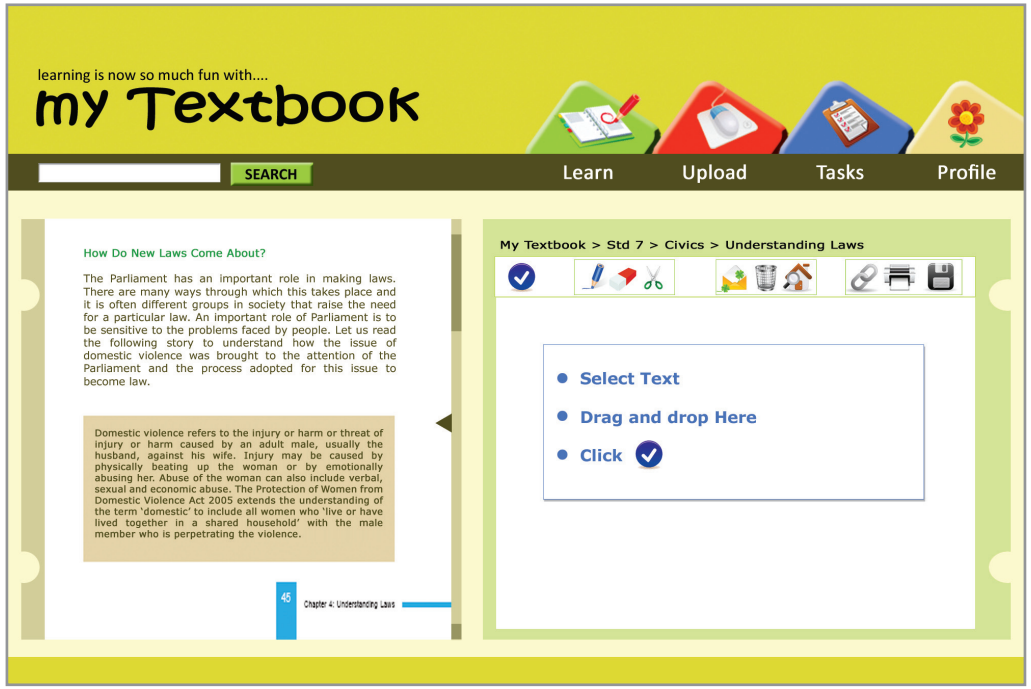
Learn Page

- Search options provide chapters related to the keywords searched.The chapters are placed according to the heirarchy of relevance to the profile.

Final Concept

Website Interface



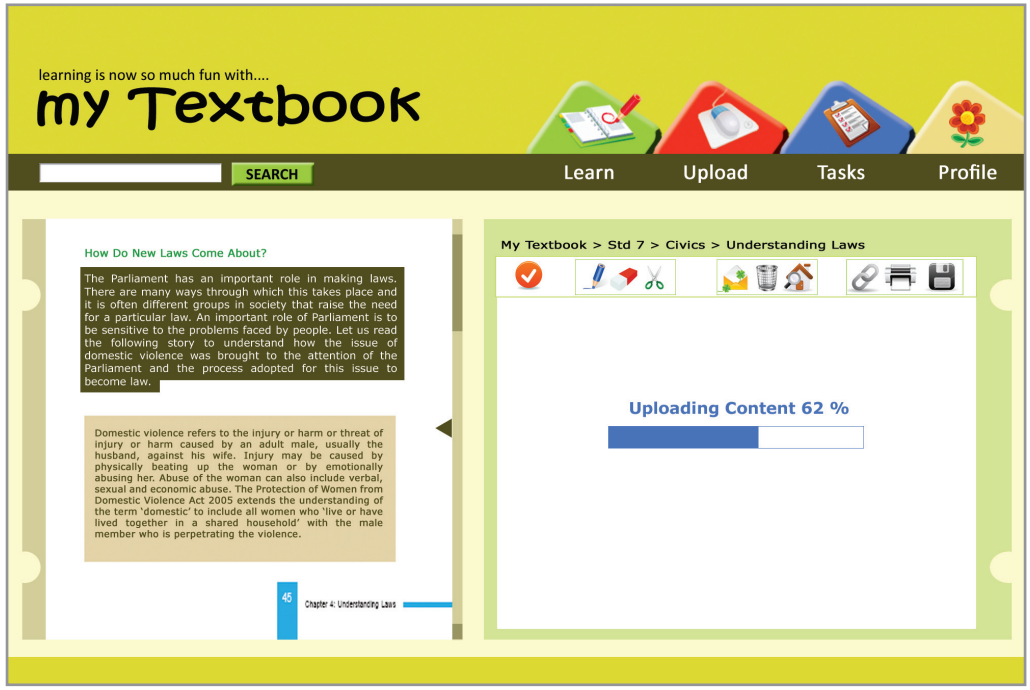


Learn Page - My Textbook
- As soon as a particular chapter is selected, the window divides into 2
Left- Shows static text that is available in the book
Right - Shows dynamic window with tools for editing,copying,saving,pasting,etc.

Learn Page - My Textbook
- To select the particular paragraph, user can scroll down and select the paragraph. After selection of the needed paragraph,dragging and dropping of the paragraph from left to the right window lets the content to upload.

Final Concept

Website Interface



Learn Page - My Textbook

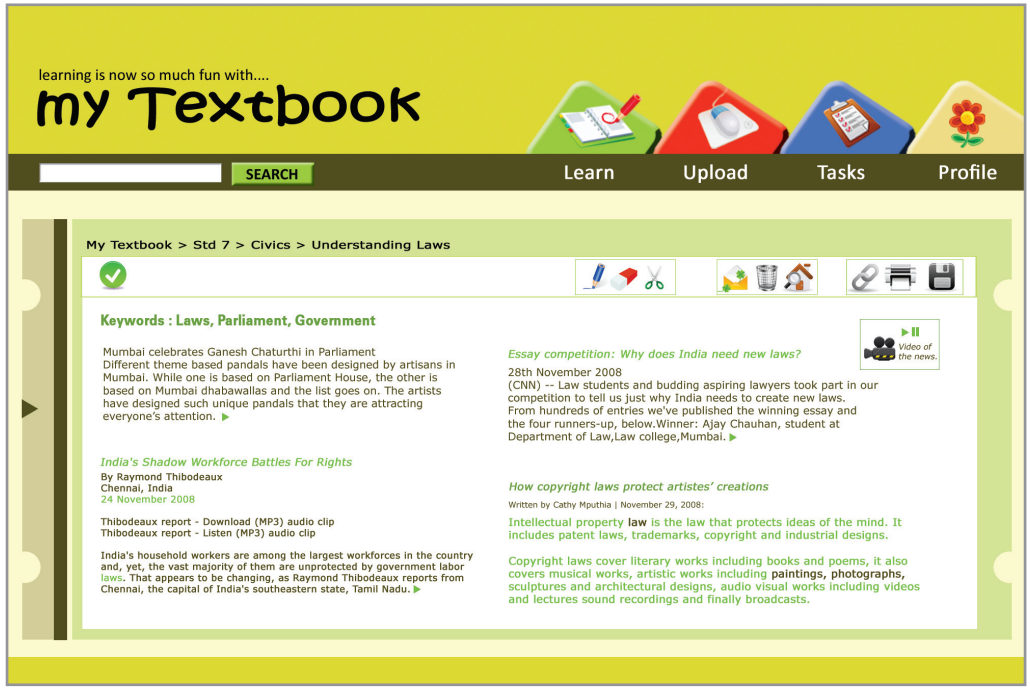
- The content that is uploading shows how much content is uploaded in percentage.

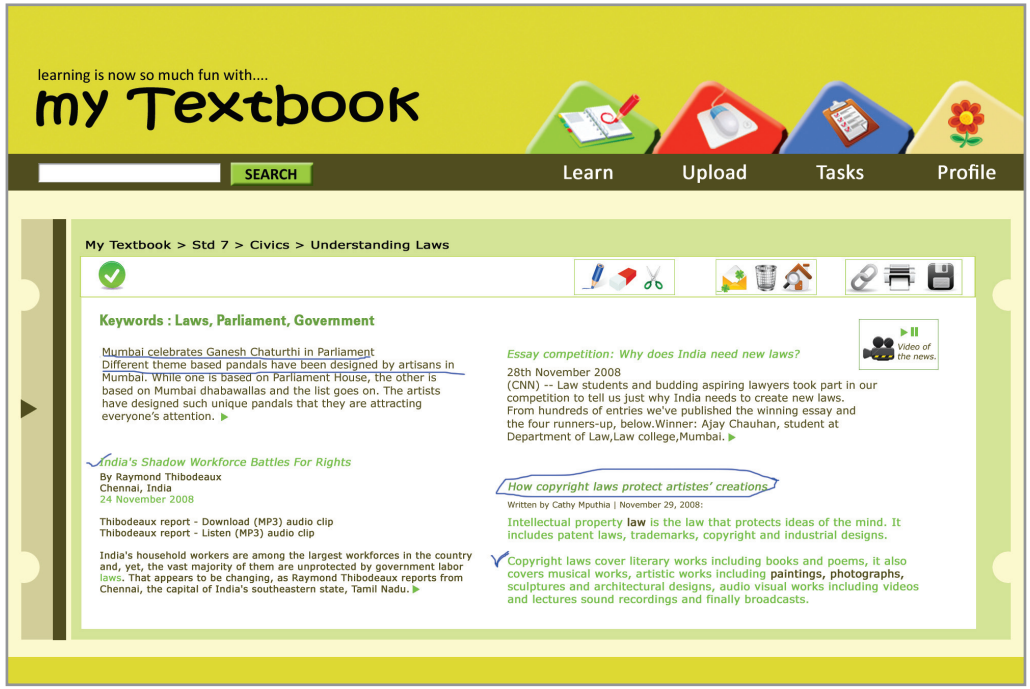
Learn Page - My Textbook

- As the static text window is docked inside to the left, the dynamic window expands to full screen size. The new uploaded relevant content thus can be viewed properly.

Final Concept

Website Interface





Learn Page - My Textbook

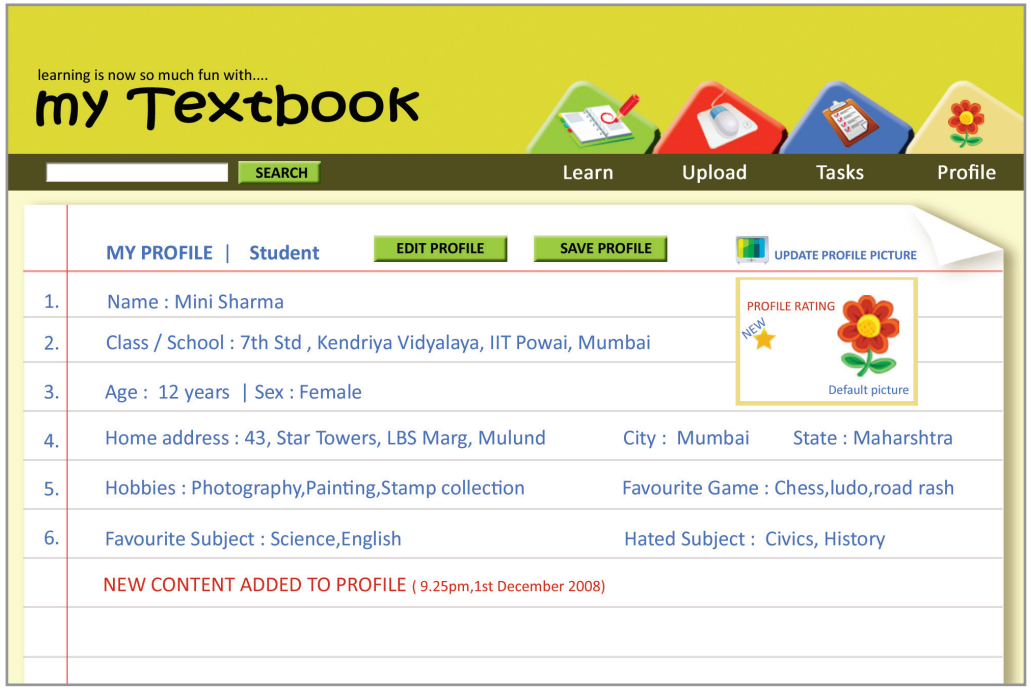
- The dynamic content once uploaded is available in offline mode for the user to learn and makes notes on it.

Learn Page - My Textbook

- As the static text window is docked inside to the left, the dynamic window expands to full screen size. The new uploaded relevant content thus can be viewed properly.
- The dynamic window allows to carry out different options of underlining, marking, bolding, copying, pasting, saving, printing etc to the user.

Final Concept

Website Interface



Upload Page

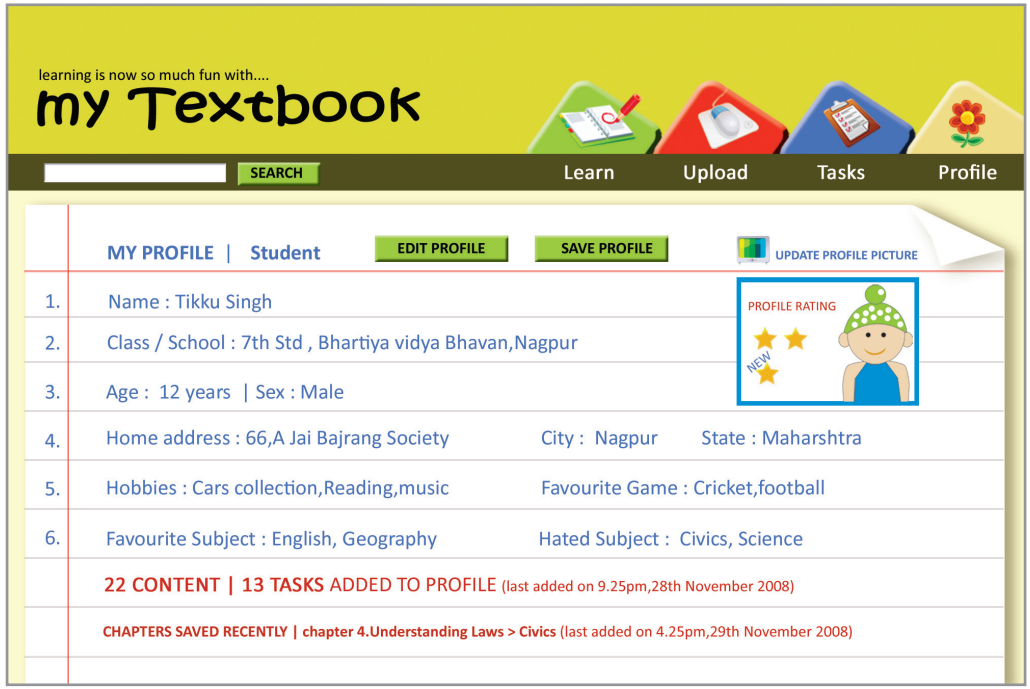
- The user can upload content like photos,videos or text files. The content after uploading provides a preview to the user.

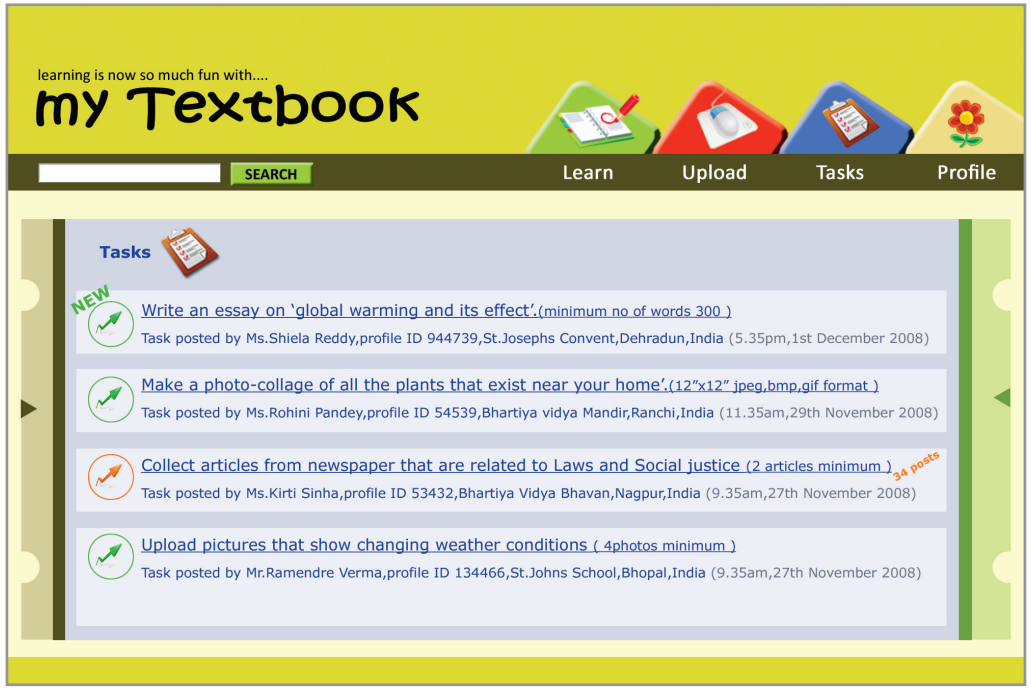
My Profile Page

- The uploaded content is shown in the profile of the user with time and date of upload.
- As content is uploaded the profile also gets rating with a star on the profile picture.

Final Concept

Website Interface





Other Profile Page

- Other learner profiles can be viewed as per star ratings or through search options
- The user may see what other learners have uploaded as content, or what tasks they have completed recently in the profile itself.

Tasks Page

- The tasks page shows the most recent task on top.
- Tasks can be searched as per subject, as per profile ID given by the teacher
- New tasks can be viewed, solved and saved to add star ratings to the profile.

Conclusion

The project explored different ways in which a learner could be provided with an environment which is student centric. The final web application is made keeping in mind the indian context. It was made aiming that it could be implemented in our education pattern.

The relevant content generation for the learner would not only help in improving their understanding, but it would provide them with new ideas for deciding career. It would make them connect to different learners around them, thus creating a competitive learning.

The project solution aimed to help and motivate unguided learners by involving them in learning through creative modes of task solving, content sharing and networking with different learners.

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