

Information Architecture Of an Open Educational Resource website.

INTERACTION DESIGN PI

A Summer Internship at Vigyan Ashram, Pabal.

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Interaction Design





Why do they dropout?

Lack of good teachers?
Inaccessible schools?
Financial Difficulties?
Domestic challenges?



WHY VIGYAN ASHRAM?

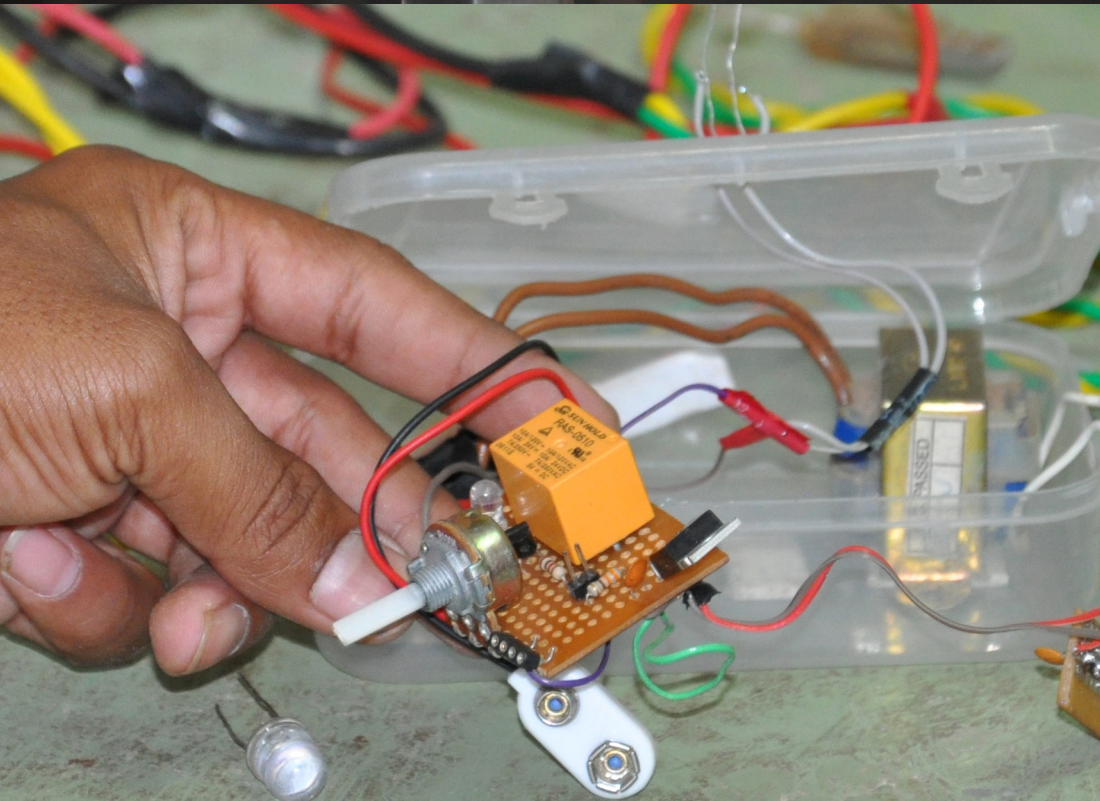
Need for insights of those experienced in alternative learning models.

Learning while doing: A tried & tested educational model.

Looking for a project which has sustained and matured over time.

Has achieved good results.





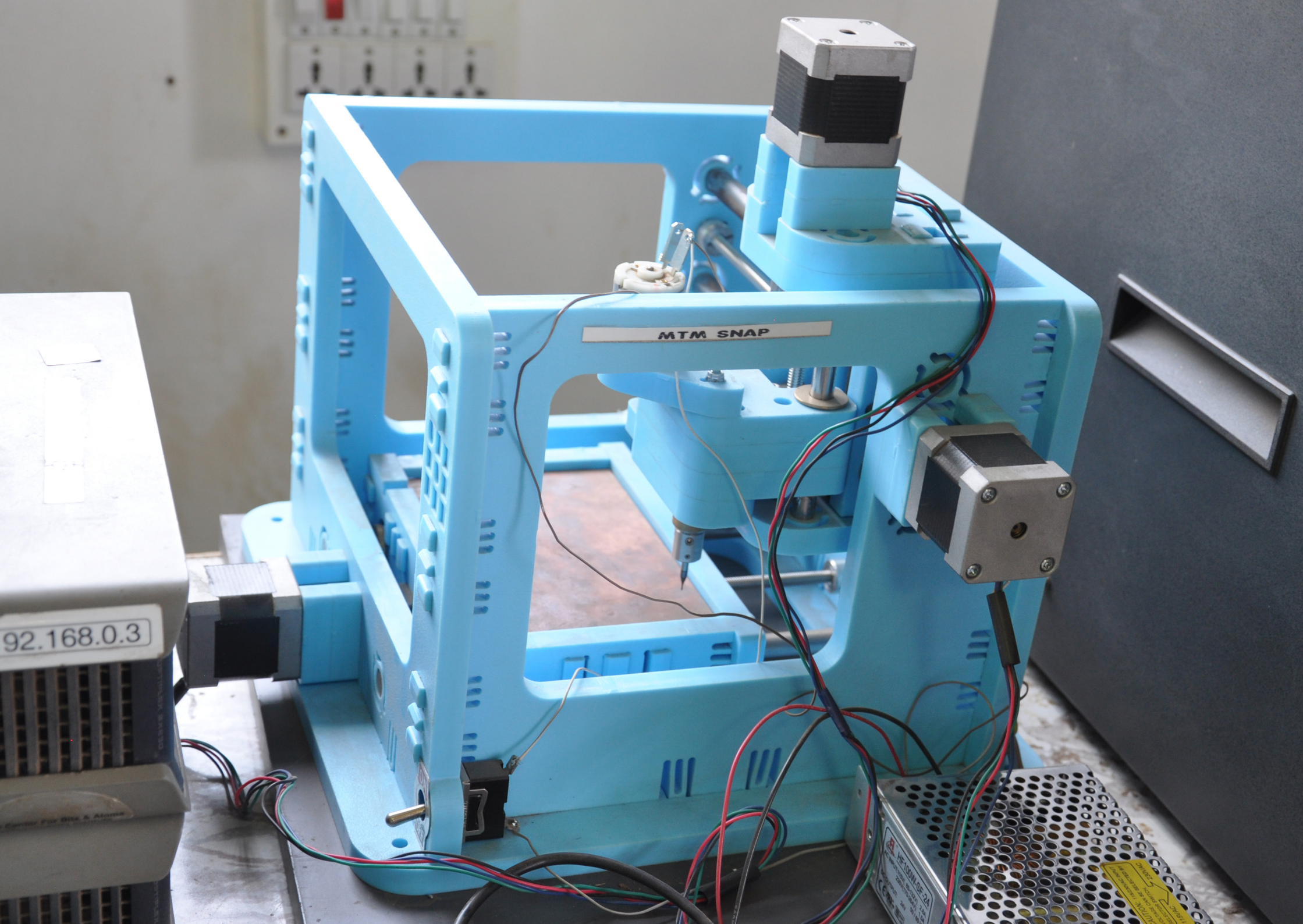














HOSTEL
NO
1



THE PROBLEM

Vigyan Ashram conducts teachers training workshops on its campus at Pabal. But only a limited number of teachers are able to attend such workshops. The team wished to share their educational philosophy with teachers from all over. In recent times the team has started preparing OER (Open Educational Resources). These OERs have been uploaded on their blog. But as the projects and their documents have accumulated, they now feel the need for

- Redesigning the way information stored in their database (in the form of OERS) is displayed and accessed online.
- Information be displayed in such a way that it communicates their educational philosophy more effectively and facilitates teachers in forming their own lesson plans based on the same.



USER

The users are:

- a) Educationists who wish to adopt Vigyan Ashram's learning while doing educational philosophy.
- b) Teacher's who are already part of such programmes and are in search of relevant course materials and lesson plans.

Teaching skills: novice to mediocre.

Computer savvy: Mediocre



SCOPE

My Project Scope

Profile	(classifying OERs as per) Syllabus	About	Contact
Teacher's background	View OERs		
Student's List (Personal data)	Create		
OER's created			

SCOPE

- Documenting content requirement and preparing the features list and page hierarchy for the site.
- Laying rules for organizing and classifying content on the website to enable efficient search and consumption of information.
- Designing wire-frames for critical tasks undertaken by user (novice to mediocre competence teachers)

The Information architecture and interaction design done to the first draft of wire frame level for the following tasks:

- Organizing the content of the www.learningwhiledoing.in
- Designing a template for creating OERs
- Designing a template for displaying the OER

Searching and retrieving relevant information from the existing body of data.

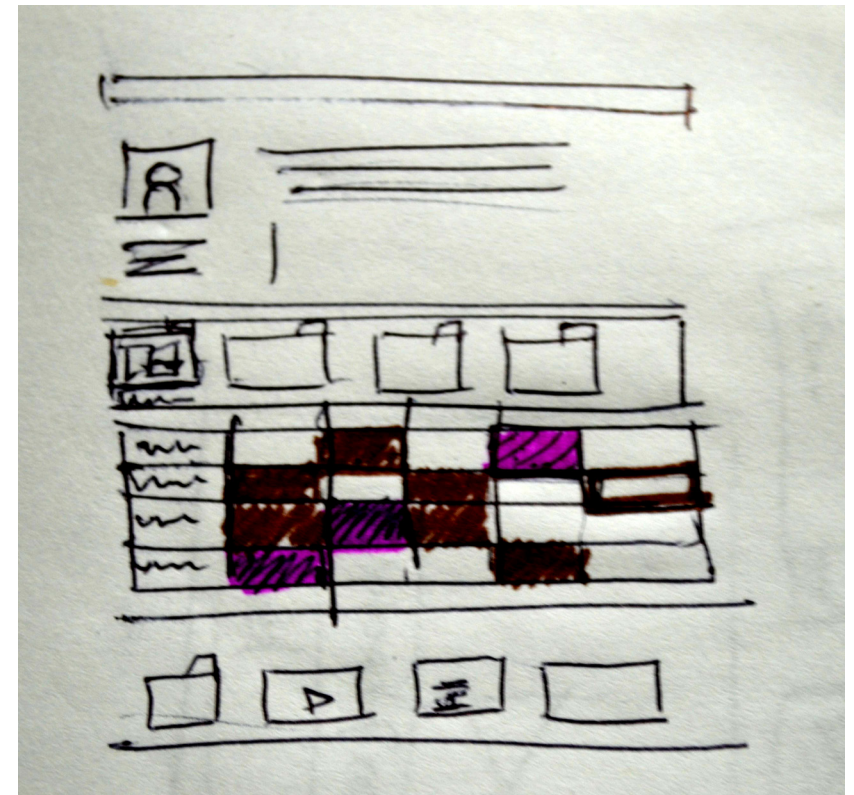
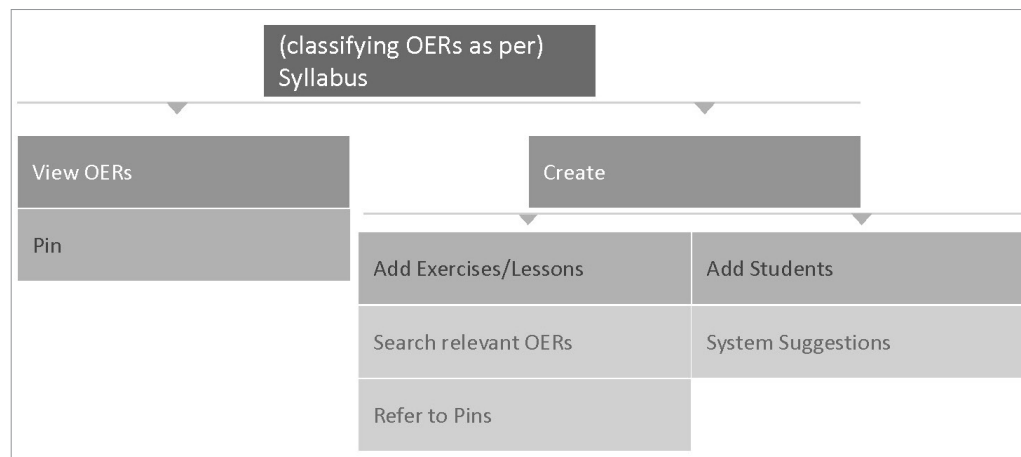
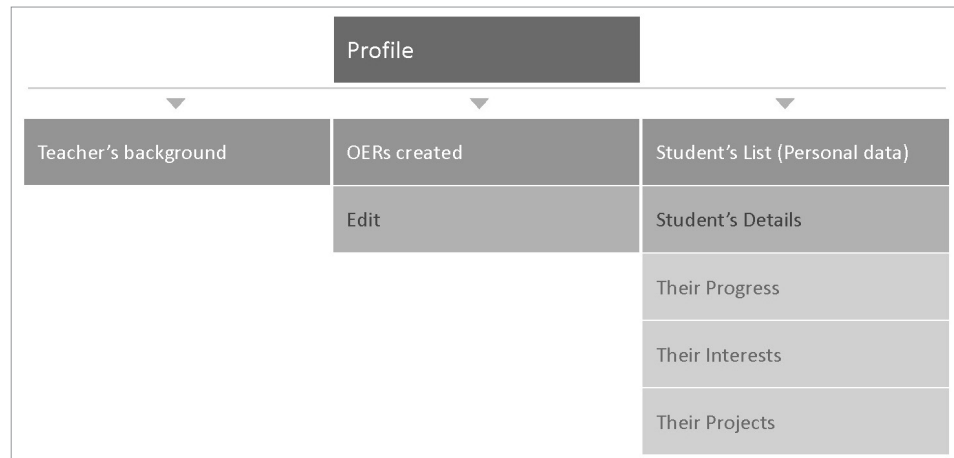
Allowing Interconnections between -projects, which allows viewing similar projects in a close sequence.

Preparing a facility for allowing novice users to create meaningful OERs.

REQUIREMENTS

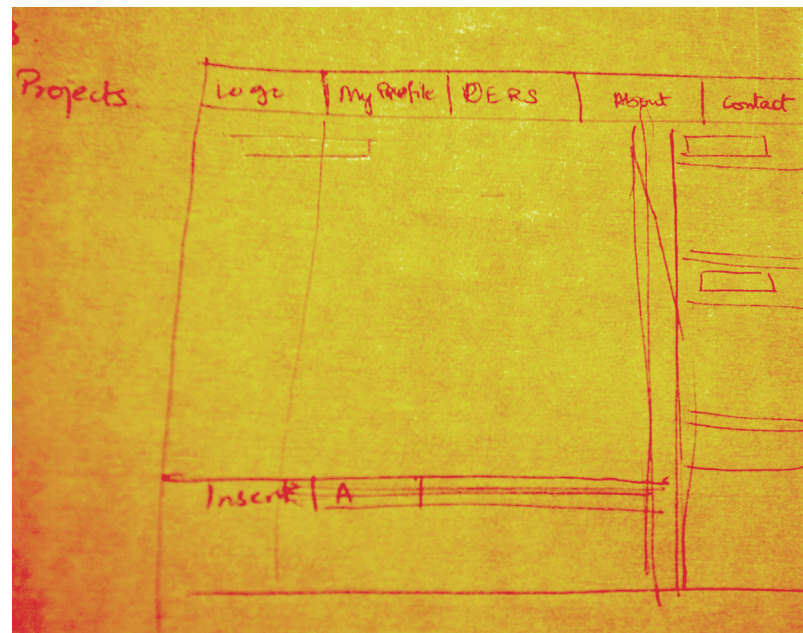
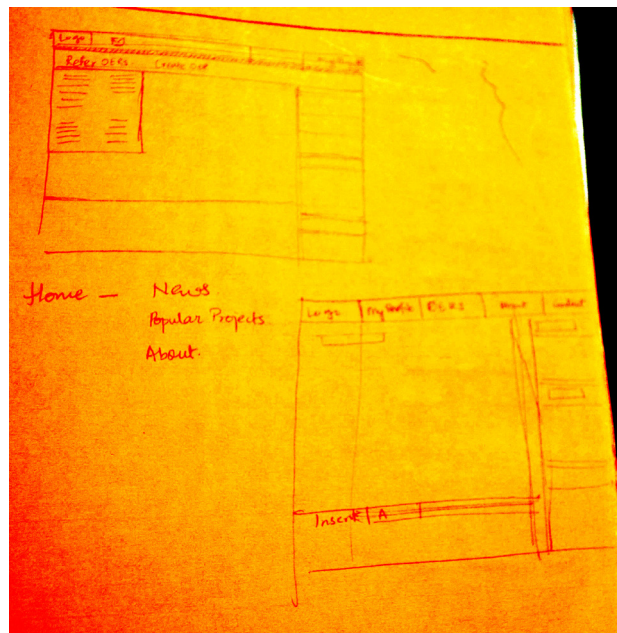
- Accommodate uploading and viewing of multiple media like text, videos, images in the most user friendly manner.
- Allow editing rights to the authors even after the document is shared
- Allow the author freedom to organize and rearrange content in a way that's best for a particular lesson plan.
- Design to suit easy/smooth translation of the page into vernacular languages.

HEIRARCHY OF INFORMATION AND INITIAL SKETCHES

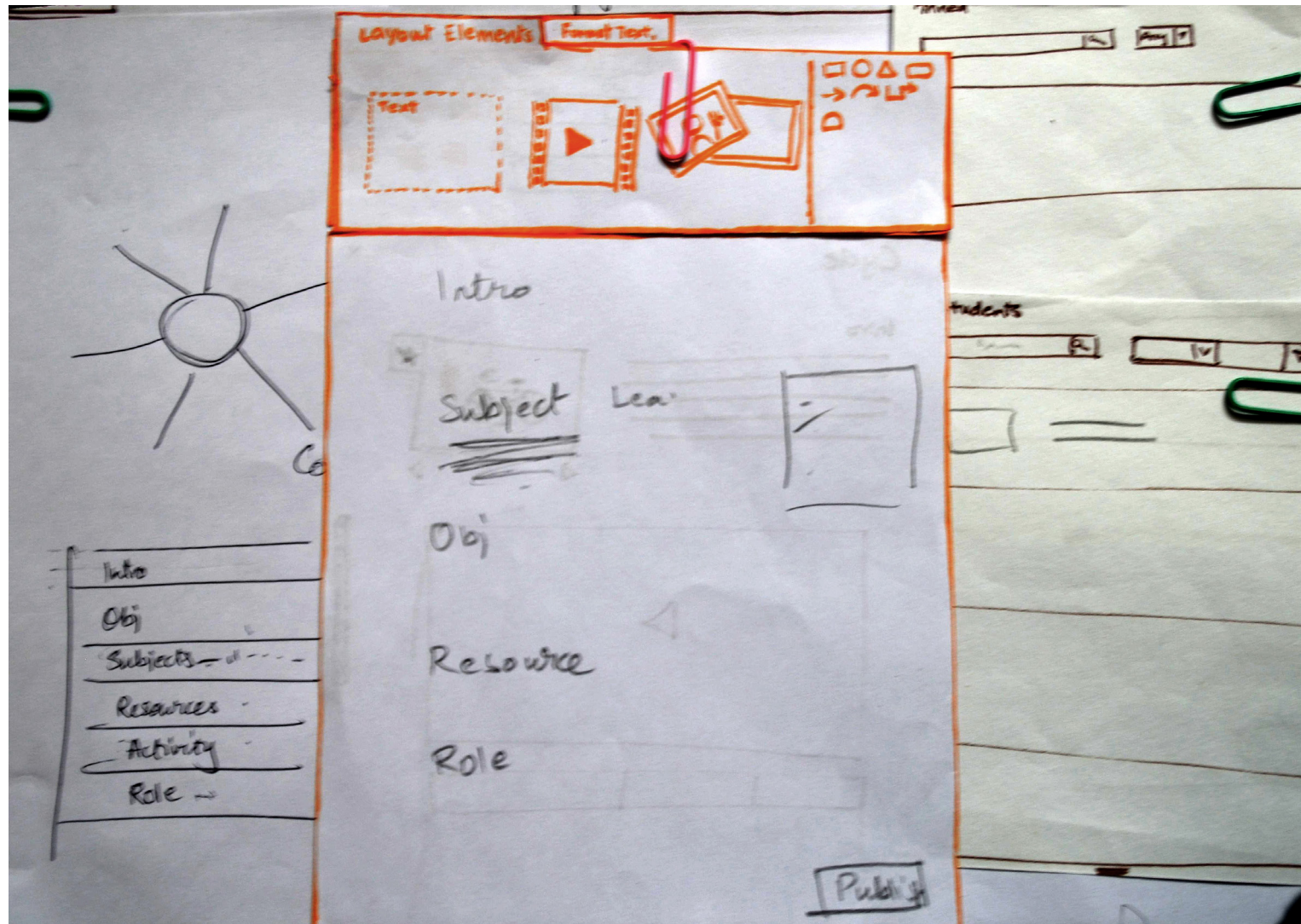


HEIRARCHY OF INFORMATION AND INITIAL SKETCHES

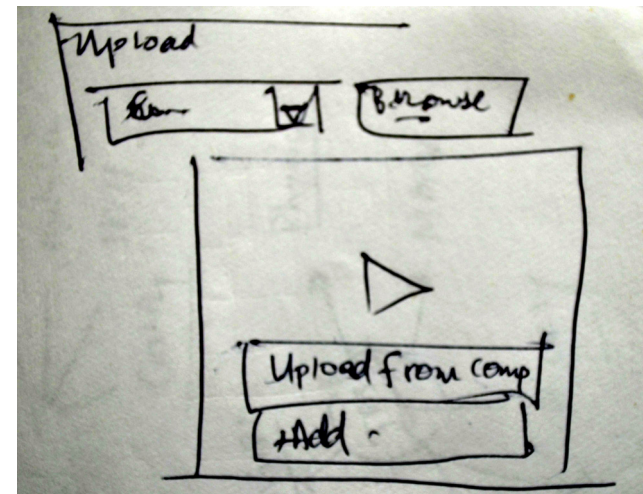
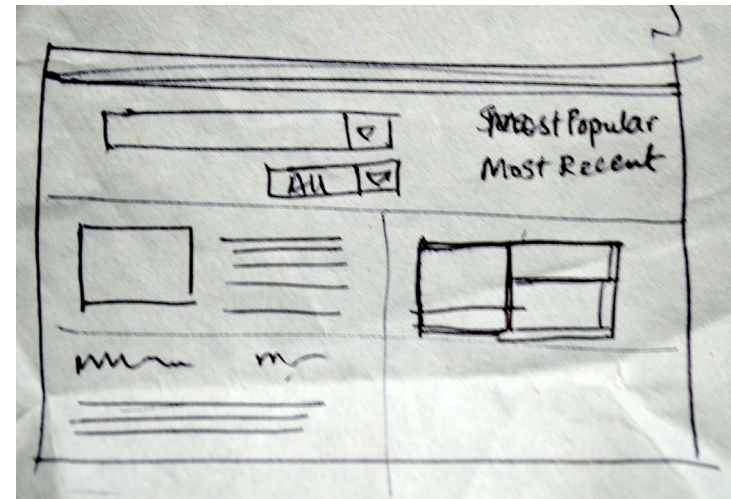
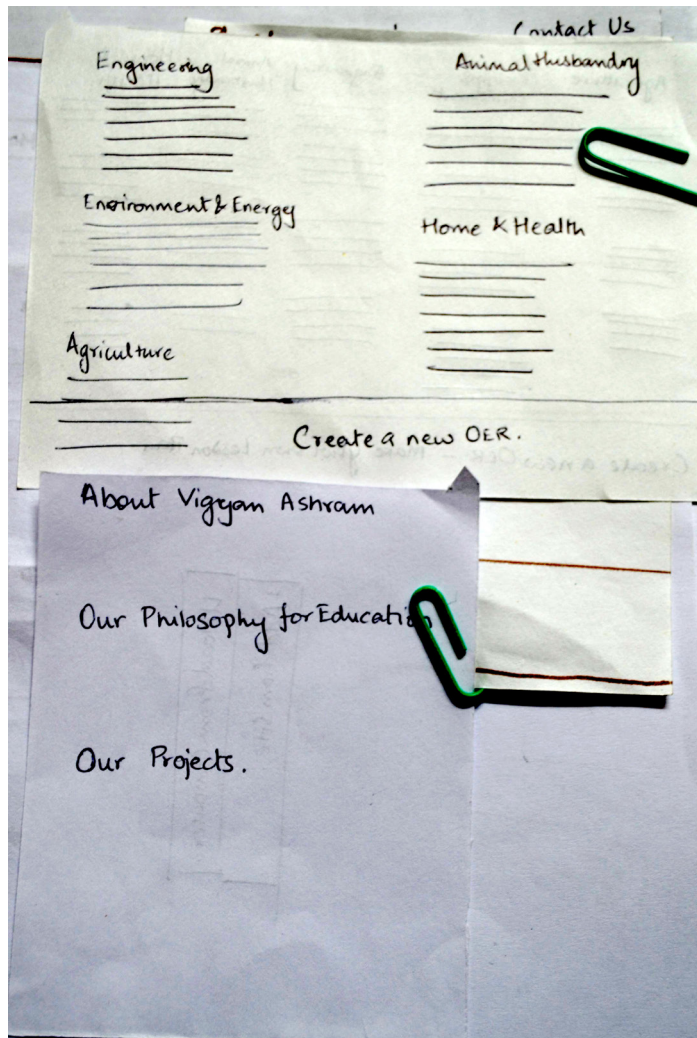
After gathering the requirements and fixing the scope, the first step in designing was to plan the hierarchy of information and pages, and to identify their interconnections. Previously, the data used to be arranged as per the format of the course material. In the new design however, reorganised and created a new system that allowed the user to search and access data, directly as per relevance of subject, which is more natural and intuitive.



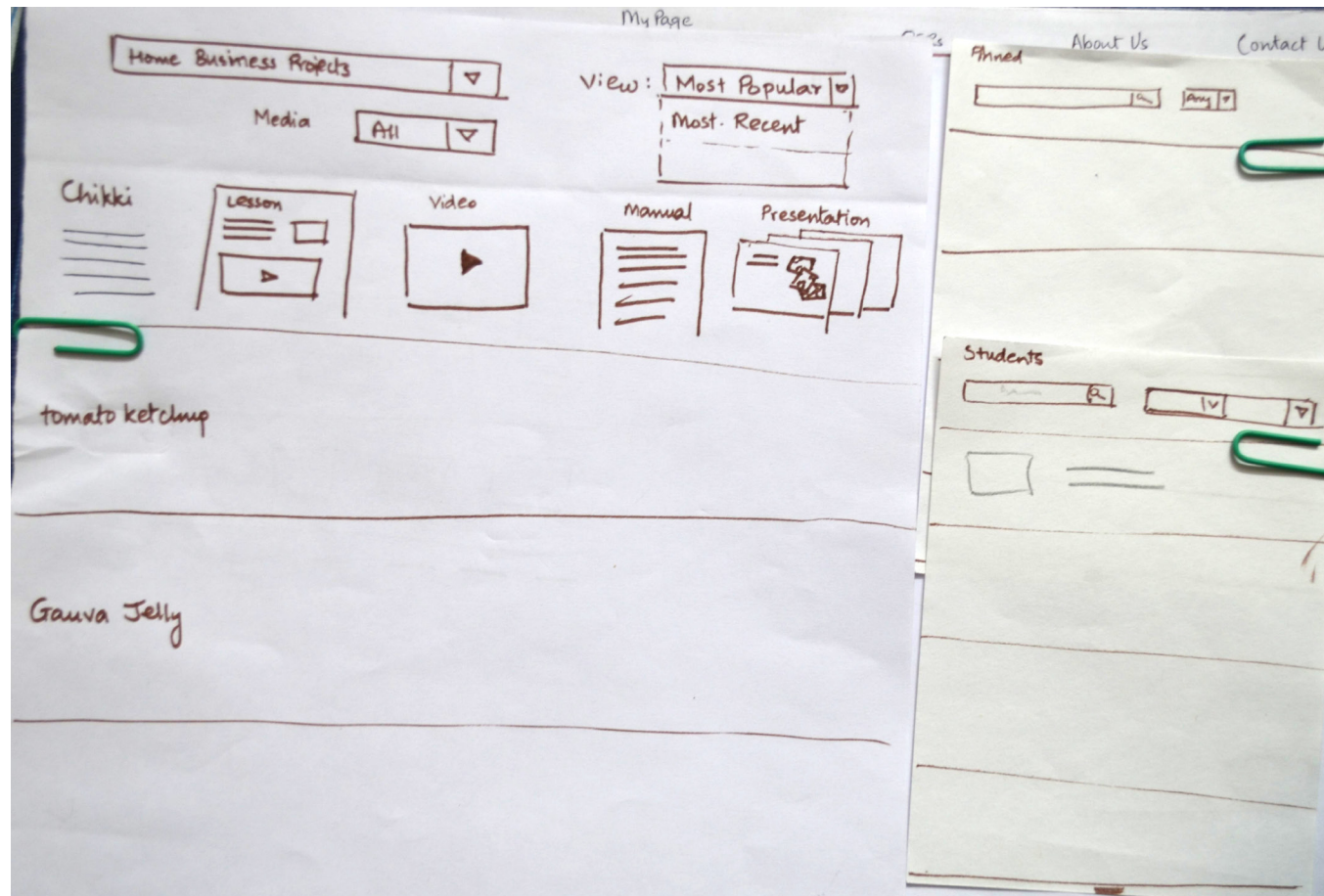
PAPER PROTOTYPE



PAPER PROTOTYPE



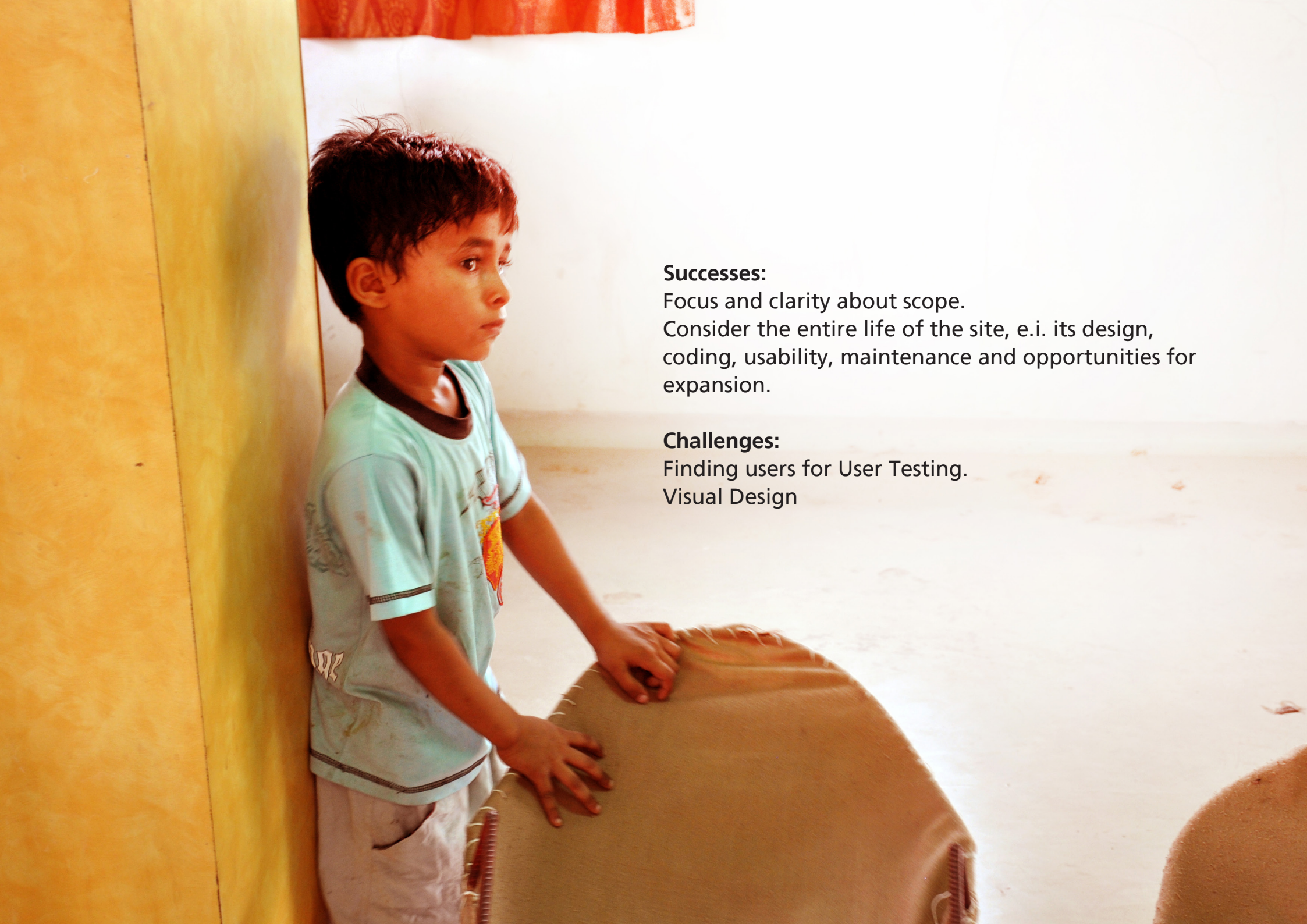
PAPER PROTOTYPE



- Easy to modify.
- Easy to relate to.
- Can be made and remade quickly.
- Can be handed over to Users/ stakeholders for trying tasks

WIRE FRAME INTERACTION

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**Successes:**

Focus and clarity about scope.

Consider the entire life of the site, e.i. its design, coding, usability, maintenance and opportunities for expansion.

Challenges:

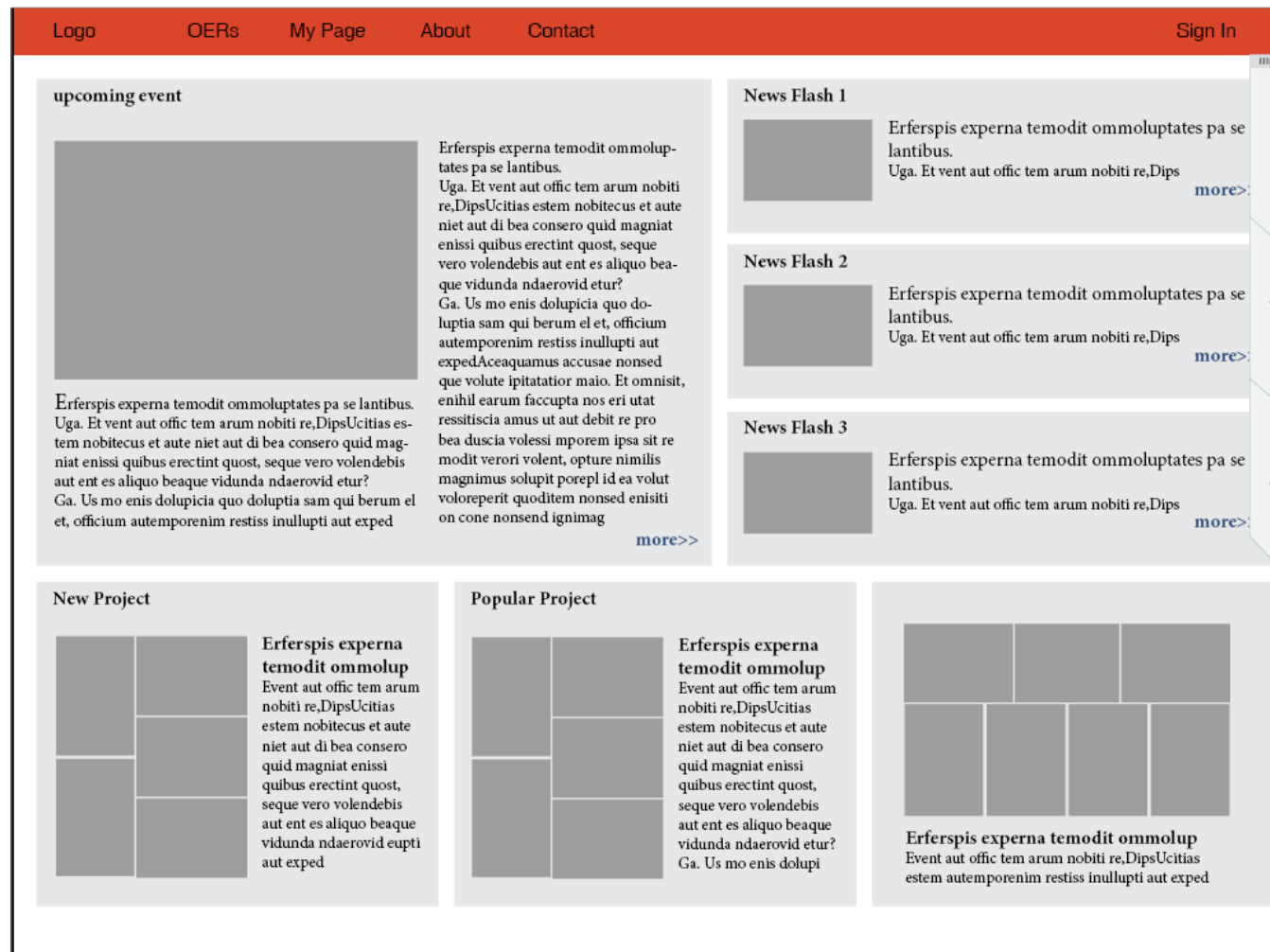
Finding users for User Testing.

Visual Design



FINAL INTERACTION WIREFRAME PROTOTYPE

Fig. 1: Home



The home page may display articles relevant to effective practice of the learning while doing model and also the latest and the most popular projects. All data on the site is accessible at all times through the menu bar.

FINAL INTERACTION WIREFRAME PROTOTYPE

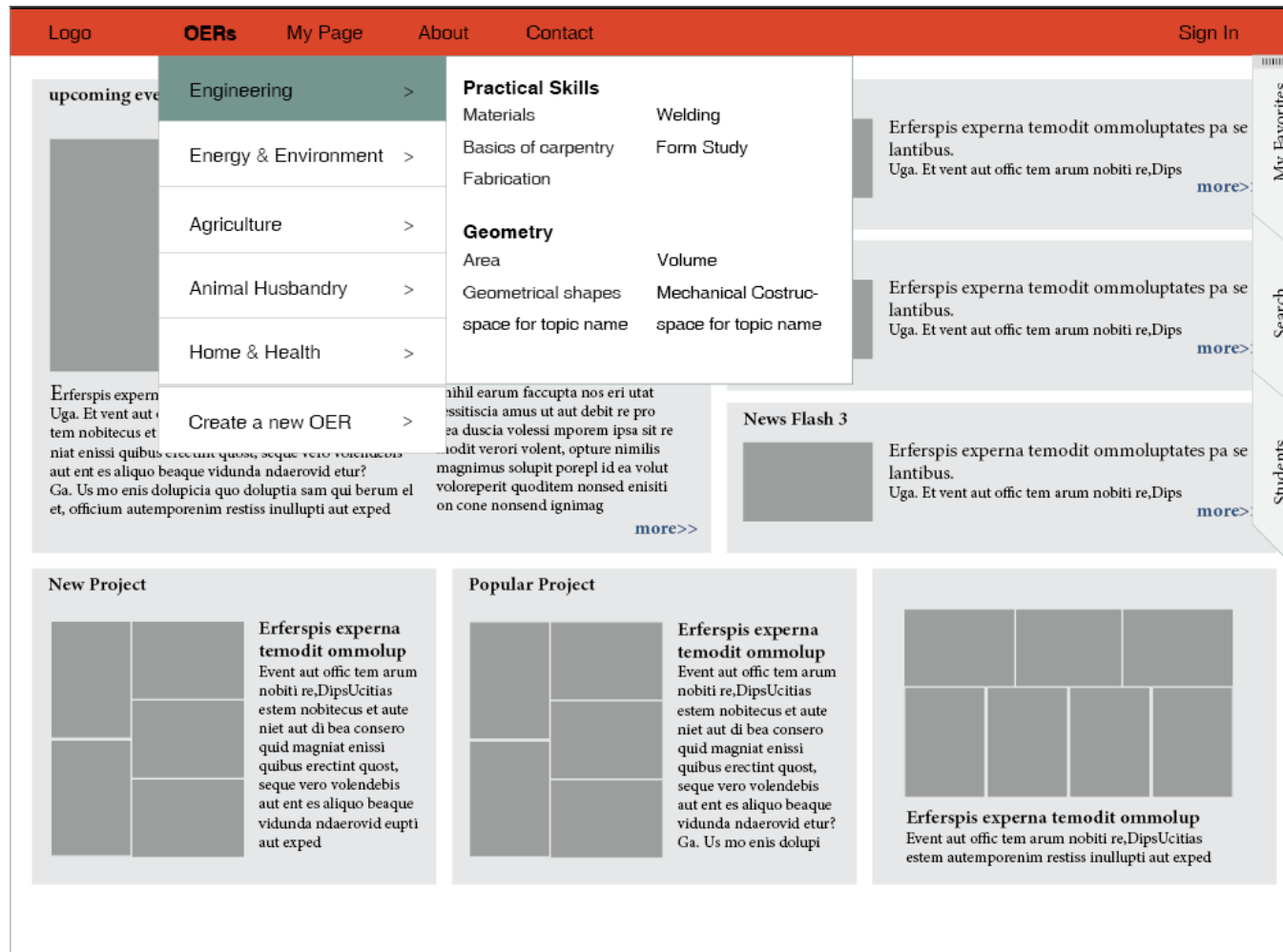


Fig. 2: OER dropdowns:
Vocation & Topics

The OER dropdown displays the vocations, their branches and the topics.

Users who have signed in may even create their own OERs.

FINAL INTERACTION WIREFRAME PROTOTYPE

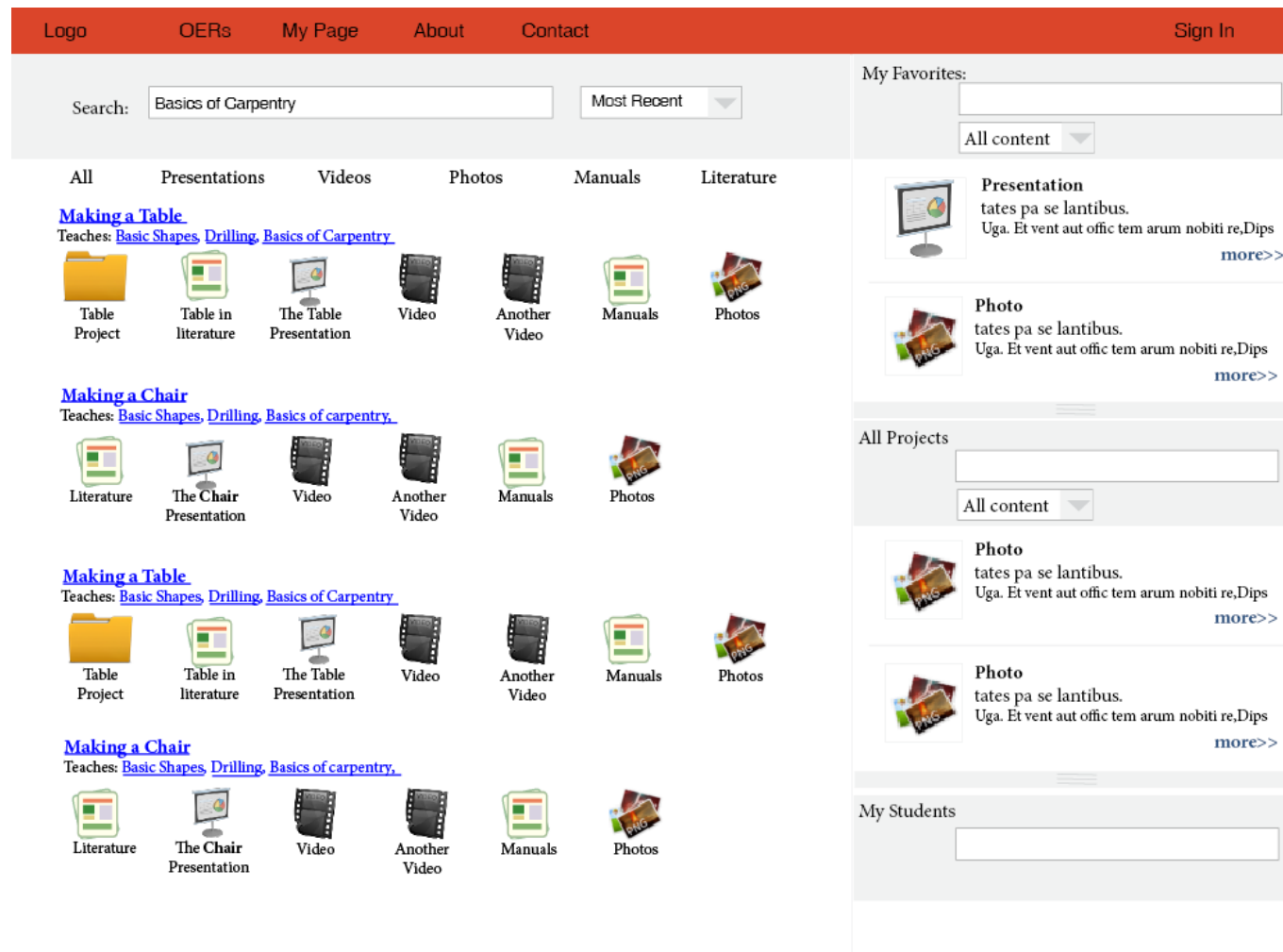


Fig. 3: Search

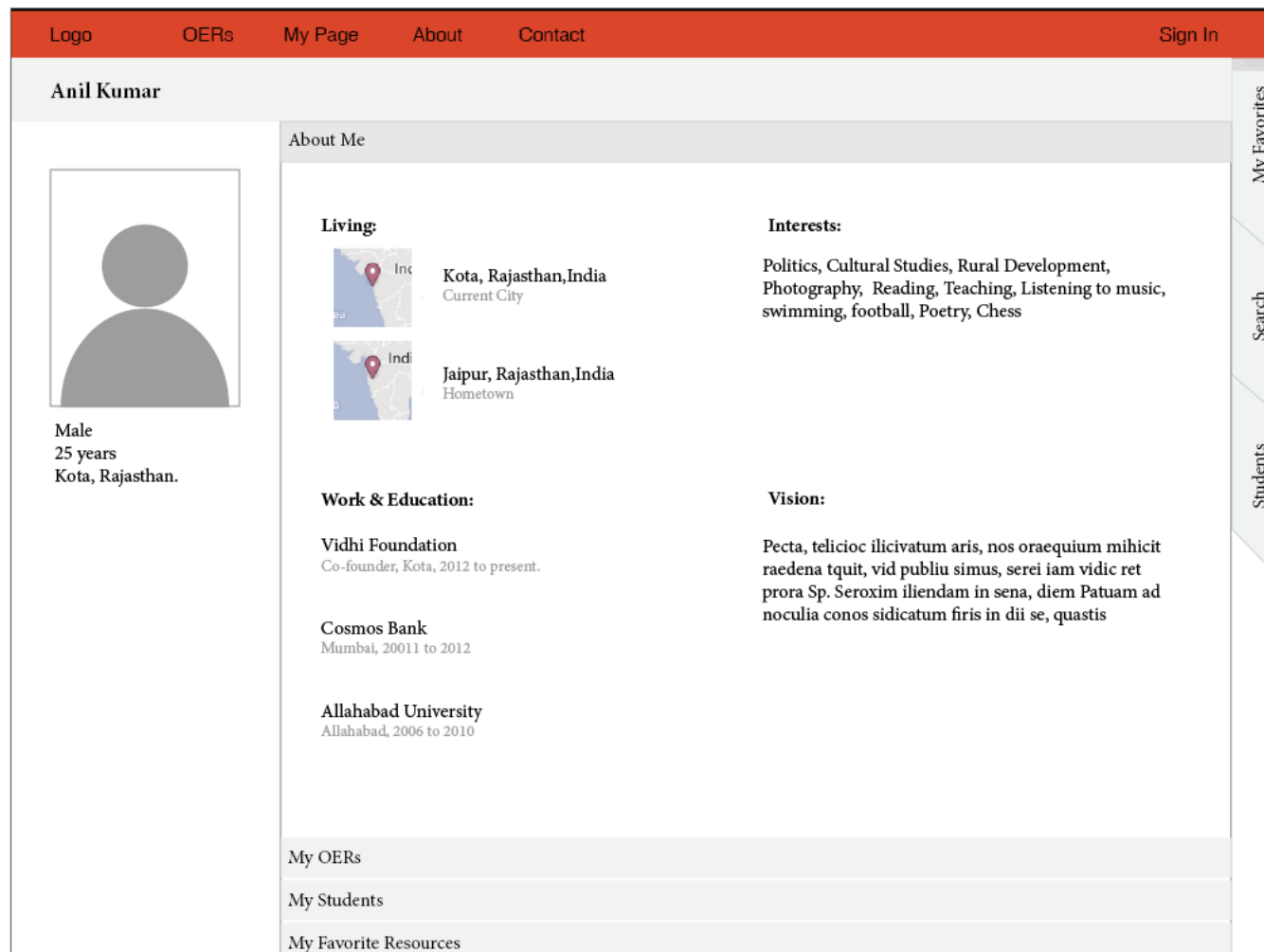
Search may be displayed in two ways:

- a) most recent
- b) most popular

It can also be filtered by a choice of formats. eg. One may search only the video results which may be relevant to keywords entered.

Projects also display the concepts covered in the lesson plans, as keywords. Upon clicking on these, one may view other projects that also cover the clicked concept. eg. One may click on the keyword "drilling" and view all projects that teach drilling. User can also favourite a project or course material.

FINAL INTERACTION WIREFRAME PROTOTYPE



This will allow them to refer back to such material through their own page, without needing to conduct a major search through the entire database all over again.

Fig. 4: About Me

Every signed in user has a dedicated page where they may:

1. share their profile,
2. their published OERs
3. maintain records on the progress of students (this page may only be seen by the page owner)
4. collect favourite resources for study and reference.

FINAL INTERACTION WIREFRAME PROTOTYPE

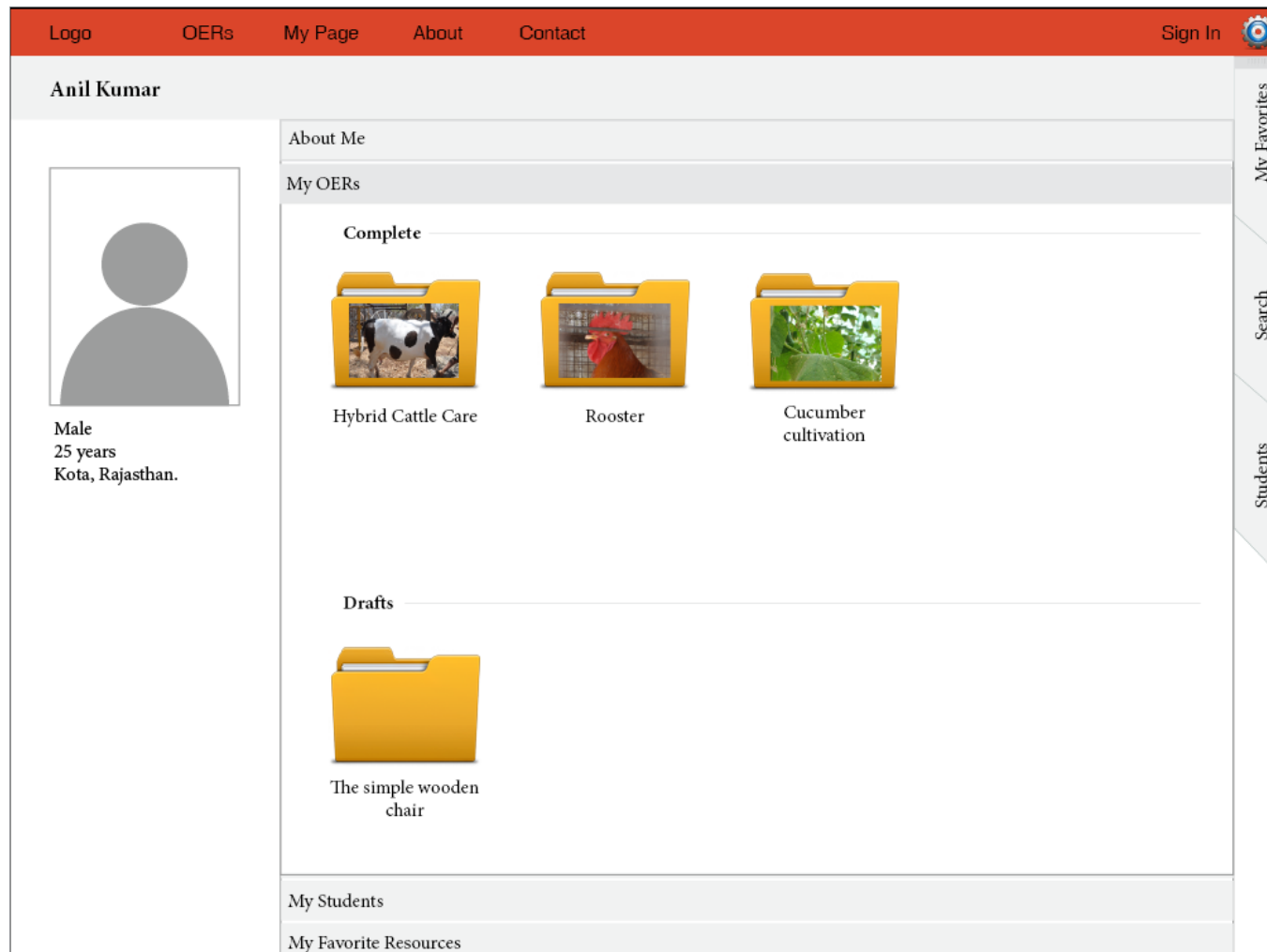


Fig. 5: My OERs

OERs that are complete maybe published for the benefit of all. However, those which are in the process of being made and yet to be completed will be saved to drafts. Drafts are only visible to the author.

FINAL INTERACTION WIREFRAME PROTOTYPE

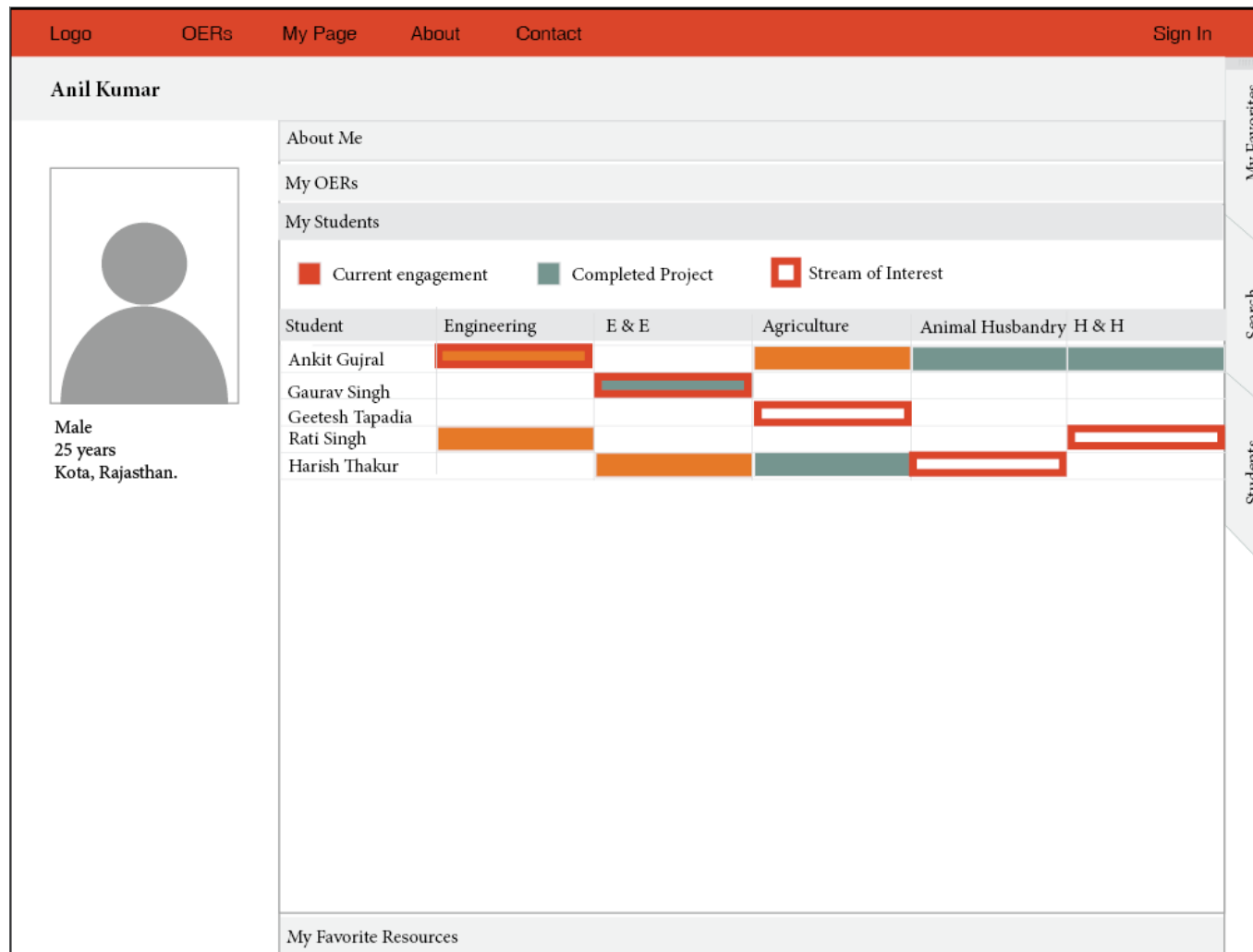


Fig. 6: My Students

User may maintain records of the work done by their students and their area of interest. With the help of this data the system can also suggest the involvement of a particular student in a certain kind of project.

FINAL INTERACTION WIREFRAME PROTOTYPE

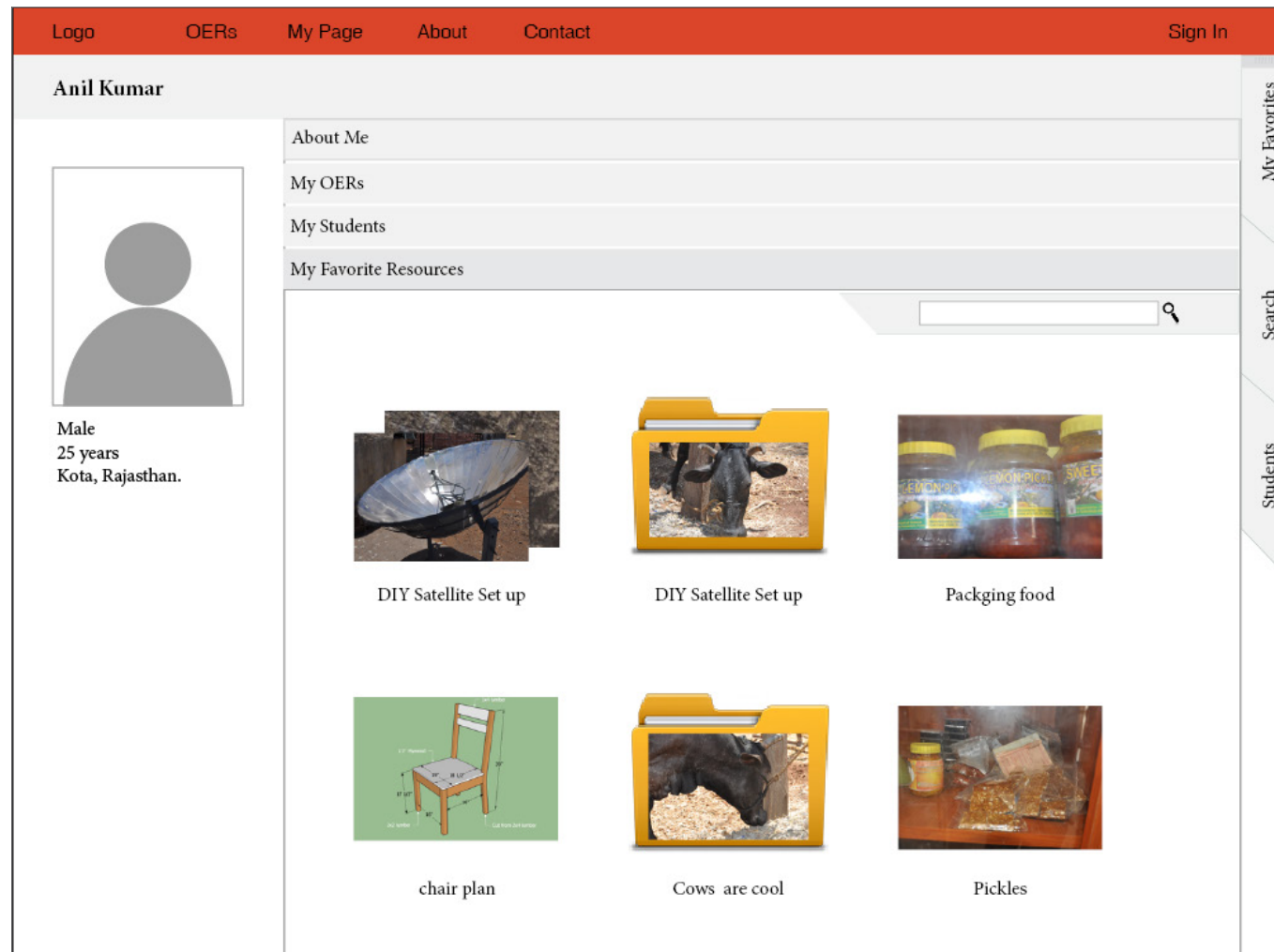


Fig. 7: My Favourite Resources

FINAL INTERACTION WIREFRAME PROTOTYPE

LogoOERsMy PageAboutContactSign In

Scribbles

Basic Info

abc

funnel

wedges

drilling

intro :

basics of carpentry -

simple tasks

introductory lesson

teaches measurements and

estimation of space

resources:

wood, work space- 10x10

feet for 3 students,

cutting, drilling, joints, fin-

ishing, polishing

Project manager, product

designer, saw man, hammer

man, polishwala, supply

management.

Insert

Text Formatting

Slide show

Video

Photo

Document

Text
Textbox

Basic Info

Project Name:

The simple wooden chair

Stream *:

Engineering

Lessons taught *:

Practical Skills	Math	Science	Geography	Literature	History
Abc Lesson	L joint		clay modelling	L joint	
fixing hinges	T joint		POP modelling	Drilling	
making a funnel	wedges and slopes		prototyping	fixing hinges	
lesson xyz	tool maintenance			Z Lesson	
lesson abc					

Other
(Please Specify):

Introduction

Resources

Activity

Student Roles

Publish

Preview

Close

My Favorites

Search

Students

Fig. 8: Create OER

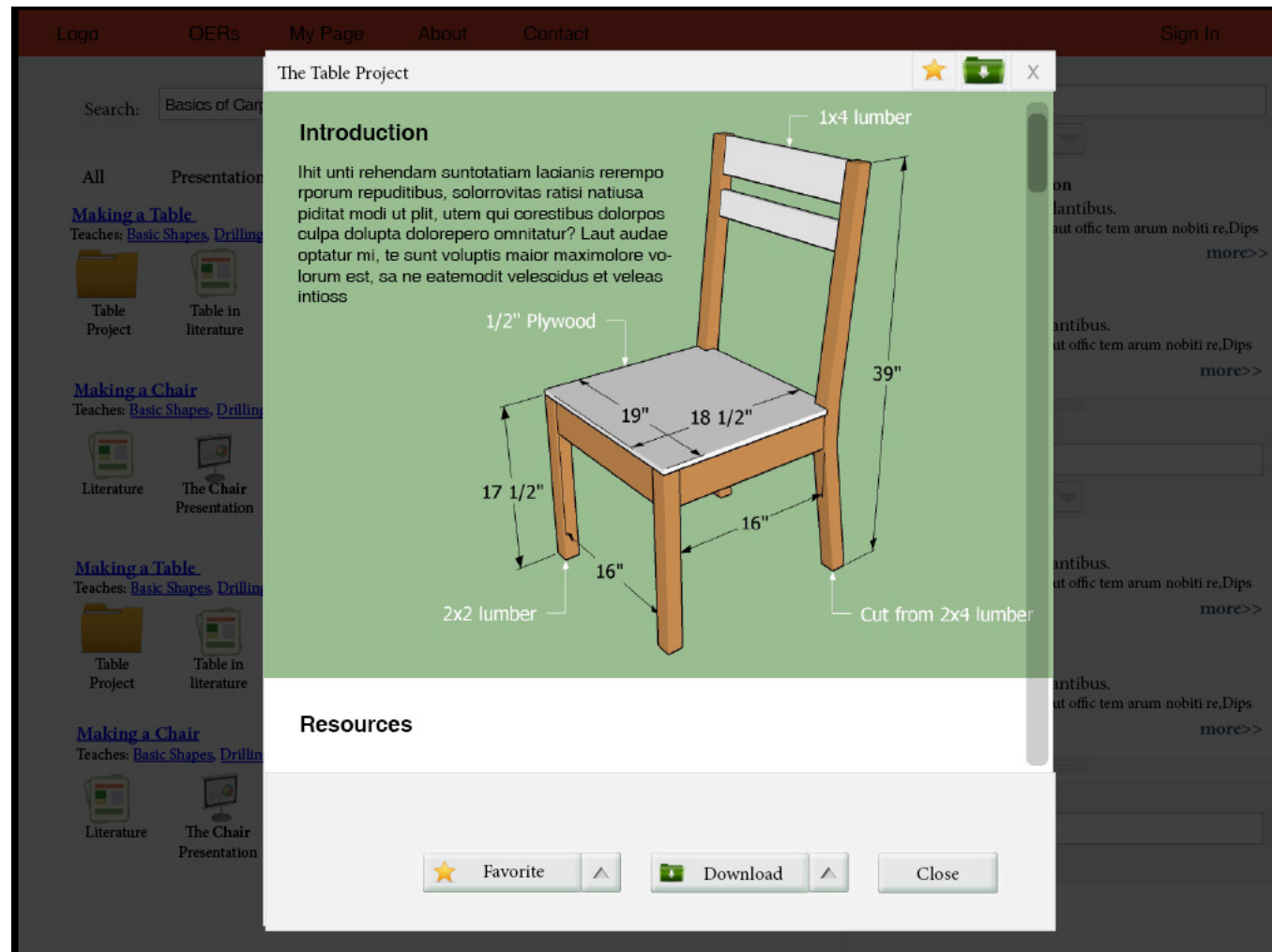
A template that facilitates the creation to allow quick lesson plans in an easy manner.

All information on the site free for all to use. One may upload their own content or even extract resources from other's lessons to add to their own plan.

eg. While preparing an OER on how to make buttermilk from milk, one may adopt some part of another OER existing in the database, which explains the process of making curds from milk.

FINAL INTERACTION WIREFRAME PROTOTYPE

Fig. 6: OER Preview



Preview of lesson plan or their sub parts, open up in modal windows so as not to disturb the users' line of search. These previews allow download individual parts of the OERs to facilitate quick and light download in case of low internet bandwidth at the user's end.