

COURSE MATERIAL

Team

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Project Details

COURSE MATERIAL is a web app for providing the course materials to college students in a well structured and organised manner, all at one place. Course materials will be uploaded by students themselves and other fellow students can access those materials in an organised manner.

By this web app we try to solve the problem of students wandering here and there, searching and asking everyone (specially seniors) for links, pdfs, notes and other materials. After this web app becomes live they just need to login on this site and get the data that their fellow students, seniors uploaded in a well organised manner.

Tech Stacks

Frontend :

- HTML
- CSS
- ReactJs
- React Bootstrap
- Material UI

Backend :

- NodeJs
- ExpressJs
- Mongoose
- MongoDB

Abstract/Project Idea

- We will have a separate model for each college.
- A user after registering will be associated with a college domain, in which he/she can add/view course materials.
- Every user will have a profile overview providing them details of their contribution.
- If a user wants to contribute to other college's materials then he/she can add the material but the material will be added after approval of the 3 users from the other college.

Workflow

- Wireframing the website.
- Designing web pages.
- Coding web pages
- Making models of content and the users.
- Connecting the frontend with the backend.

Implementation

Frontend :

(I) Wireframing the website

First of all we will make a sitemap of the complete website. We will implement this using Adobe XD.

(II) Designing the web pages

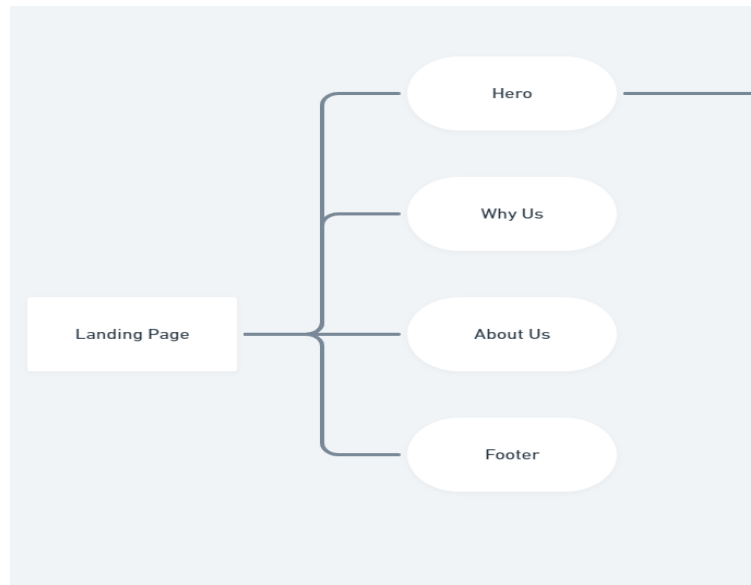
Then we start designing each web page. For designing we use Adobe XD.

(III) Coding Frontend Part

Then we start coding each web page using React. For designing we take help of Material UI and React Bootstrap. Here are implementation details of each pages:-

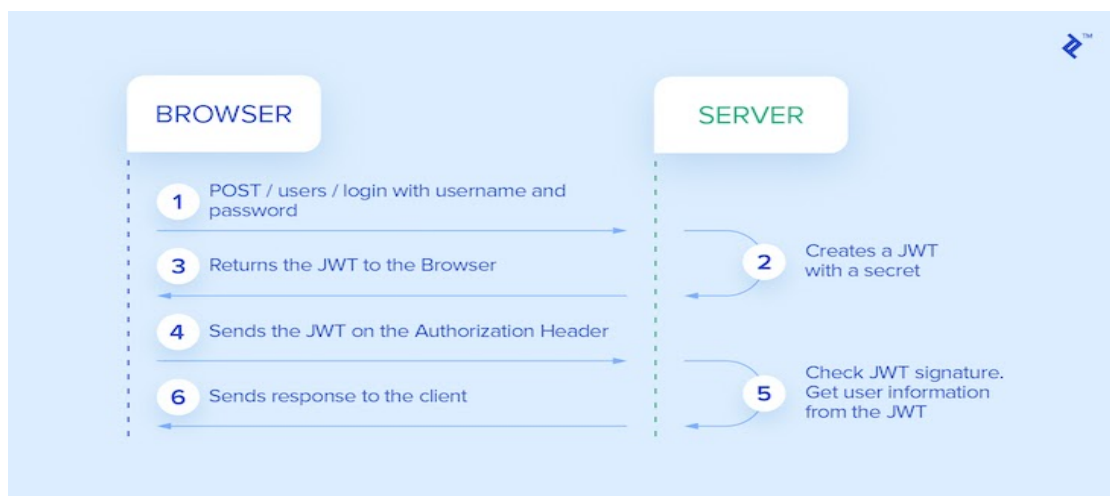
1. Landing Page

Landing page will as the name suggests will be the first page to be displayed when the site is opened. This component will have the overview of the site for what it is and why everyone should use it. We can implement it very easily using reactJs and material UI.



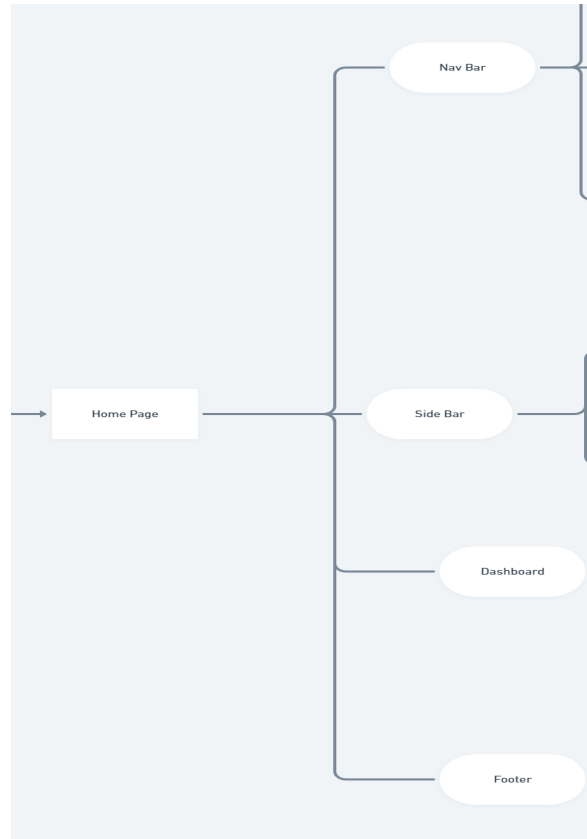
2. Signup and Login Page :

SignUp/Login will be done in the backend part by using Javascript web tokens. The workflow for the same is :



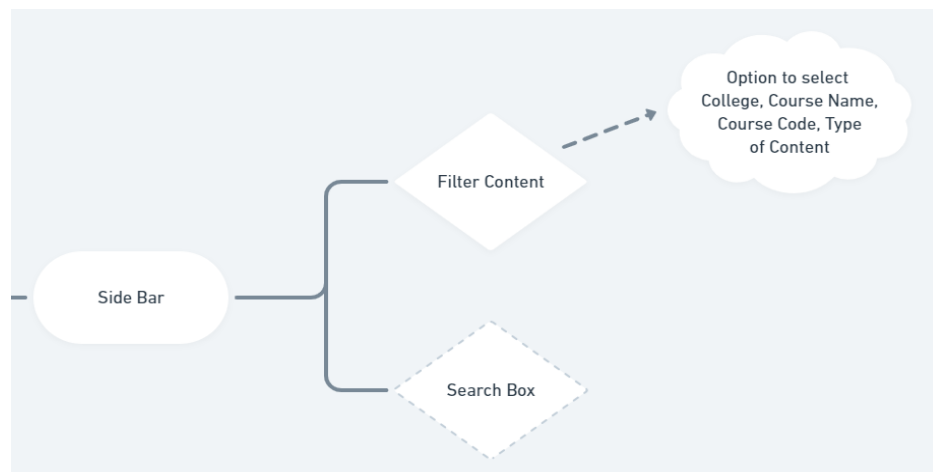
3. Home Page:

After the user is logged in, the user will be redirected to the home page which will have Navbar, sidebar, Dashboard and footer, and will fetch the data in the dashboard from the api provided in the backend.



4. Sidebar :

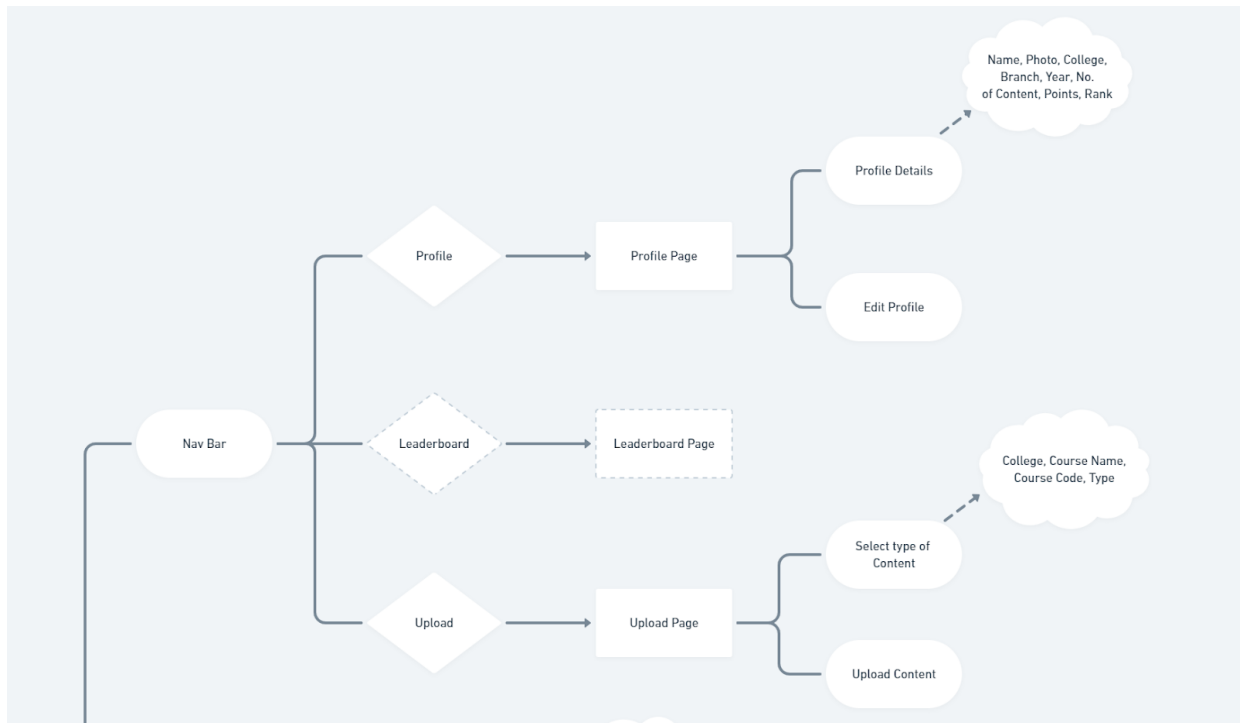
Sidebar has mainly two features. One to filter the content appearing on the dashboard and other to search the content and search results will be shown in the dashboard.



5. Navbar and Upload Content:

Navbar will have links to two parts, Profile and Upload content part. Upload content component will have the option to select type of content, course details like course name, course code.

Extra Part(If the time persists): We will add a leaderboard containing the list of users showing their contributions in the college course material.



(IV) Backend Part

We implement the backend part using nodejs expressjs and for databases we use mongodb atlas in the production environment and mongo local in the development environment.

For a content database we use an online platform cloudinary.

We planned to make two models, one for content which has all the details of content like which college course it belongs to and a link of the cloudinary where that content file will be uploaded and an user model which contains all details of the user.

Project Timeline

Week 1:

- Wireframing and Designing different components.
- Setting up the basic structure of the backend part and defining models.

Week 2:

- Completing the frontend coding part of signup,login dashboard and upload content pages.

Week 3:

- Connecting the backend with the frontend.
- Adding functionality to upload content pages.
- Adding functionality to filter content components.

Week 4:

- Completing the components parts and final touches to the project.

That's all what we had planned till now. Now as mentioned in the proposal template it is not easy to plan everything in the beginning itself so something may change but we try our best to stick to the things mentioned in this proposal.

Thanks