

GNDEC BLOG

MINOR PROJECT SYNOPSIS

BACHELORS OF TECHNOLOGY

Department of Information Technology

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1 Introduction

A blog is a frequently updated online public journal . It is a place to notify the latest update news and information for student and teachers. A place where the thoughts of the teachers and students can be shared. Really it's anything you want it to be . For our purposes we'll say that a blog is short form for the word weblog and the two words are used interchangeably . It can also play an important role in student's life .It can help in the promotion of the critical and analytical thinking, increased access and a combination of solitary and social interaction with peers. It would be a unified system of communication among students and faculty.

This project is based on modern JavaScript framework React.js for Frontend development and GraphQL API for database purpose. GraphQL is a query language for APIs and a runtime for fulfilling those queries with your existing data. GraphQL provides a complete and understandable description of the data in your API, gives clients the power to ask for exactly what they need and nothing more, makes it easier to evolve APIs over time, and enables powerful developer tools. We are using Graph CMS to provide an interface to enter data that will be showed in blogs. **GraphCMS** is a modern content management platform that helps teams bring content to any channel.

GraphQL is a query language for your API, and a server-side runtime for executing queries using a type system you define for your data. GraphQL isn't tied to any specific database or storage engine and is instead backed by your existing code and data. A GraphQL service is created by defining types and fields on those types, then providing functions for each field on each type.

1.1 Rationale

In our college, there is no unified system of sharing the information. The information about cultural, technical events need to be shared on WhatsApp groups, which sometimes get miscommunicated. Due to miscommunication, students missed the opportunities to participate and showcase their skills. Also official information is shared on notice board. But the UI of GNDEC notice board is not appropriate and it sometimes does not work in mobiles .

So, we are trying to provide a unified system of communication where information related to technical, cultural events by societies can be shared. Also all kind of official notices , information about scholarships, any research related blogs can posted by admins (professors).

2 Objectives

This project aims to provide a user friendly and interactive solution for getting news of user choice.

1. To provide a user friendly interface from which students can read news about college , get to know about different activities and different events organised by college societies .
2. To document the social and cultural values of college through daily blogs.
3. To stay up to date with all activities , events and news about college through blogs.
4. To keep students update about recent researches and technologies by professors.

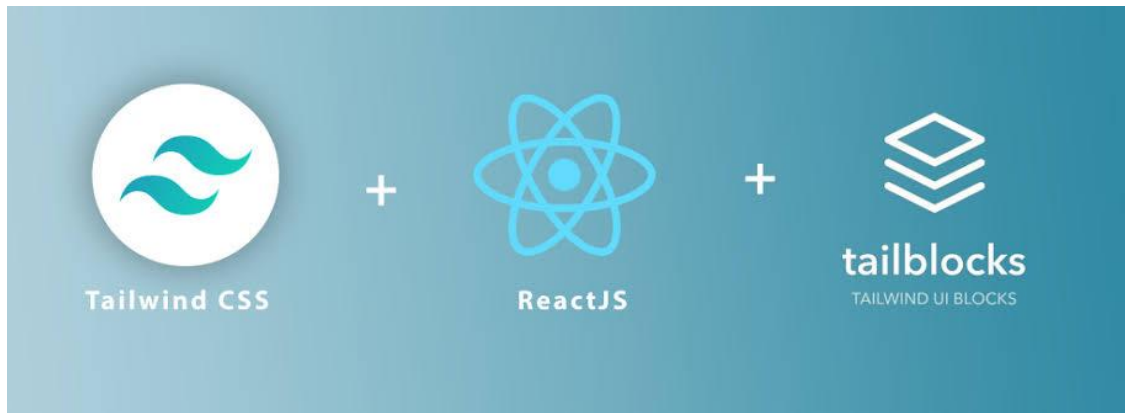
3 Feasibility Study

- **Technical Feasibility** :- The project is feasible within the limits of current technology .The software technologies used are open source and this doesn't require much hardware technologies except hosting services .
- **Economic Feasibility**:- The project is being built using free and open source technologies such as React.js , GraphQL and Tailwind CSS . Also for the hosting this blog, we will use a free version of Vercel .
- **Operational Feasibility** :- The proposed Blog can be easily adaptable by college & the project is easy to maintain because of the GraphQL , which is a content management system . The operation such as uploading new content is managed by GraphQL.

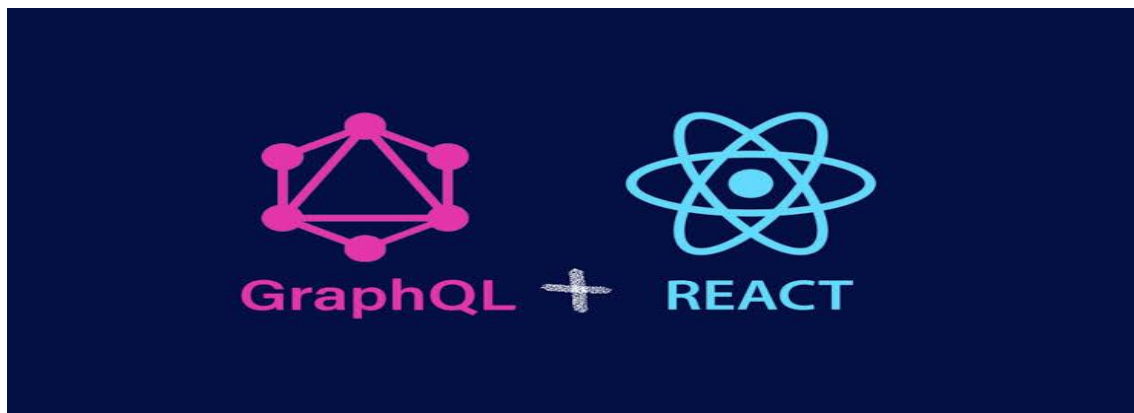
4 Methodology/ Planning of work

We plan to work on project by following the **Waterfall model** of SDLC. In it, tasks and phases are completed in a linear, sequential manner, and each stage of the project must be completed before the next begins. The project implementation will be done in three phases

:-



- First of all, UI design need to be prepared .
- This design then converted to website using React.js and Tailwind CSS.



- Then we need to setup GraphQL schemas for the database in the GraphCMS content management system .
- GraphCMS data will be accessed through the GraphQL API .
- Application will be deployed using free platforms Vercel.
- Then the application will be maintained .

5 Facilities required for proposed work

As it is aimed at proposing a standalone web application, the functional hardware and software requirements of the system are presented below:

Software Requirements:-

1. Operating System:- Any operating system supporting modern browsers Edge, Firefox, Chrome, Safari, etc
2. Frontend Technologies :- HTML,CSS,React.js and Tailwind CSS
3. Database : Graph based database (GraphCMS)
4. APIs for Integration :- GraphQL API
5. IDE for development:- Visual Studio Code
6. Deployment platform : VERCEL .

Hardware Requirements:-

Component	Minimum Requirement
Processor	1.9 gigahertz (GHz) x86- or x64-bit dual core processor
Memory	2GB RAM
Display	Variable screen sizes

6 Conclusion

- A fully responsive Blog Application with support for different screen sizes .
- A custom Blog Application with advanced features such as featured and recent posts and moderated user comments .
- Blog which can be filtered using hashtags, categories of blogs .
- A feature of saving the Blog for future reference.

References

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