

School of Information Technology and Engineering Curriculum Assisted Learning project (J- Component) Winter Semester 2020-21

PROJECT TITLE: COME-ON (A Knowledge Sharing

Information Highway for our College Students)

REVIEW – III

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Slot: G2

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Abstract

For every year the number of admissions for our college (Vellore Institute of Technology) had been increasing because of the college infrastructure, couching and all other stuffs attracts the students. But the challenging task for some students who has interest to join our college or the freshers may not understand by the college regulations so in such cases the seniors (who already studying in the college) can help by responding to their thoughts by our project. Yes, it's an interaction or knowledge sharing website. This project builds a bridge between students also for discussing about books where to get and yummy foods, transportation facilities, important questions for their exams and doubts regarding business incubator.

For example, if a new joiner wants a knowledge about how the course credit system works can post his/her question in our website and that can be answered by the seniors who already have an account for them. It will be highly helpful for all school passed students to know about our college regular system.

General Overview or Background of the Project Topic

The project titled "ONLINE DISCUSS FORUM" is designed using Active Server Pages .NET, JS, HTML, CSS SQL Server 2000 which runs under .Net Frame Work 2005 in Microsoft Windows Operating System family.

The project contains seven main modules.

- Category
- Post Question
- Registration
- Answer
- Discover
- Search

Literature Survey

1. Scope Discussion Forum

by, Senior Prof. Tung Chioa Master's Program Offering at Yukon College

April June 2013 Kicked off project

Completed 27 interviews with internal and external representatives
Distributed survey via online list serve Received 26 responses Presented final
report and recommendations for moving forward based on these responses
Program takes place like

- Professional Master's Program
- Has a Certificate option
- Delivered in a blended delivery format

Instructors

• Existing faculty, adjuncts, local Ph.D. holders (ideally with teaching)

Academic Focus

- Climate induced environmental change in the north
- Interdisciplinary
- Practically apply climate change lens to
- existing disciplines
- Science background not required
- Focus on science / policy interface
- Credible credential is offered

Discussions:

What would a course like this have to offer in order to be of interest to you or other YG employees?

What does Yukon College need to consider when offering a course intended for professional development?

Given your experiences with community-based field programs, what lessons have you learned from previous offerings?

2. IARE Discussion Forum

by, A review article by James Carly about IARE Discussion Forum

This guide is designed to provide basic information on participating in the Discussion Forums. This tool is a great way to connect with your peers throughout the year. The first time you log-in you as a new user in the forums you must review your profile and settings for notifications about the forums. You must review your profile page info before gaining access to the Discussion Forums. Be sure to select the two boxes at the bottom of the form so that you are notified of any private messages to you and of updates to topics you are interested in. The home page of the Discussion forums lists all available forums. Within each of these forums are additional topic areas. I selected the forum of Customer Service, Performance Measure for Staff, Conversion rates. All posts in this specific forum are available for review. Above the first post listed is a SUBSCRIBE button. You can choose to subscribe to the specific forum post and then be notified of new posts via e-mail. This button is a toggle switch so you can also choose to unsubscribe.

3. Small Talk Forum

by, Warfield Taylor, Peace River RD, Province of BC

It provides many solutions regarding the problems mentioned below Cell Coverage in Remote Areas (The need for federal and provincial orders of government to promote and provide funding incentives towards enhanced cell coverage in remote communities), Microcell Transmitter Placement (Examining the placement of microcell transmitters near local residences, schools and hospitals, and the need for greater consultation. Based on resolution 2017-B100.), Provincial & Federal Downloading (Provincial policy changes that are adding new responsibilities to local governments, many of which who do not have the staff resources or financial means to absorb these new duties.), Ministers Visiting Small Communities (The need for provincial ministers to visit smaller communities, not just large urban areas.), Ambulance Service & Paramedics (The negative effects of paramedic and ambulance shortages on small communities, including impacts on ambulance response times, other community resources, and overall health of residents.)

4. User Forum – Slides for Discussion

by, JamieShiers from EIROForum

Look for merging with other user forum activities and utilizing existing work Include wider set of" e-infrastructure acronyms" and try to make the interface less confusing to users

Promote open approach and clear selection criteria

- Choices and pilots based on clear criteria, not based on "since it happens to be there". Some pilots have a tendency to become permanent.
- Example from datacenter selection criteria: energy efficiency, environmental sustainability, running costs

QUESTIONS LIKE:

- what is the aim of the forum supporting, blocking, commenting, recommending, claque ring, etc.?
- how to make sure we get the people we are looking for?
- is it a neutral place or is there a hidden agenda?
- whom do we trust who is in the driving seat (researchers, IT folks, etc.)?
- how do we organize the forum monolithically?
- do we understand that there is no golden way of user engagement partly success depends on trusted persons? (famous Henry Thompson and XML)
- same issues being addressed by RDA (and others such as IETF, W3C, etc.

5. HOW QUORA CAN BE A SUCCESSFUL DISCUSSION FORUM

by, USA dependency article admin Ricky Daniels

Quora is a growing user generated Question and Answer community co-founded by two former Facebook employees, Adam D'Angelo and Charlie Cheever launched in US in June 2009. Quora works by members asking questions and Quora delivering you answers and content from people who already know the answer from real marketers, economists, screenwriters, police officers, and military veterans.

Unique features

Quora can be distinguished from others in a number of fundamental ways:

- 1. It is designed with a heavy emphasis on encouraging the quality of questions and answers. Top writers are recognized by the ability of the community of readers to 'upvote', similar to a Facebook like, the answer.
- 2. it allows users to vote on answers and encourages accountability and reputation amongst its community of users.
- 3. it allows users to follow topics and control the subjects that interest them giving users full control
- 4. The design and user experience are simple, intuitive and users can easily follow their topics of interest (rather than searching like Yahoo! Answers) The navigation is logical with clear hierarchy
- 5. Quora has inbuilt networking by default, sign in via Twitter or Facebook, which automatically connects with other networks

6. How can Quora help your marketing effectiveness?

by, David Reilly is a Digital Strategy Consultant and Trainer who writes about digital innovation, new technology and runs the digital future networking Group, Future Thinking in Digital Marketing

It is fantastic research tool enabling users to not only gain access to expert answers across the world but also, and most significantly as marketers to really understand the key questions being asked around your topic of interest.

Enables you to build real subject authority. Quora is about being authoritative on a subject, and building relationships based on your competency over the course of multiple questions with the people who share similar interest. The extremely tight subject matter focus and smaller scope allows for greater intimacy, and

lowers the barriers to being a consistent and useful contributor over the long term Improve your writing skills. Using Quora will improve your written communication skill sets. It enabled you to write concise, clear responses to questions instead of waffling. This is invaluable.

Asking good questions which engage your audience. The marketing value is in the fact that you need to ask an interesting and intriguing question to get feedback from all those people out there. A lot of the work in content strategy is focusing on asking the right question and answers will arrive. For a marketer having the knowledge of which are the key questions provides a fantastic advantage Inspiration for headlines for your topics of choice. Quora search can be filtered to only display the questions, which is a way to get inspiration for article headlines.

7. CROKAGE: A New Way to Search Stack Overflow

by, Ben Popper: Director of Content

One of the most powerful attributes of Stack Overflow (SO) is the accumulation of developers' knowledge over time. Community members have contributed more than 18 million questions and 27 million answers. When a developer is stuck on a coding problem, they search through this vast trove of information to see if a solution to their particular conundrum has already been offered. Some use the internal SO search feature while others use search engines such as Google or Bing, narrowing down the search to the stackoverflow.com domain.

Software developers searching for answers might use natural language — "How do I insert an element array in a specific position?" — or they might choose a few important keywords relevant to the programming task at hand and use those as their query with the hope that the search engine would return the relevant solutions. A lot of the time they find the relevant code, but don't find a clear explanation of how to implement it. Other times they find a great explanation about how one might solve the problem, but not the actual code.

Earlier this year, a team of computer science researchers published a paper with a novel solution to this problem: CROKAGE – the Crowd Knowledge Answer Generator. This service takes the description of a programming task as a query and then provides relevant, comprehensive programming solutions containing both code snippets and their succinct explanations.

8. Q & A Site Corpus Query Expansion and Answer

by, Derczynski L, Wang J, Gaizauskas R, Greenwood MA (2008) A data drive approach to query expansion in question answering In: Proceedings of Coling 2008. Coling 2008 Organizing Committee, Manchester, pp 4–41

Question Answering (QA) is a task of answering natural language questions with adequate sentences. This paper proposes two methods to improve the performance of the QA system using a Q&A site corpus. The first method is for the relevant document retrieval module. We proposed modification of measure of mutual information for the query expansion; we calculate it between two words in each question and a word in its answer in the Q&A site corpus not to

choose the words that are not suitable. The second method is for the candidate answer evaluation module. We proposed to evaluate candidate answers using the

two measures together, i.e., the Web relevance score and the translation probability. The experiments were carried out using a Japanese Q&A site corpus.

9. Effectiveness and user satisfaction in Yahoo! Answers

by, Chirag Shah

Social question-answering services such as Yahoo! Answers (YA) are becoming highly prominent venues for online information seeking. While their immense popularity indicates their success, there is a need to measure their effectiveness and how satisfactory information they provide to the information seekers.

To study these questions of effectiveness and user satisfaction, we collected a large amount of data from YA.

For operationalizing the constructs of effectiveness and user satisfaction, we considered the amount of time elapsed between a question being asked and answered, and the asker choosing an answer to be satisfying, respectively.

Using data mining, we show that the majority of the questions on YA get at least one answer within a few minutes, however, it takes longer to receive an answer that satisfies the asker. We also demonstrate that the sooner an answer appears for a question, the higher chances it has being selected as the best answer by the asker.

10. 100 Days of Code - Geeks-for-geeks

by, anuupadhyay on featured articles of geeks website

Do you want to become a successful software developer and dreaming about getting into the big tech companies? Are you someone who is already working as a developer but looking for a big move in your career?

Well, if you're one of them then surely you might have tried to do some preparation and you might have tried to cover various topics. You make a plan, you try to follow your plan and you start doing preparation through various resources, tutorials, and videos. You start learning it but after a couple of days or months, you realize that you're not going anywhere. You're not making any progress and things are overwhelming for you.

You're not alone and it's happening with so many newbie programmers and experienced developers. They try to learn to code, and they try to cover various topics but due to the lack of a good roadmap and guidance, things become messy and confusing for them. During their preparation, they miss out on a lot of important things to cover.

We will cover 5-6 main topics in 100 days, and we will target the interviews of big tech companies such as Facebook, Google, Microsoft, Amazon, etc. These topics are given below...

- Data Structures and Algorithms (Coding part and problem solving)
- System Design
- Operating System and DBMS (database management system)
- Object-Oriented Design
- Cultural Fit

11. Online discussion forums good for well-being, study shows

by, Dr Jessica Salvatore of Sweet Briar College, USA

In the study, users were approached on a range of online discussion forums catering to a variety of interests, hobbies and lifestyles. Those recruited to the study were classified in two groups: those whose forum subject could be considered stigmatized (such as those dealing with mental health issues, postnatal depression or a particular parenting choice for example) or non-stigma-related forums (such as those for golfers, bodybuilders and environmental issues).

They were asked a set of questions relating to their motivations for joining the discussion forum, the fulfillment of their expectations, their identification with other forum users, their satisfaction with life and their offline engagement with issues raised on the forum.

Lead author Dr Louise Pendry from Psychology at the University of Exeter said: "Our findings paint a more optimistic picture of old-style online discussion forums. Often, we browse forums just hoping to find answers to our questions. In fact, as well as finding answers, our study showed users often discover that forums are a source of great support, especially those seeking information about more stigmatizing conditions.

12.Effective online interaction: Mapping course design to bridge from research to practice

by, Mary Thorpe, The Open University

Quantitative and qualitative research of a case study course confirmed that the course achieved a highly interactive learning experience, associated with more effective student support and high student retention. Computer conferencing

achieved high participation from the beginning and evidence of dialogue and argumentation within online tutor groups. This was achieved not by active tutor moderation but by a sequence of structured tasks. Compendium mind mapping software has been used to represent the design of this sequence of tasks and this has refined interpretation of the research findings. The positive outcomes identified relate not purely to computer conferencing but to an integration of individual and group tasks feeding forward into a well-designed assignment. The usability of case study data relates to the ability of practitioners to compare their own context with that of the case. The visual representation of the design of the task sequence is providing a better bridge from the research to the practice context than the use of general description of findings alone. This is particularly important in an area which has generated a range of sometimes conflicting findings, with weak links to the challenges of course design.

13.Student views on participation and interaction in student centred online discussion forums

by, Neil Harris, Griffith University and Maria Alexandra Sandor, Kristianstad University

It is important for higher education to evolve and incorporate new teaching and learning technologies as they emerge. While such technologies can offer new educational possibilities, it is vital to ensure their usage is grounded in pedagogical thinking and enriches the learning experience of students. Computer-mediated communication (CMC), and more specifically online discussion forums, is being increasingly utilized. However, how to best incorporate such applications remains modest amongst most academics. This paper presents a framework of the online discussion forum as a student-centered peer e-earning environment. In particular, the paper presents research findings relating to student views on participation and interaction in these online discussion forums. Data was gathered through semi-structured interviews with students. The findings support the discussed framework in that it allows students to take an active role in their learning and enriches their learning experience. In summary, the framework provides a viable mean of implementing peer learning in an online learning environment.

14. A review of recent papers on online discussion in teaching and learning in higher education

by, Neil Harris, Griffith University and Maria Alexandra Sandor, Kristianstad University

This paper presents a review of a sample of recent case studies on the use of asynchronous online discussion in higher education. These studies are analyzed in terms of curriculum design, assumptions about teaching and learning, and claims and reported conditions for using online discussion. The claims made for asynchronous online discussion—in particular the opportunities for interaction between learners, and permanent access to these interactions—are found to be frequently based on social constructivist principles. Asynchronous online discussion is seen as offering additional value by providing learners with experience of computer communication tools and opportunities for taking part in group work. Several constraints on participation within online forums are described. These are discussed in relation to the nature of curriculum design, software design, tutor support, and learners' attitudes and previous experience. The conditions under which asynchronous online discussion may best support learning are set out, and avenues for future research are suggested.

15. Analysis of students' listening behavior patterns in an asynchronous discussion forum

by, Durairaj, K & Umar, I.N, Centre for Instructional Technology & Multimedia, Universiti Sains Malaysia, 11800 Penang, Malaysia

Online forum can be used to complement learning and teaching, particularly in blended or hybrid learning courses. According to Balaji and Chakrabarti (2010), asynchronous discussion forum can increase students' understanding and give them the opportunity to share information, perspectives and experiences. Besides, it leaves an impact on achievements (Cheng, Paré, Collimore, & Joordens, 2011). Thus, it is important to know the level of interaction or students' engagement in an online discussion forum. Students' engagement level can be analyzed using social network analysis and cluster analysis. In this study, cluster analysis is carried out to classify the students' level of interaction and participation in an online forum. The effectiveness of asynchronous discussion forum in assisting the instruction and learning depends on the tasks or activities conducted. For example, the success of

asynchronous discussion forums depending on the students' interaction, participation and the quality and the extent of scholarly discussions taking place. The analysis of these online forum activities - listening behaviors - will reflect the types of participants. Based on this analysis, further suggestions can be made to improve their learning.

Overview of Survey Existing Systems and their Limitations

In general people share their ideas, queries and answers from their colleagues or friends through the intercom or direct manner. They need to spend time for their work.

LIMITATIONS:

Some of the drawbacks are:

- 1. Details are enquired through phone.
- 2. It consumes more time
- 3. They don't get proper answers.

Motivation

Discussions happen all the time in face-to-face classrooms. They occur when students chat before and after class, when instructors pose questions during lectures, and when students form study groups to do homework or prepare for a test. In online courses, important discussions are harder to come by, but it is just as important for instructors to facilitate that kind of conversation. Here are three motivations with which we can promote healthy conversations in your online discussion forums.

- Create spaces for students to build contact with other students.
- Make assessments engaging and relevant to students' lives.
- Facilitate opportunities for collaboration and support.
- Apart from these discussion regarding where to find hard copy of books, applications, question banks, transport, food, etc.
- These are the motivations that we had for doing this project.

AIM

Aim of our project is to provide some basic knowledge about our college details and information in our application. Here all students in every year the number of admissions for our college Vellore Institute of Technology has been increasing because of the college infrastructure, knowledge about campus ,couching and all other activities attracts the students. But the challenging task for some students like junior students who has interest to join our college or the freshers may not understand by the college regulations so in such cases the seniors (who already studying in the college) can help by responding to their thoughts by our project. Yeah, our project is an interaction or knowledge sharing website. This project builds a bridge between students also for discussing about books where to get and yummy foods, transportation facilities, important questions for their exams and doubts regarding business incubator.

OBJECTIVES

The primary role of our interaction between students is to connect to knowledge nodes both the knowledge providers and the knowledge seekers. The knowledge of the mind of one provider like senior student may thus be ultimately transferred to the mind of someone who seeks that query answer about their basic information needs etc. so that a new decision can be made or situation handled. Here I our project we provide a means of capturing and storing knowledge and brokering it to the appropriate requirement of students. Here in our project, we added some significant options like retweet, comment and like button which is equivalence to top online applications.

1. <u>To Capture Knowledge among students</u>: This goal can be achieved by creating KM repositories. Those will consist of structured documents with Knowledge embedded in them memos, reports, presentations, articles stored in a way that they may be easily retrieved.

- 2. <u>To Improve Knowledge Access</u>: To facilitate the processes of knowledge transfer in our app and between vit students to increase for their future purpose.
- 3. To Enhance the Knowledge Environment in campus: by proactively facilitating the doubts in each and every student and rewarding their knowledge creation which is beneficial for others, transfer to them and use.
- 4. <u>To Manage Knowledge as an Asset:</u> some projects are including their intellectual capital in the project others are leveraging their knowledge assets to generate new income from or to reduce costs with their patent base.

PROPOSED SYSTEM

It is difficult to note down all the problems manually. Instead, it is decided to develop an "ONLINE DISCUSS FORUM" called Come-On to ease the operation. A system is required which is being capable of elimination all the problems and become useful to users and thus the new system is derived. Here we get a different view from different users.

BENEFITS

- Interaction will be easier.
- Users' posts can be viewed by others
- Less time consuming.
- Introduce a new model for user login authentication
- Considering the present situation, we could conduct meetings through internet
- Organizations for the long data set is quite difficult though we can use some tools for do it
- Using data analytics models to manage all those information
- Micro web framework which is used for the code to run on a browser so that the all-packed model is made as a web application

Development Tools and Methodologies to be Used

The hardware used for the development of the project is:

PROCESSOR : INTEL i3 10th GEN RAM : 128 MD SD RAM

MONITOR : 16" COLOR

HARD DISK : Minimum 20 GB

FLOPPY DRIVE : 1.44 MB CD DRIVE : LG 52X

KEYBOARD : STANDARD 102 KEYS

MOUSE : 3 BUTTONS

The software used for the development of the project is:

OPERATING SYSTEM: Windows 10

ENVIRONMENT : Visual Studio .NET 2003

.NET FRAMEWORK : Version 1.1

LANGUAGE : JavaScript, HTML, CSS, NET, ASP.NET

BACKEND : SQL SERVER 2000

Methodologies:

- Methodologies we used in our project is the React Js a web framework concept discovered by Facebook a recent most preferred technology for all Full-Stack developer since it's built under JavaScript and typescript.
- Also, we used one of the react template called redux to make our Web Application as one page application.
- All modules and components are designed by Material-Ui icons and stuffs where the button looks pretty clean and attractive for the users.
- Finally, for backend User authentication and database we used firebase and also for hosting our web page we using it.

Functional Requirements Specification

Following is a list of functionalities of the system. More functionality that you find appropriate can be added to this list. And, in places where the description of functionality is not adequate, you can make appropriate assumptions and proceed.

Users of the system:

Following are the requirements, which can be used to derive functional components:

- Users need to register.
- Facility to post topics for the discussion.
- Facility to view the articles by topics
- User can view the previous discussion taken place on that day.
- Rate the articles.
- Administrator has privilege to edit user's profile
- Provide an interface for the admin to approve posts so that posts are not visible without admin approval
- Enable the admin to generate reports which contains all the posts and their corresponding replies

Non-functional Requirements Specification

Performance and scalability

How fast do the system return results? How much will this performance change with higher workloads?

Portability and compatibility

Which hardware, operating systems, browsers, and their versions does the software run on? Does it conflict with other applications and processes within these environments?

Reliability, availability, maintainability

How often does the system experience critical failures? and how much time is it available to users against downtimes?

Security

How are the system and its data protected against attacks?

Usability

How easy is it for a customer to use the system?

The above-mentioned non-functional requirements are need to be followed for making the system more progress and attracts the users. How NFR's influence system architecture:

- They serve as constraints or restrictions on the design of the system across the different backlogs. Also known as system qualities, non-functional requirements are just as critical as functional Epics, Capabilities, Features, and Stories.
- They ensure the usability and effectiveness of the entire system.
- Failing to meet any one of them can result in systems that fail to satisfy internal business, user, or market needs, or that do not fulfil mandatory requirements imposed by regulatory or standards agencies.
- In some cases, non-compliance can cause significant legal issues (privacy, security, safety, to name a few).
- Proper definition and implementation of NFRs is critical. Over-specify them, and the solution may be too costly to be viable; under-specify or underachieve them, and the system will be inadequate for its intended use.
- NFRs are persistent qualities and constraints that, unlike functional requirements, are typically revisited as part of the Definition of Done (DoD) for each Iteration, Program Increment (PI), or release.
- NFRs influence all backlogs: Team, Program, Solution, and Portfolio

Design Constraints

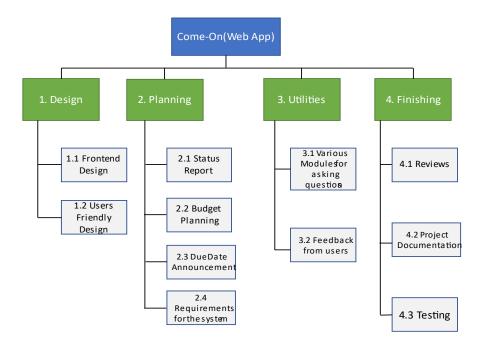
Design constraints are limitations on a design. These include imposed limitations that you don't control and limitations that are self-imposed as a way to improve a design. The following are common types of design constraint.

You can simply login with your Google account. As soon as you are in you can see modules to the left side of the page. You can click it as get specific questions regarding that module. Also, you can give feedback and discovery space. Towards right there are like social medias with which also you can contact. At the middle is the main part the question and Ans column you can ask question and view answers with filters in it. At top there like some set of icons like home, notification button these buttons are constrained and use cannot use it except the search and add questions.

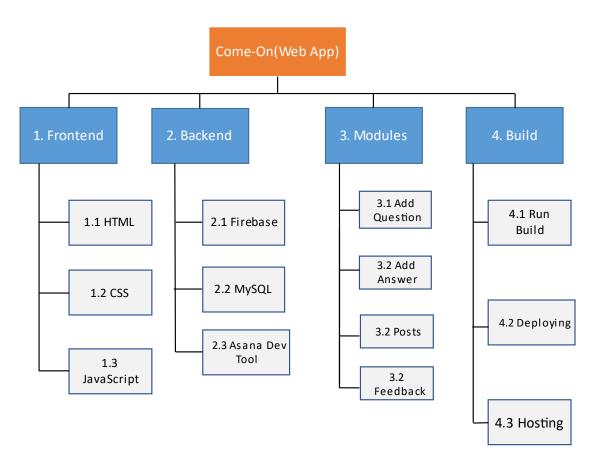
DISCOVERABILITY, FEEDBACK, VISIBILITY, MAPPING, CONSISTENCY, AFFORDANCE is all maintained properly in order to get a good design for the website.

Whilst constraining user behavior instead of enabling it may initially seem counter-intuitive, by limiting what actions users can undertake, we can focus on perfecting those limited options. Understanding and implementing constraints will aid in usability and help your users engage your design with minimal error, thus creating a more effective overall experience

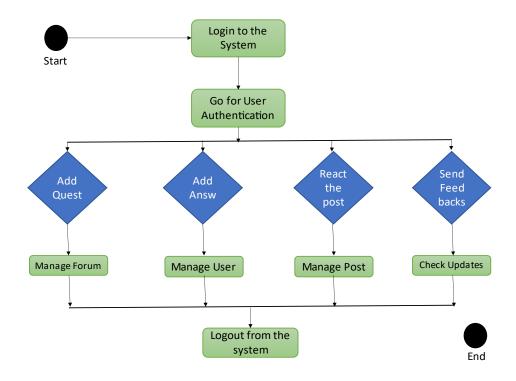
Work breakdown structure (WBS)



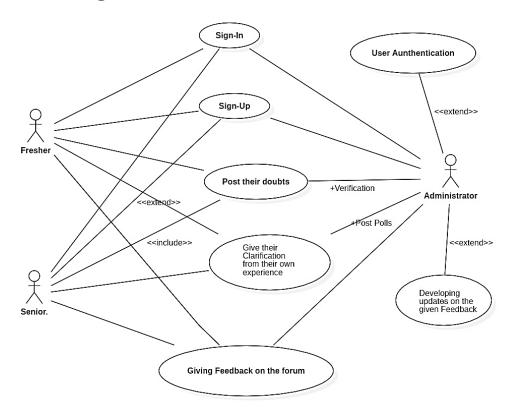
Product breakdown structure (PBS)



Activity Diagram



Use Case Diagram



System Architecture and Design

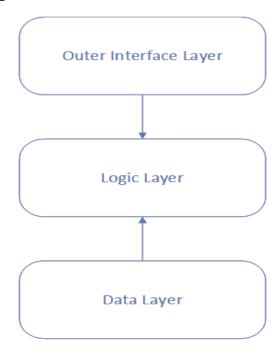
3-Layered architecture is one of the simplest and oldest patterns we have come across; however, depending on certain implementation decisions it can become complex. We have developed an acronym to remember 3-Layered architecture we call it the **OLD Pattern**.

- Outer Interface Layer: This layer is what the user of your software system will interact with. You could also call this the Presentation layer. It is in the Outer interface layer where API definitions or Views are written and maintained.
- Logic Layer: In the center and the heart of your application lies the logic layer, it is in this layer where business rules are defined, calculations are made and processes that make your software generally function.
- Data Layer: The last layer is the data layer, it is in the data layer where data persistence logic resides. Data can be read or written from a local or networked file system, a database, a 3rd-party web service, a cache service or any endpoint where your software needs to consume data.

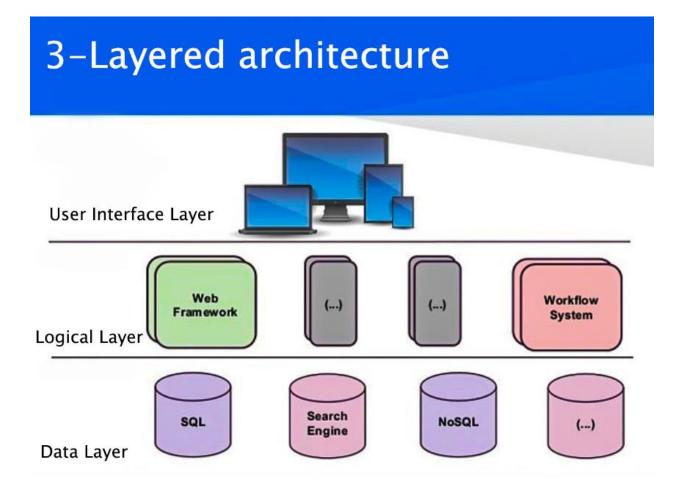
It allows for flexibility in implementation as well as being able to push hard decisions later in the development cycle. During initial design we might think "we really want a database specifically a relational database"; however, it is possible the application didn't need that powerful of a component in the system. Maybe all that was necessary was storing some data in a flat file in the file system.

Below diagrams has been used for the visualization of Structured design of the Student Knowledge Sharing Forum.

General Form:



ComeOn (Our Web App Name) 3-Layered Diagram



First layer, designed first a front-end coding for the users to login or sign-up to our discussion forum. This layer is all about developed for clean and responsive UI to our users.

Next layer, designed for the logical and algorithm stuffs which used to post the recent posts in our web application. This layer also covers user authentication, web framework and all dev logical parts.

Last layer, designed to maintain the database which store all user information and questions with their answers using stable database tools.

Coding or Implementation

Index.html

```
<!DOCTYPE html>
<html Lang="en">
  <head>
    <meta charset="utf-8" />
    <link rel="icon" href="%PUBLIC_URL%/favicon.ico" />
    <meta name="viewport" content="width=device-width, initial-scale=1" />
    <meta name="theme-color" content="#000000" />
    <meta
      name="description"
      content="Web site created using create-react-app"
    />
    <link rel="apple-touch-icon" href="%PUBLIC URL%/logo192.png" />
    <link rel="manifest" href="%PUBLIC_URL%/manifest.json" />
```

```
<title>COME ON</title>
 </head>
  <body>
   <noscript>You need to enable JavaScript to run this app.
   <div id="root"></div>
   <div id="portal"></div>
 </body>
</html>
```

Index.js

```
import React from 'react';
import ReactDOM from 'react-dom';
import './index.css';
import App from './App';
import store from './app/store';
import { Provider } from 'react-redux';
import * as serviceWorker from './serviceWorker';
ReactDOM.render(
  <React.StrictMode>
    <Provider store={store}>
      <App />
    </Provider>
  </React.StrictMode>,
  document.getElementById('root')
);
serviceWorker.unregister();
```

App.js

```
import React, { useEffect } from "react";
import { useDispatch, useSelector } from "react-redux";
import './App.css';
import Comeon from './component/Comeon';
import { login, logout, selectUser } from "./features/userSlice";
import { auth } from "./firebase";
import Login from "./component/auth/Login";
```

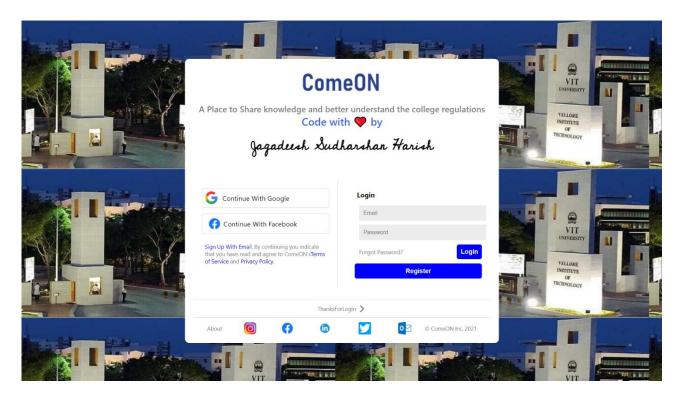
```
function App() {
  const user = useSelector(selectUser);
  const dispatch = useDispatch();
  useEffect(() => {
    auth.onAuthStateChanged((authUser) => {
      if (authUser) {
        dispatch(
          login({
            uid: authUser.uid,
            email: authUser.email,
            displayName: authUser.displayName,
            photo: authUser.photoURL,
          })
        );
      } else {
        dispatch(logout());
      console.log(authUser);});
  }, [dispatch]);
  return <div className="App">{user ? <Comeon /> : <Login />}</div>;
export default App;
```

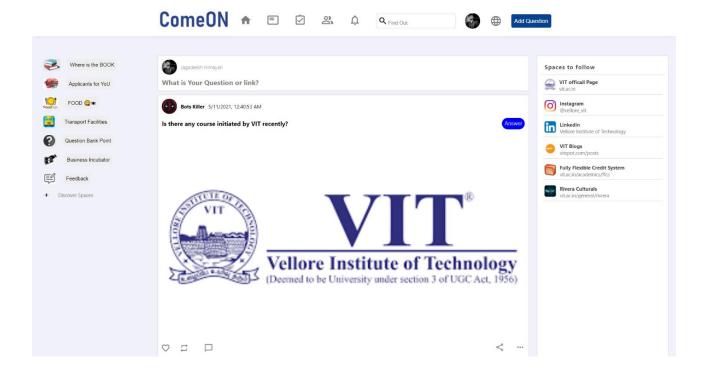
This is the main code that connects all other modules, since it has n number of lines, we would like attach all the source code in the below link:

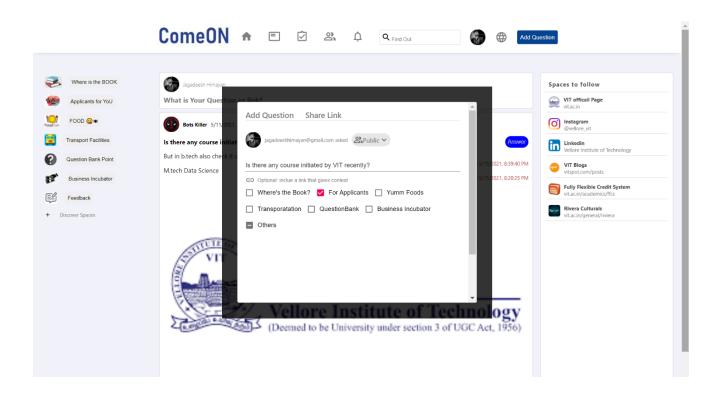
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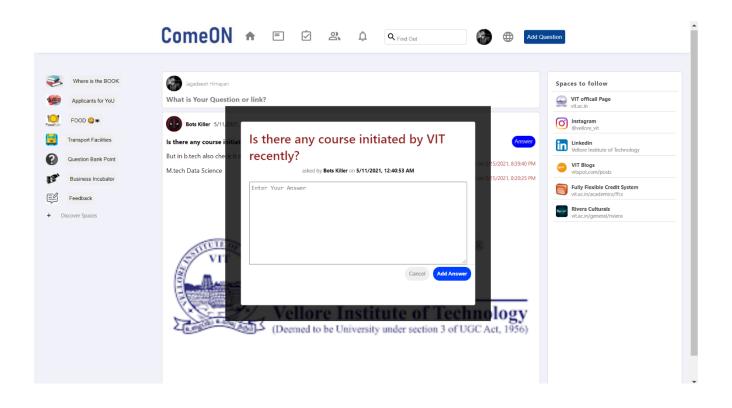
Implementation Screenshots

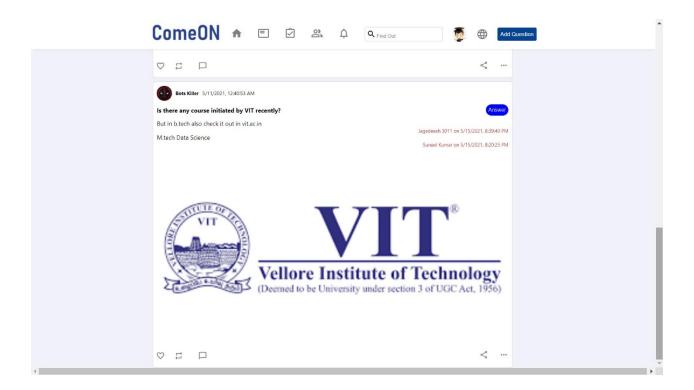
https://kms-comeon.web.app/

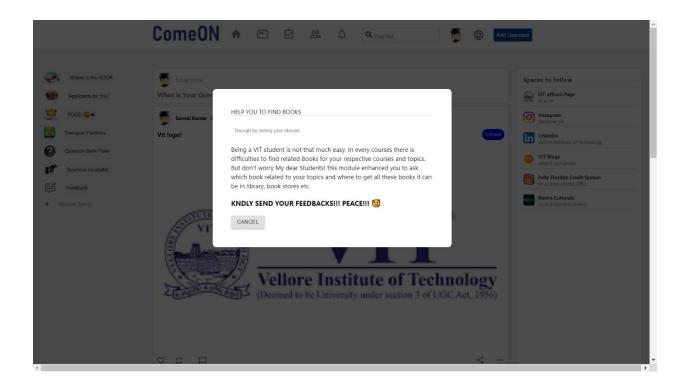


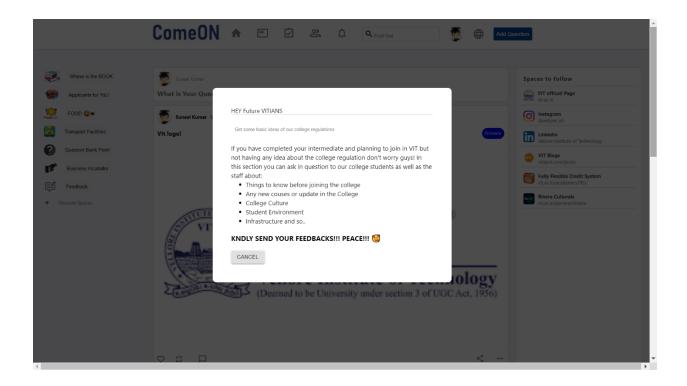


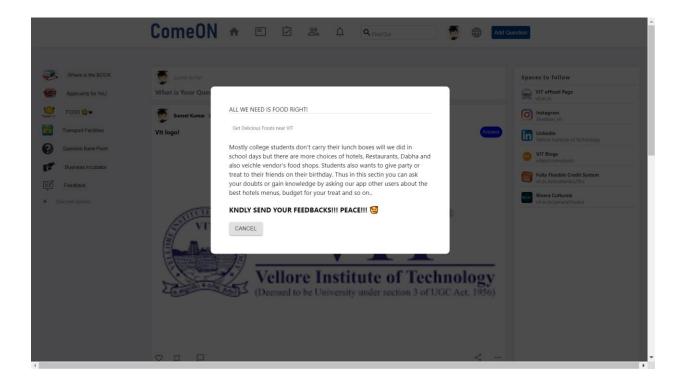


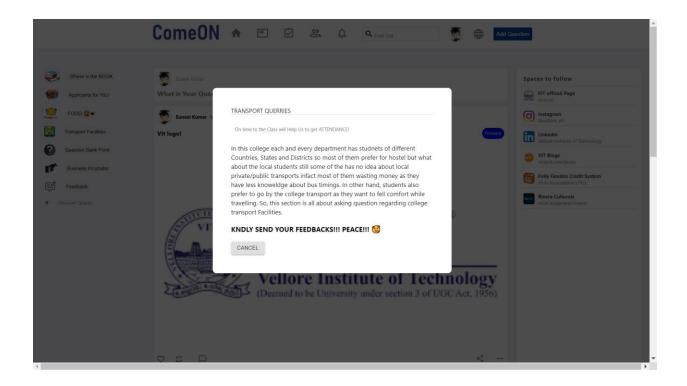


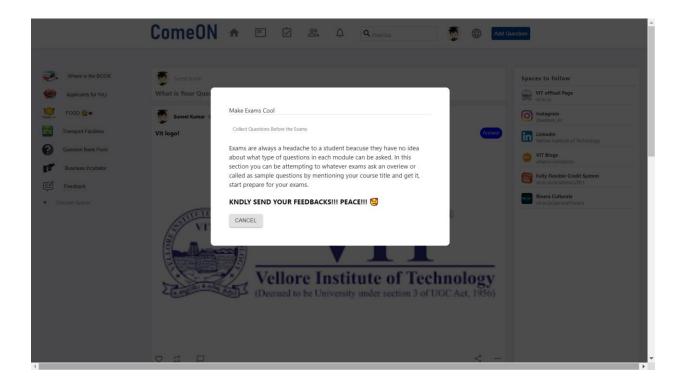


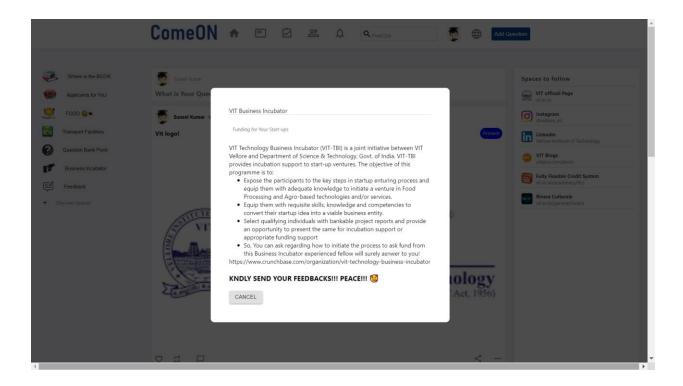


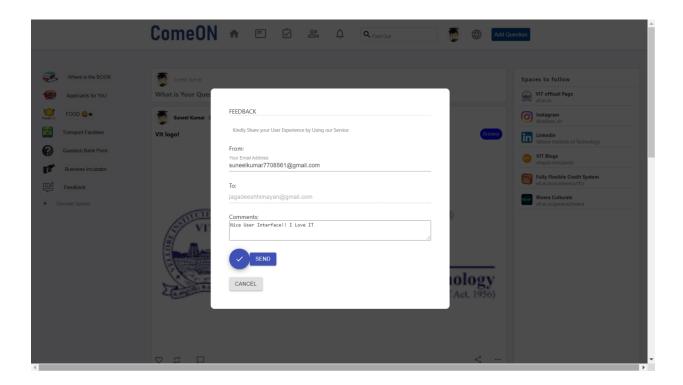












Testing

Unit Testing

- Verify that the web application is for a new user has all the required fields to undergo a registration as student.
- Verify that after entering the student details and successfully logged in to the website.
- Verify that the user login for only a fair use and to post any spam or abuse questions.
- Verify that after the student registration is successful signed-in all the details and password should be stored in the system database.
- Verify that the system also accepts other than students like college faculties, working staffs.
- Verify that the system allows the users to ask their field related question and post publicly.
- Verify that the system uses clean UI to make the user for replying to any questions that they know the answers.
- Verify all the question and answers stuffs stored in a stable database to retrieve at any time.
- Update the database if the users change the password due to some privacy issues for them.
- Verify that the system as a feedback column to get what users think about our web app.
- The procedure level testing is made first. By giving improper inputs, the errors occurred are noted and eliminated. Then the web form level testing is made.
- For example, storage of data to the table in the correct manner. The dates are entered in wrong manner and checked. Wrong email-id and web site URL (Universal Resource Locator) is given and checked.

INTEGRATION TESTING

Testing is done for each module. After testing all the modules, the modules are integrated and testing of the final system is done with the test data, specially designed to show that the system will operate successfully in all its aspects conditions. Thus, the system testing is a confirmation that all is correct and an opportunity to show the user that the system works.

We will prefer big-bang approach for our project, as it is convenient for small systems.

In Big Bang integration testing all components or modules are integrated simultaneously, after which everything is tested as a whole.

- In this approach individual modules are not integrated until and unless all the modules are ready.
- In Big Bang integration testing all the modules are integrated without performing any integration testing and then it's executed to know whether all the integrated modules are working fine or not.
- This approach is generally executed by those developers who follows the 'Run it and see' approach.
- Because of integrating everything at one time if any failures occurs then it became very difficult for the programmers to know the root cause of that failure.

In case any bug arises then the developers have to detach the integrated modules in order to find the actual cause of the bug

VALIDATION TESTING

The final step involves Validation testing, which determines whether the software function as the user expected. The end-user rather than the system developer conduct this test most software developers as a process called "Alpha and Beta Testing" to uncover that only the end user seems able to find.

The compilation of the entire project is based on the full satisfaction of the end users. In the project, validation testing is made in various forms. In registration form Email id, phone number and also mandatory fields for the user is verified.

VERIFICATION TESTING

Verification is a fundamental concept in software design. This is the bridge between customer requirements and an implementation that satisfies those requirements.

This is verifiable if it can be demonstrated that the testing will result in an implementation that satisfies the customer requirements.

Inadequate testing or non-testing leads to errors that may appear few months later. This will create two problems

- I. Time delay between the cause and appearance of the problem.
- II. The effect of the system errors on files and records within the system.

Conclusion

It is concluded that the application works well and satisfy the both registered and registered. The application is tested very well and errors are properly debugged. The site is simultaneously accessed from more than one system.

The site works according to the restrictions provided in their respective browsers. The speed of the transactions become more enough now. In this site the user can search the appropriate answers for their questions. They can view their favorable questions, articles and inventions.

Finally, we achieved by working on this project to help the students of our college to discuss on some topics as well post their doubts or questions on any topics related to our college can be asked.

On the other hand, whoever registered an account on our website can come forward and answer to any questions without spamming the post.

Annexures

Source code link has been already attached above (page No-27)

Minutes of meetings of the project team are to be attached as annexures to this report along with weekly activity reports for each team member:

THE ANNEXURE ->

https://drive.google.com/file/d/1tZkZ5TPOhhZU8bGwlaE9mwAMI40 OLCL/view?usp=sharing

Approx. 6 hours per week

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THANK YOU