

Chapter 1

1.1 Introduction

Our project "The Technical Forum" allows users to ask each other technical questions provided they are logged in. Although, a user can view the forum regardless of having an account. It is a very simple website which opens on the home page and users can navigate to different pages without necessarily having to log in. But logging in provides several different privileges except for just being able to question and answer. Every page has four section.

1. The header on the top – that has different options based on whether the user is logged in and what type of user has logged in.
2. The Navigation bar on the left - allowing users to navigate through topics such as: C, C++, Java, PHP etc.
3. The body of the page – that changes on every request sent by the user.
4. The footer – with basic information and a few hyperlinks.

Once the user opens the website, the user has an option to log in on the header. There are two kinds of login:

1. The User Login
2. The Admin Login

Admin is a special user who handles all the contents in the website.

Users, on the other hand can have a discussion on the forum. But first they need to register themselves with their name, number, email id, gender and provide with a password. In the forum section, they can post a question (on any of the existing topics added by the admin) or reply to anybody's question. Users also can report on a post that seems offensive. The users can delete any

of their own questions asked or answers given. They can also have a live chat with all the other logged in members.

We also made a settings page where the user can change their credentials and add a profile photo.

We take feedback from the users that are saved in the database, so that we can improve on the user's demands.

Admin user is the predefined user in the website. The Admin cannot change his credentials when they are logged in. An Admin can:

1. Add new topics on which a user can post a question
2. Modify the names of the topics
3. Block or Unblock a user
4. View the reported posts
5. Unreport a post if need be.
6. Add a new FAQ question
7. Add a contact to the "contact us" list

An admin user does not have the privileges that a general user has.

There is also a search button on the header page where a user can search for their required topics.

Chapter 2

2.1 Scope of the project

The objective of the project is to develop an online technical discussion forum to promote and encourage students as well as programmers and IT professionals to actively participate in the programming activities. The technical discussion forum gives specific information to the programmers about programming languages. It is also helpful for the beginners to gain information about programming languages from the same site only. It is very useful site for the beginners to gain information as well as learn new programming languages very easily. The goal of this site is to provide information about the technical related questions and answer to the end user. Our Project replaces the conventional and inconvenient method of solving programming related problem which involves the two person to be physically present at the same time. In this context arises the importance of our project. This project bridges the existing gap between two person due to the time constraints. This forum is the central place for all types of programming related questions, answers and ideas which might be beneficial for all the programmers. Everyone is welcome to ask related questions, make suggestions and leave comments.

The Existing System:

Limitations:

Proposed System:

- It is an online interaction between the programmers, students and IT professionals.
- Registered users can post about programming related questions and other registered members can answer them online.

- Non-registered user can view all the questions asked and view the reply to those questions.

This can improve the knowledge and ideas of programmers.

Features:

Advantages of Proposed System:

- It is easier method for efficient interaction between programmers.
- The conventional method is time consuming and often proved inefficient.

Hence, this system manages time more effectively.

2.2 User wise Functionalities

When a user first opens the site, the user can see a home page that only gives a rough introduction of the website.

An unregistered user can see 4 parts in a page:

1. The header on the top – that has different options based on whether the user is logged in and what type of user has logged in.
2. The Navigation bar on the left - allowing users to navigate through topics such as: C, C++, Java, PHP etc.
3. The body of the page – that changes on every request sent by the user.
4. The footer – with basic information and a few hyperlinks.

Though from 2 to 4 nothing really changes for a registered user or non registered user. The main change is on the header part.

An unregistered user can see the following things on his header part:

1. A default profile picture that is same for all the unregistered user
2. A welcome message just below that, welcoming the user.
3. Home Button to be navigated to
4. A Forum Button where the user can only view the posts. Unregistered user have no right to post anything on the website.
5. Two text boxes for the user to sign in with their email id and password.
6. A Search Button to search through the topics in the website
7. A drop down menu with several option like, FAQ and Privacy Policy. New users can see through FAQs to know how to use the website..
8. And a Sign Up button which on clicking leads to a new page.

The registration is very easy because user just needs to put his credentials correctly and he is a new user in the website.

After a user logs in to the website (i.e. a general user not an admin), he would be redirected to the home page of the website. The only initial change a user finds in the pages is the change on the header.

1. A default profile picture that is same as when he was an unregistered user. Although the user can change his profile picture if he wants to.
2. A Welcome message specifically for the user with a drop down menu with 3 options:
 - (a) Settings
 - (b) Feedback – to give a feedback about the website
 - (c) Logout
3. The Home button to be navigated to.
4. A Forum Button where the user may ask a question on a topic like: Software Engineering, Haskell, Scala etc. Or reply to any question asked. A user can reply to his own post, delete any of his own post if he wants to. Or report to someone else's post if it may seem offensive.
5. A Search Button to search through the topics in the website
6. A drop down menu with several options like, FAQ and Privacy Policy. New users can see through FAQs to know how to use the website..

As for both of the users might find the pages very alike, the basic functions are quite different.

An unregistered user can only view the posts. When an unregistered user clicks on forum button he is redirected to a page named forum.php that allows them to only view the posts. A registered user is redirected to forum_log.php which is a completely whole new page and allows users to ask a question or reply to their posts.

Right below the profile picture on the top left corner of the page is a drop down menu. There are two options: 1. Settings 2. Logout

Logout takes the user directly to the home page as an unregistered user. If the user presses Settings, he is redirected to the settings page.

The user can change his First Name, Last Name, email id, Phone number and password. The user can see his old credentials while wanting to change them. As soon as the user changes his credentials the changes are seen right there. Although viewing the changes in the email requires logging out.

The user can navigate through the topics in the navigation bar to view question on a particular topic they want to view. They can also type on the search button for their desired result. The topics on which a user can asks questions are:

1. Java
2. CSS
3. JavaScript
4. PHP
5. C
6. Software Engineering
7. Perl
8. Ruby
9. HTML
10. Python
11. C#
12. Haskell

There can be any number of questions to be asked and any number of replies that can be made although each reply to a post can only contain 1000 characters.

When a user unreports a post, the post does not get deleted. It is only temporarily hidden from public view until the admin views it.

For new users, he can check the “Frequently Asked Questions”. Answer to every basic question has been provided. If the user has any doubts he can write to us on the feedback page. Or contact the developers on the details provided on the contact page.

This website stores sessions. A user if closes the browser without logging out, the next time when he enters the website he will find himself logged in. The log in

details is stored in the server side. This has been done to reduce the pain of logging in every time the user opens the website.

For every page the user has a floating widget type chat box. It's a blue box with white background. All the logged in users can have a alive chat and discuss their problems on real time. On the top of the chat box the user can see the number of users online on the website. The chat box is wholly a group chat. Personal chat is not allowed because the provision on just chatting on a technical site has not been provided.

An admin is a special user with special abilities on the website, but cannot perform the basic things like chatting or posting a question. But he can definitely view the posts.

An administrator is only to handle the website and not manipulate on how the website runs.

An admin can see the following things on his header part:

1. A profile picture specially for the user
2. A welcome message for admin with a drop down menu, which has an option to logout.
3. "About Us" button that redirects to the home page
4. A "topics and posts" button to change or modify a topic or view the reported posts
5. A "manage contacts" button to block or unblock a user
6. A Search Button to search through the topics in the website
7. A drop down menu with several options like, Contact and FAQs.

Here FAQs button allows user to add a new FAQ question. To view the existing FAQs, the admin needs to tap on the FAQs in the footer. That will redirect to the page that normal users can view.

An Admin can:

1. Add new topics on which a user can post a question
2. Modify the names of the topics

3. Block or Unblock a user
4. View the reported posts
5. Unreport a post if need be.
6. Add a new FAQ question
7. Add a contact to the “contact us” list

Adding or modifying a topic adds it on to the database. The topic on the navigation pane comes from our database.

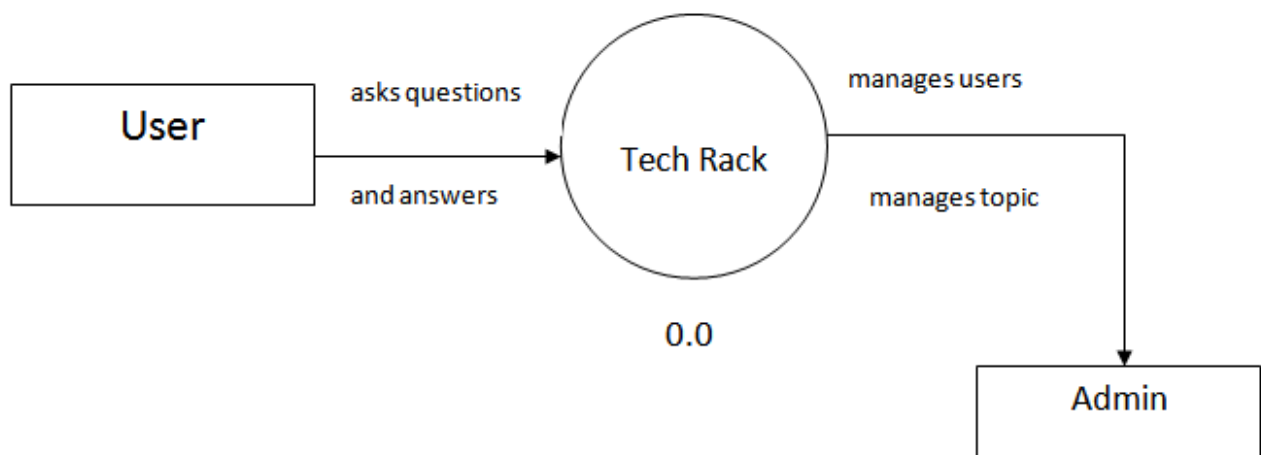
Unreporting a post adds the post back to exactly where it was in the forum.

Administrator’s online status is not shown to the users.

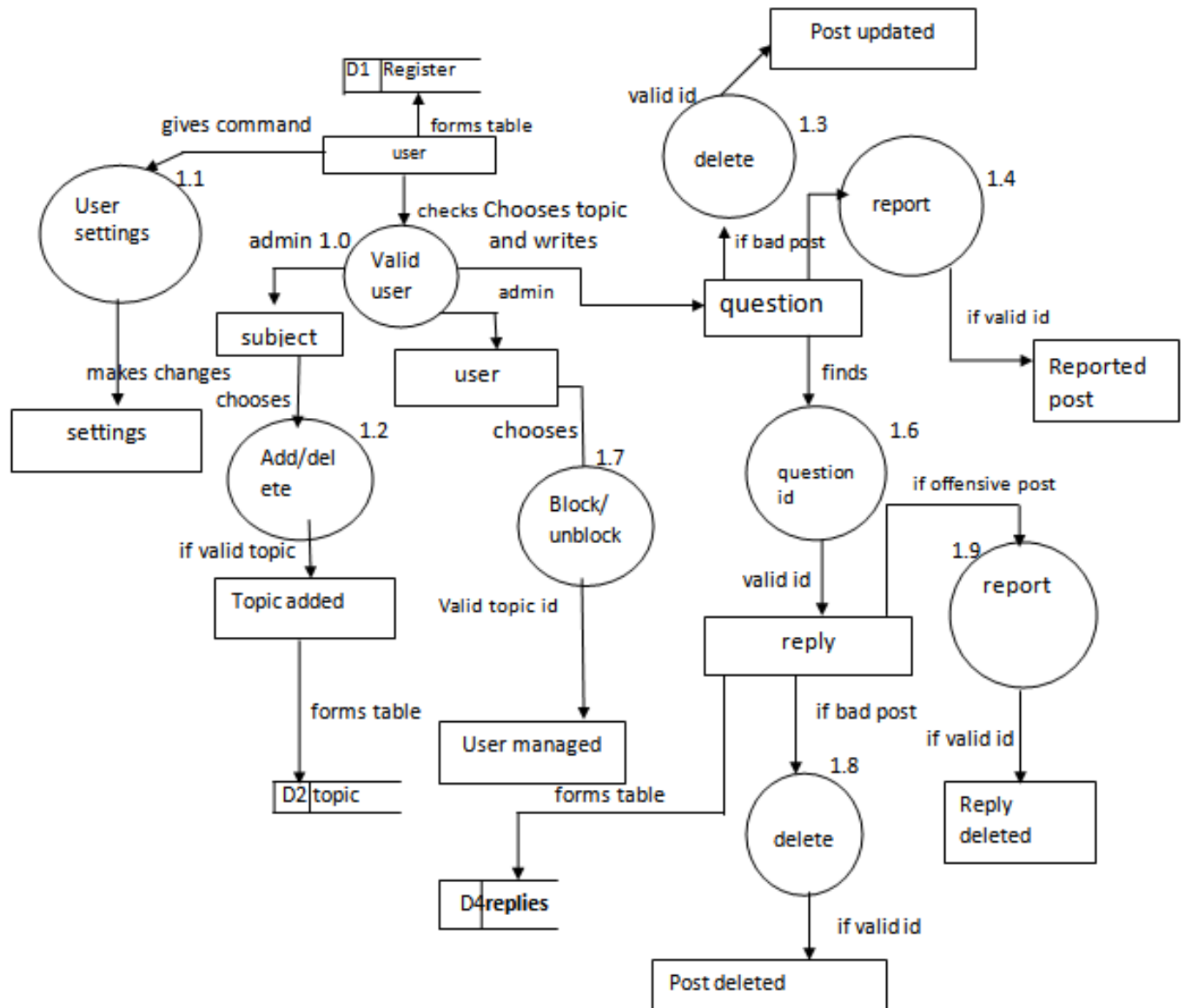
Chapter 3

3.1 Data Flow Diagrams

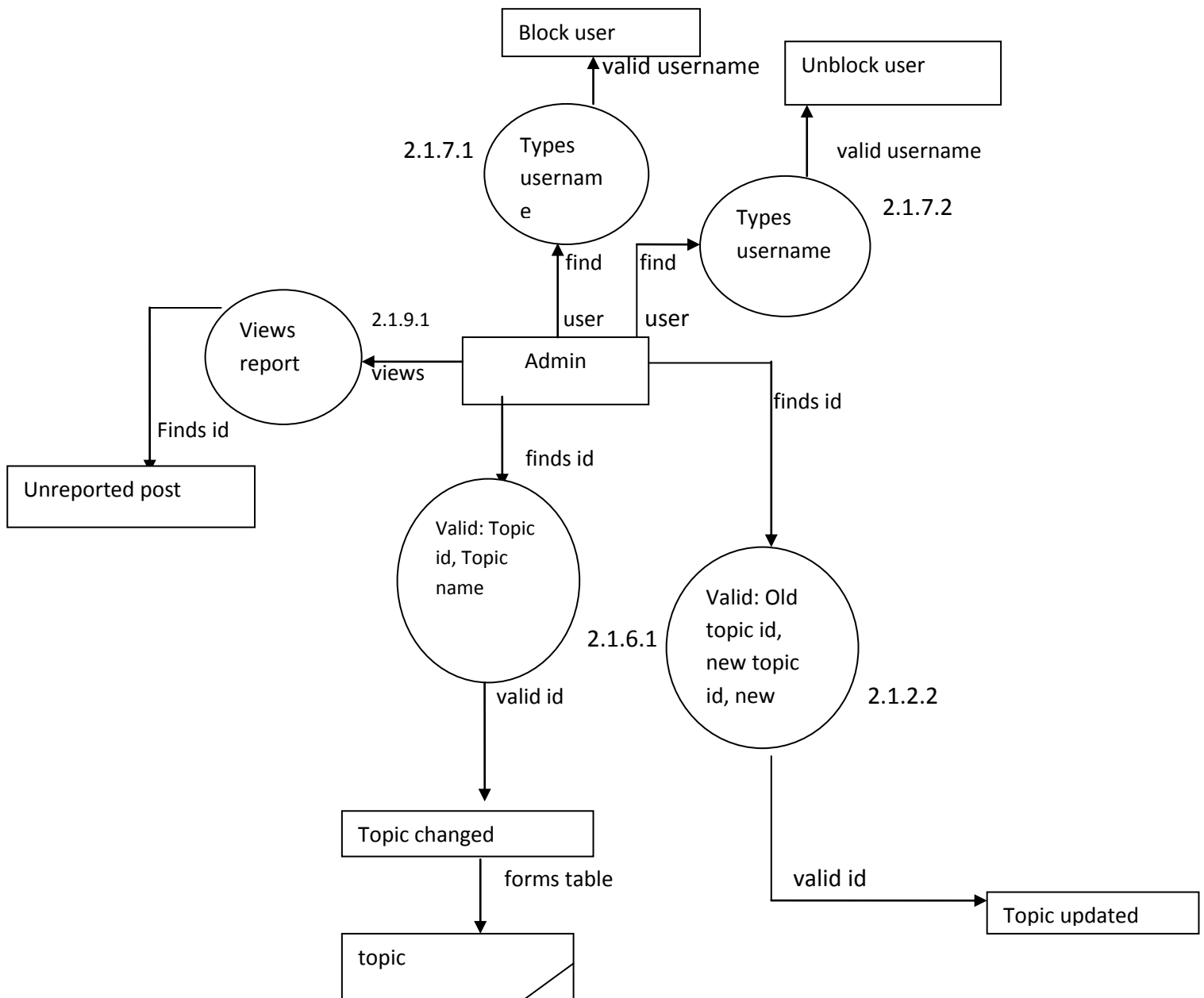
Level 0



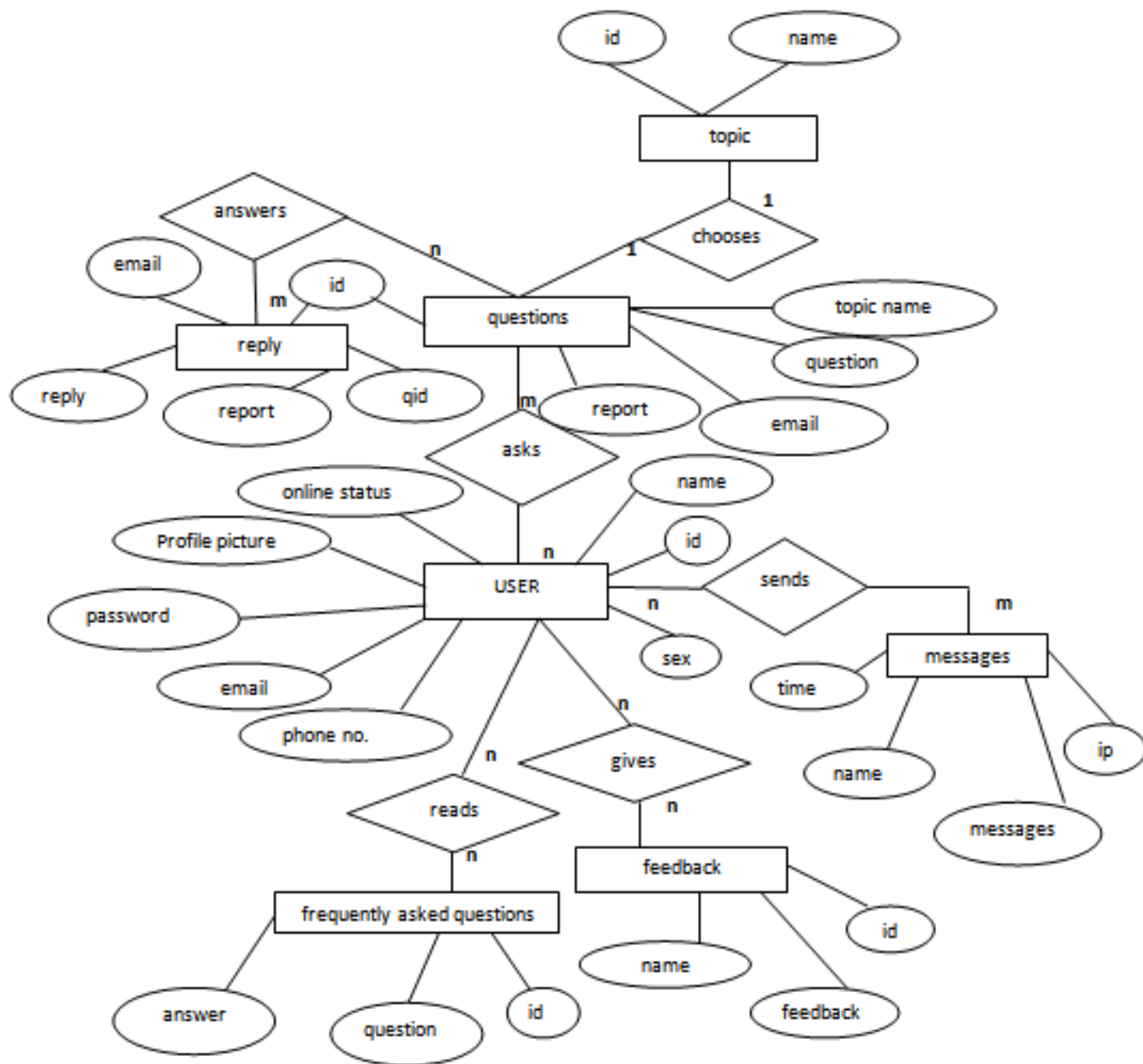
Level 1



Level 2



3.2 Entity Relationship Diagram



3.2 Table Structure

Register Table

Field	Type
index	Int(11)
fname	varchar(255)
lname	varchar(255)
email	varchar(255)
pass	varchar(32)
pn	bigint(15)
sex	varchar(10)
block	varchar(3)
online user	int(2)
Display picture	varchar(500)

Question Table

Field	Type
qid	int(3)
question	varchar(200)
email	varchar(50)
topic name	varchar(20)
email	varchar(2)

Reply Table

Field	Type
rid	int(3)
reply	varchar(1000)
email	varchar(50)
qid	int(3)
report	varchar(2)

Topic Table

Field	Type
topicid	varchar(10)
topic_name	varchar(60)

Chat

Field	Type
name	char(20)
message	varchar(300)
time	Time
ip	char(15)

Contact

Field	Type
name	varchar(40)
email	varchar(60)
phone	varchar(12)

Frequently Asked Questions – Questions

Field	Type
id	int(3)
question	varchar(400)

Frequently Asked Questions – Answers

Field	Type
aid	int(3)
answer	varchar(500)
id	int(3)

Feedback

Field	Type
fid	int(3)
feedback	varchar(500)
email	varchar(50)

Chapter 4

4.1 Software Requirement

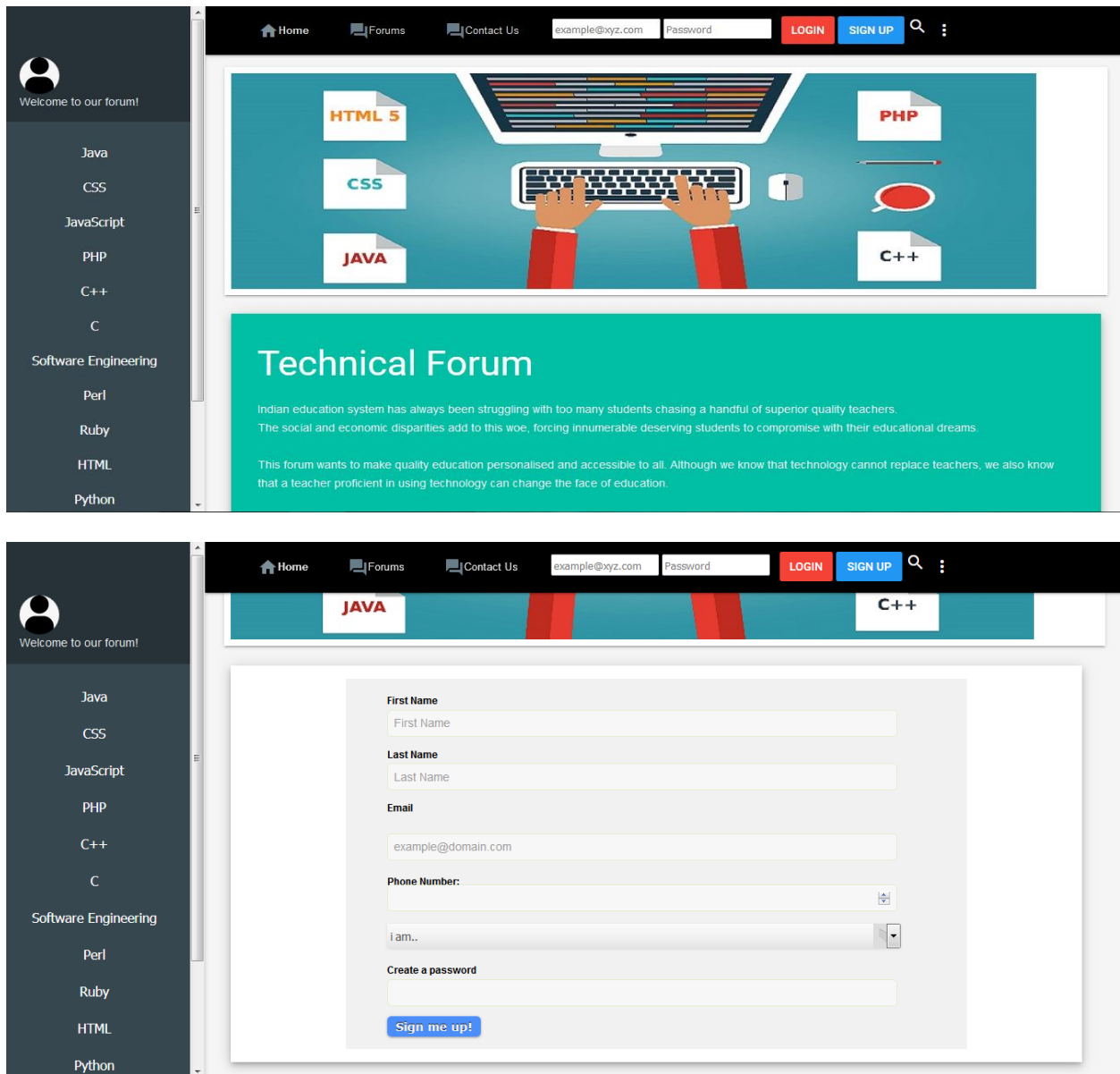
1. Platform used: PHP
2. IDE used: Notepad++
3. DBMS used: MySQL
4. Designing tools used: HTML, CSS, Javascript

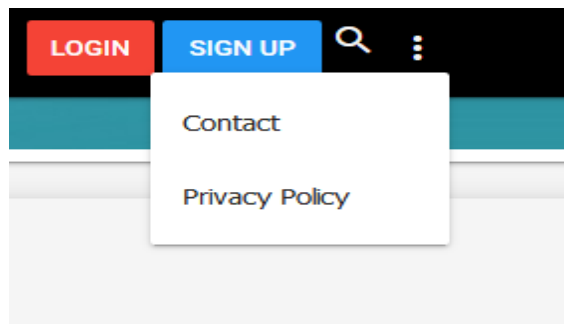
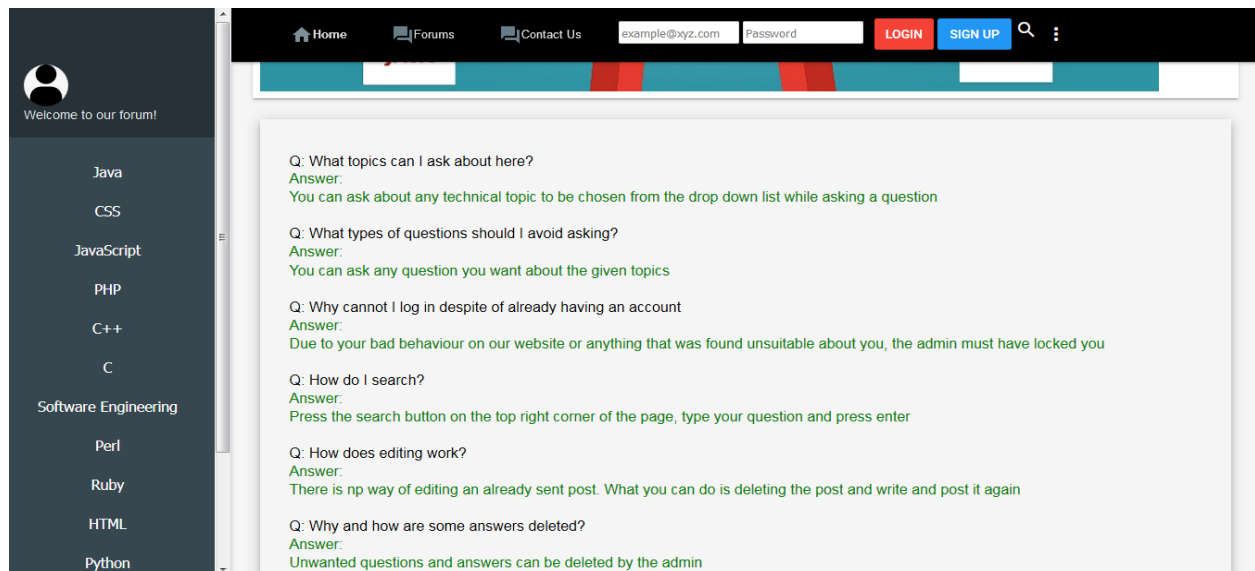
4.2 Hardware Requirement

1. 2GB RAM
2. 50GB Disk space
3. Internet Browser like: Google Chrome

Chapter 5

5.1 Screenshots





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- Java
- CSS
- JavaScript
- PHP
- C++
- C
- Software Engineering
- Perl
- Ruby
- HTML
- Python

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Forum

Java

Q: What is runtime polymorphism or dynamic method dispatch?by- Sohini Banerjee

Sohini Banerjee - In Java, runtime polymorphism or dynamic method dispatch is a process in which a call to an overridden method is resolved at runtime rather than at compile-time. In this process, an overridden method is called through the reference variable of a superclass. The determination of the method to be called is based on the object being referred to by the reference variable.

Q: What is Abstraction? What is Dynamic Binding?by- Sunandan Das

Sunandan Das - Abstraction refers to the act of representing essential features without including the background details or explanations. Binding refers to the linking of a procedure call to the code to be executed in response to the call. Dynamic binding (also known as late binding) means that the code associated with a given procedure call is not known until the time of the call at run-time. It is associated with polymorphism and inheritance.

Q: What is the difference between abstraction and encapsulation?by- Shivangi Majumder

Shivangi Majumder - Abstraction focuses on the outside view of an object (i.e. the interface) Encapsulation (information hiding) prevents clients from seeing it's inside view, where the behavior of the abstraction is implemented. Abstraction solves the problem in the design side while Encapsulation is the Implementation. Encapsulation is the deliverables of Abstraction. Encapsulation barely talks about grouping up your abstraction to suit the developer needs.

Q: What is inheritance?by- Supriya Das

Supriya Das - Inheritance is the process by which objects of one class acquire the properties of objects of another class. A class that is inherited is called a superclass. The class that does the inheriting is called a subclass. Inheritance is done by using the keyword extends. The two most common reasons to use inheritance are: To promote code reuse, To use polymorphism

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HTML

Q: Where can I find graphics to use on my page?by- Shivangi Majumder

Shivangi Majumder - There are many sites offering free use of graphics, although most will require a link to them, showing credit. You can do a search at any of the search engines and get thousands of places to look. You can also buy CDs with graphics on them. Check to be sure they state "royalty free" on the CDs. Here's my collection of graphics links, which includes how to make your own graphics, and where to find graphics offered by folks for public domain

Q: How do I make a graphic a link?by- Shivangi Majumder

Shivangi Majumder - Including the "img" tag between the "a href" tag and the "a" closing tag

Q: How do I align text next to a graphic?by- Saikat Jain

Saikat Jain - By including the "align" element in the "img" tag. Photo of wildflowers in Texas (The align="top" would align the text "Photo of wildflowers in Texas" next to the graphic at the top. - Other options are "middle" or "bottom.")

Q: What is HTML? How do I make a new paragraph in it?by- Arzoo Saha

Arzoo Saha - HTML is a plain text file with commands to tell the Web browsers how to display the file. Inserting the tag at the beginning of your paragraph will drop the text down two lines. (If you insert the tag, it will drop your text down one line.)

Welcome to our forum!

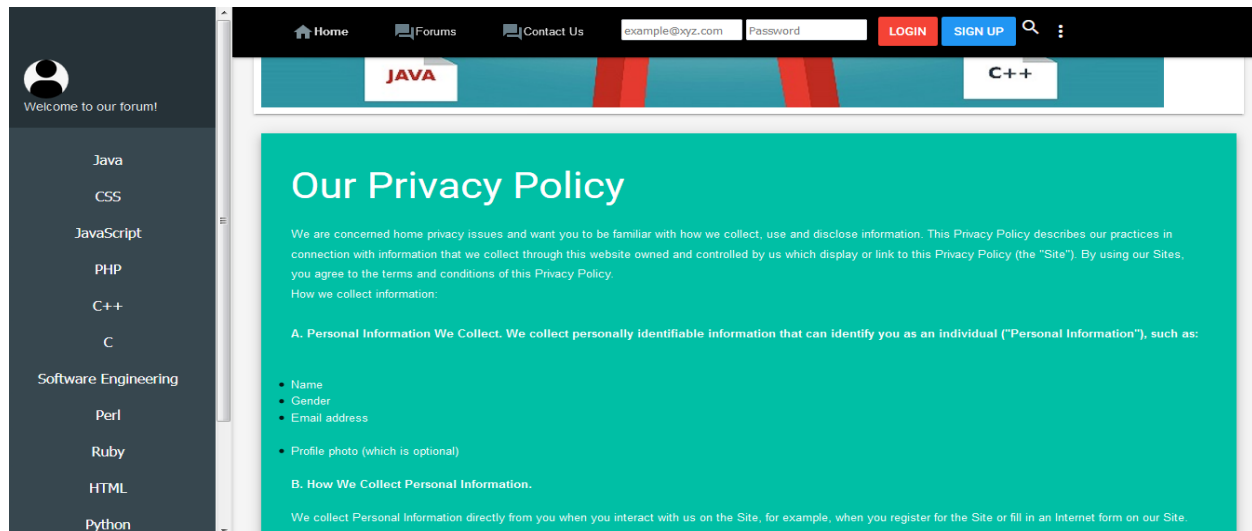
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Contact Us

Shivangi Majumder: 97938461519
Sunandan Das: 9051278114
Supriya Das: 9437464374
Sohini Banerjee: 9437180256



Welcome Shivangi

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Forum

ASK A QUESTION:

Java

Type Your Question here..

Submit

Perl

Q: What is a perl identifier? Is perl a case sensitive language?

by- Shivangi Majumder [X Del](#)

Suhrid Majumder - It is used to identify a variable, function, class, module [X Reply](#)

Suhrid Majumder - Yes perl is case sensitive [X Reply](#)

Sunandan Das - A Perl identifier is a name used to identify a variable, function, class, module, or other object. A Perl variable name s with either \$, @ or % followed by zero or more letters, underscores, and digits (0 to 9). es! Perl is a case sensitive programming langu: [Reply](#)

Users online(1)

Shivangi.jgkg	01:18:34
Shivangi.hkgyg	01:18:37
Shivangi.hi	01:19:03
Shivangi.hui	01:19:45
Shivangi.blah	01:19:53
Shivangi.hmm	01:20:08

Welcome Shivangi

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C++

Q: What are pointer variables?

by- Supriya Das [X](#)

Re: Pointer variables can store the address of other variables but the addresses stored in pointer variable should be of the same data ty: pointer variable is pointing to. [Sunandan Das] [X reply](#)

Reply..

C++

Q: How is polymorphism different from inheritance?

by- Shivangi Majumder [X Del](#)

Re: Polymorphism promotes, reduces software complexity, as multiple definitions are permitted to an operator or function. Inheritance: class to be derived from an existing class thus promoting reusability of code. [Priya Karmakar] [X reply](#)

Reply..

C++

Q: What is the full form of OOP?

by- Arzoo Saha [X](#)

Re: Object Oriented Programming. [Saikat Jain] [X reply](#)

Users online(1)

Shivangi.jgkg	01:18:34
Shivangi.hkgyg	01:18:37
Shivangi.hi	01:19:03
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Perl

Q: What is a perl identifier? Is perl a case sensitive language?

by- Shivangi Majumder [X Del](#)

Re: It is used to identify a variable, function, class, module [Suhrid Majumder] [X reply](#)

Re: Yes perl is case sensitive [Suhrid Majumder] [X reply](#)

Re: A Perl identifier is a name used to identify a variable, function, class, module, or other object. A Perl variable name starts with either a letter or an underscore, followed by zero or more letters, underscores, and digits (0 to 9). es! Perl is a case sensitive programming language. [Sunandan] [X reply](#)

Reply...

Perl

Q: What are Arrays and Hashes in perl?


by- Sohini Banerjee [X](#)

Re: Arrays are ordered lists of scalars that you access with a numeric index which starts with 0. They are preceded by an "at" sign (@). Hashes are unordered sets of key/value pairs that you access using the keys as subscripts. They are preceded by a percent sign (%).

[X reply](#)

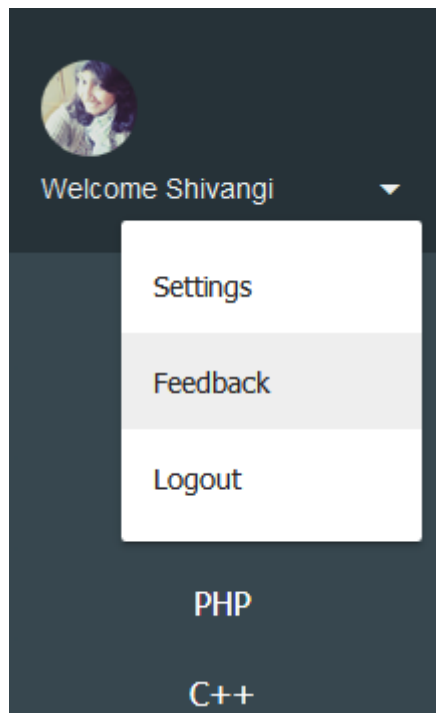
Users online(1)

Shivangi:jgkg	01:18:34
Shivangi:hkgyg	01:18:37
Shivangi:hi	01:19:03
Shivangi:hui	01:19:45
Shivangi:blah	01:19:53
Shivangi:hmm	01:20:00

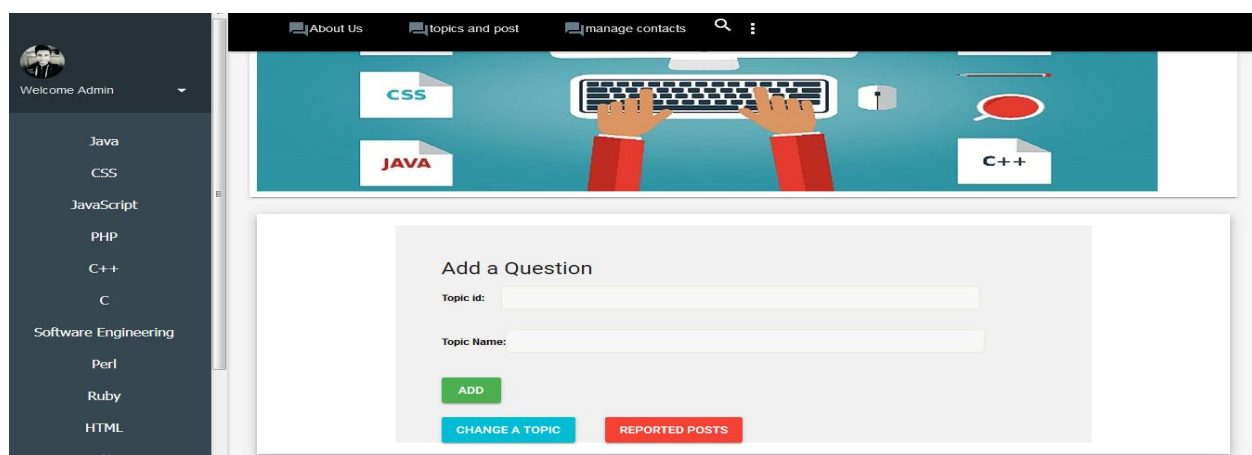
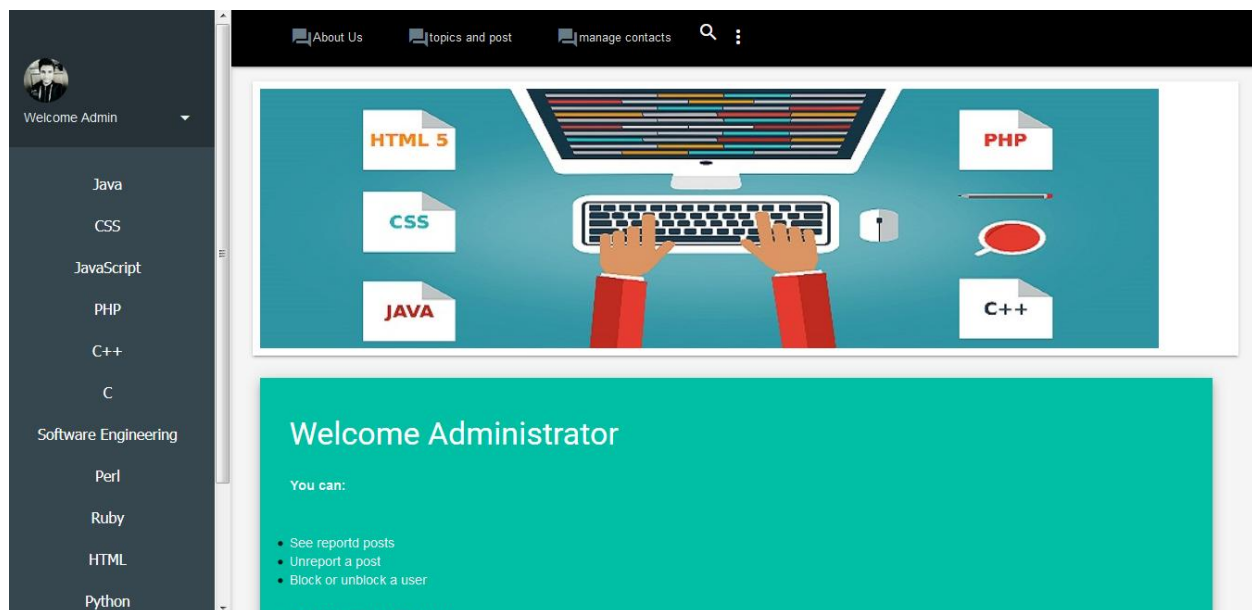
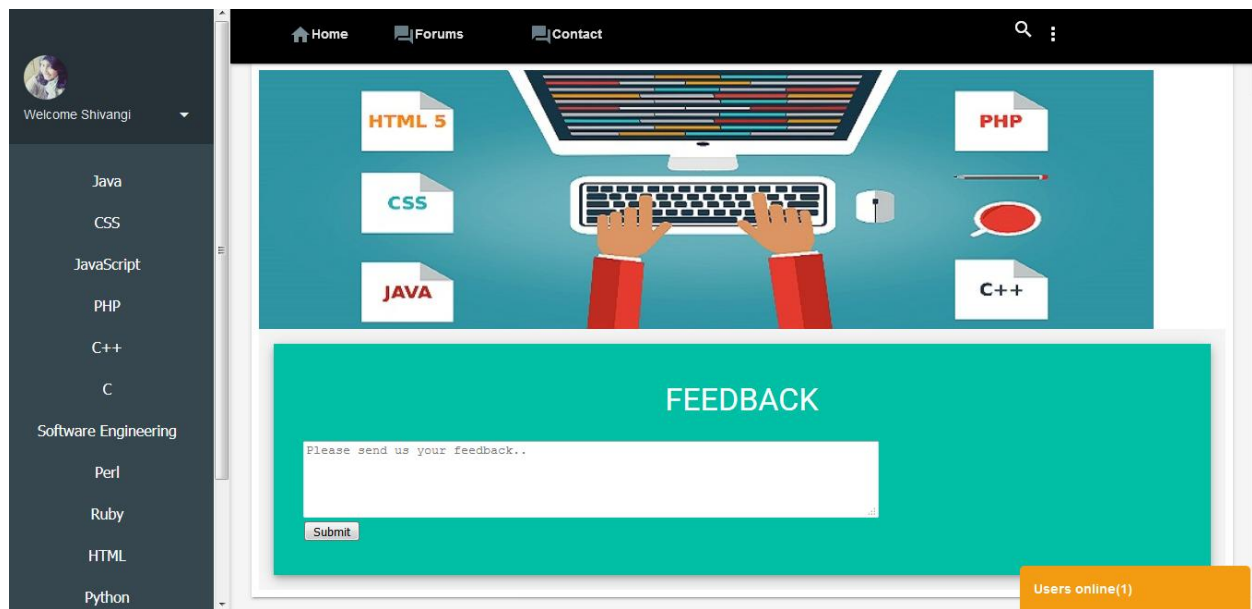



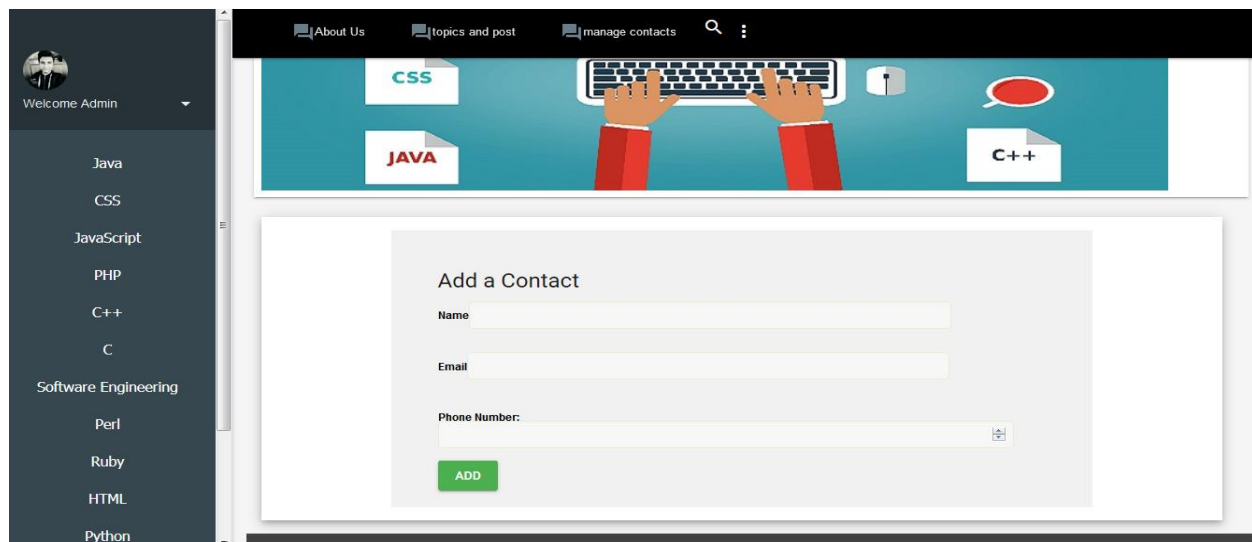
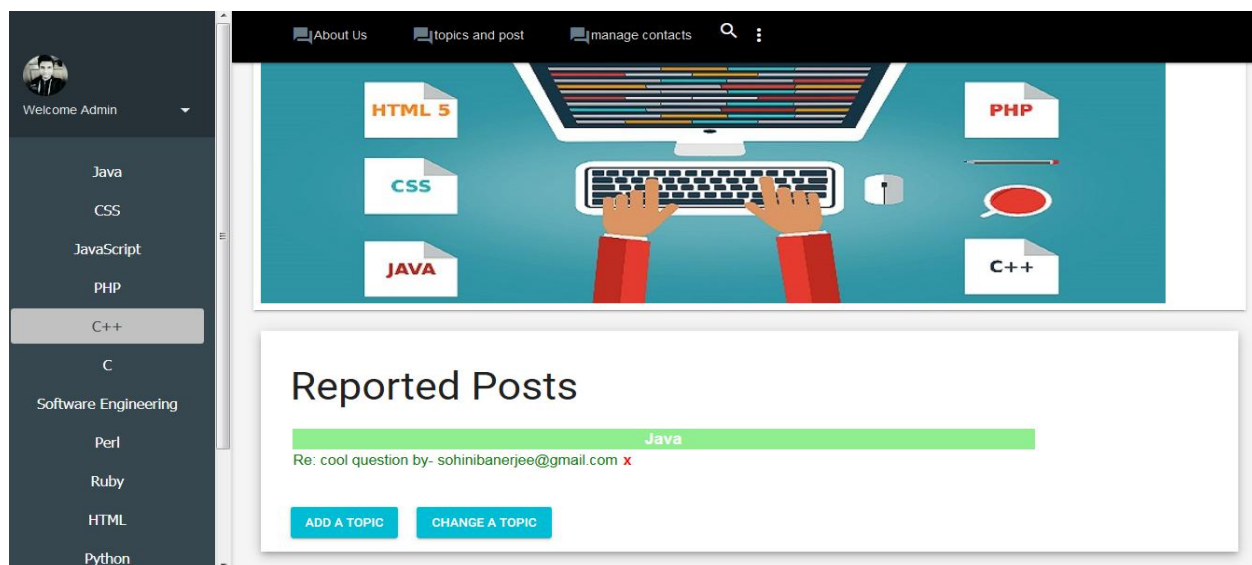
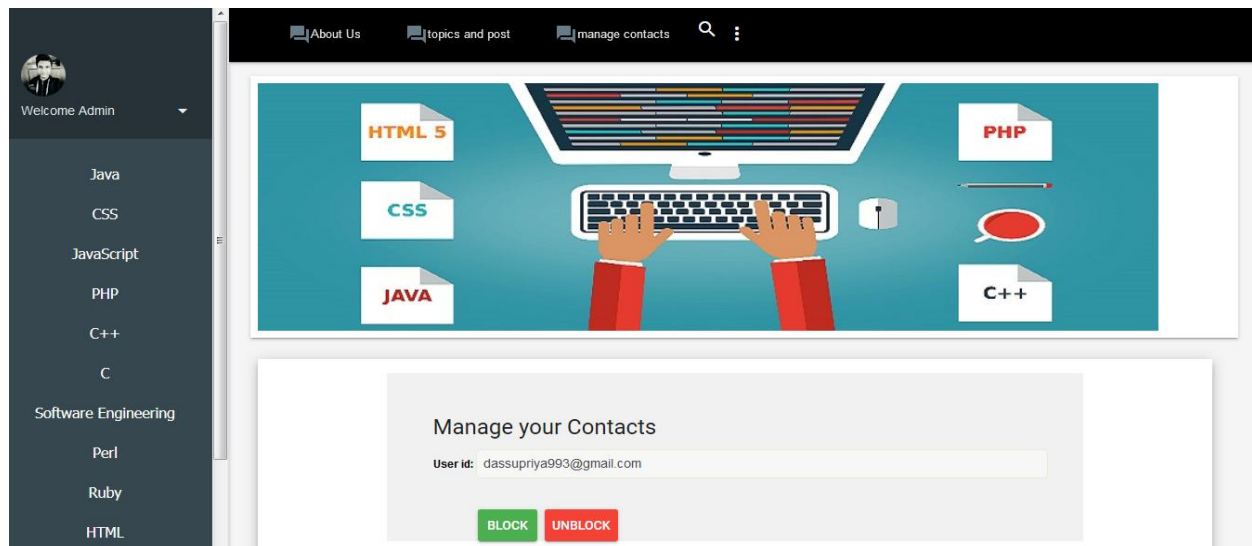
Users online(1)

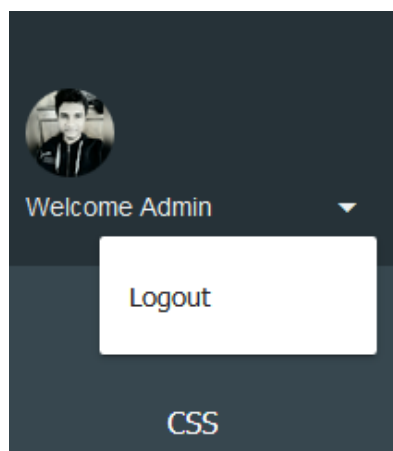
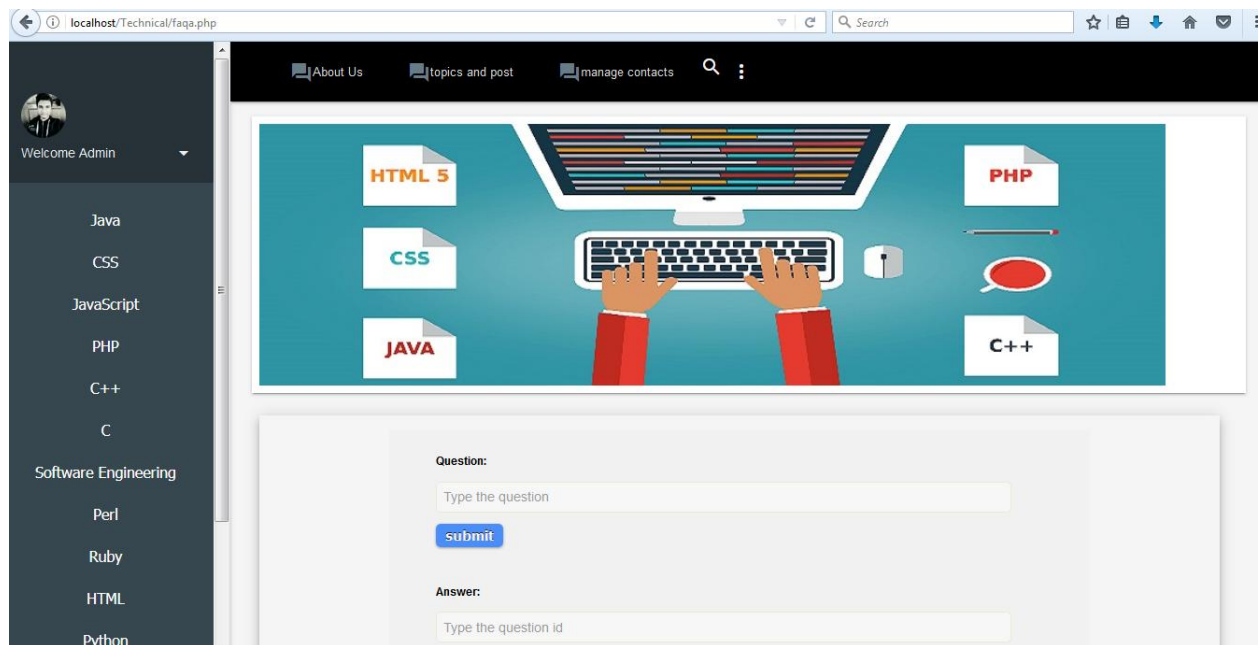
Shivangi:jgkg	01:18:34
Shivangi:hkgyg	01:18:37
Shivangi:hi	



A screenshot of a web application's user profile settings page. The page has a dark sidebar on the left with a user profile picture and the name "Welcome Shivangi". The sidebar contains a list of programming languages and technologies: Java, CSS, JavaScript, PHP, C++, C, Software Engineering, Perl, Ruby, HTML, and Python. The main content area is white and contains a form for updating user information. At the top of the form, a red message says "*Log out to see changes in the E-mail ID". The form includes fields for "Select Picture" (with a "Browse..." button and "No file selected." text), "Name" (with "First Name" and "Last Name" sub-fields), "Phone Number" (with a "Number" sub-field), and "Email" (with an "Email" sub-field). Each of these fields has a "Change" button. There is also a "Change Password" section with "Current" and "New" password fields, each with a "Change" button. An "Upload" button is next to the "Select Picture" field. At the bottom right of the page, there is an orange button that says "Users online(1)".







Chapter 6

6.1 Conclusion

Through this project we took a step towards to minimize the gap between programmers, students, and IT professionals using a common interaction platform using PHP for discussion purpose. The present project contributes to the understanding of the effectiveness of online technical discussion forum in students and programmers improving their knowledge. Here we provide the best way of learning the software paper like PHP, C and C++ etc.

We extend the current topics of discussion that use multiple environments and improve the learning facilities. In this the chatting facility is provided to have group communication with the other members online. Online Technical discussion forum has positive effect on student's interest and interaction in learning, when bored with the traditional classroom lecture. By applying this, the future scope of distance learning and professionals of work will also increase

6.2 Future Scope

Following are the improvements that could be applied in the future:

1. We could add a verification email for the email ID given and verification message for phone number
2. There could be a page with user profile description. If a user clicks on another user's name, it should be redirected to that user's profile description with their name, gender and email address.
3. Implementation of the same system on Android as well as iOS to let the Smartphone users empower themselves by accessing the Online discussion forum.
4. We can add a feature in which a user can reply to a reply so that a conversation can be more user-friendly.
5. There can also be an option of tagging a user while making a reply.
6. Users should be able to add a screenshot with their post or their replies
7. We want to give power to our site like as other social networking sites have. So this website will be more better than other forum sites.
8. A notification can be given to the user whose question has been answered or tagged on an answer
9. We would like to increase the security in our database giving less chance for hackers to tamper on the database.