



# **HACKVERSE - WEB APPLICATION**

**A Project Report of Capstone Project 2**

*Submitted by*

**ADARSH PRATAP SINGH**

**(1613114003/ 16SCSE114057)**

*in partial fulfillment for the award of  
the degree of*

**Bachelor of Technology**

**IN**

**COMPUTER SCIENCE & ENGINEERING WITH  
SPECIALISATION IN COMPUTER NETWORKS &  
CYBER SECURITY**

**SCHOOL OF COMPUTING SCIENCE AND ENGINEERING**

**Under the Supervision of**

**Ms. Supriya Khaitan Chandra**

**Asst. Professor**

**April/May-2020**



**SCHOOL OF COMPUTING AND SCIENCE AND  
ENGINEERING**

**BONAFIDE CERTIFICATE**

Certified that this project report **“HACKVERSE - WEB APPLICATION”** is the bonafide work of **“ADARSH PRATAP SINGH (1613114003)”** who carried out the project work under my supervision.

**SIGNATURE**

**DR. MUNISH SABARWAL**

**HEAD OF DEPARTMENT (DEAN)**

**School of Computing Science &**

**Engineering,**

**Galgotias University**

**SIGNATURE**

**MS. SUPRIYA KHAITAN CHANDRA**

**SUPERVISOR**

**Asst. Professor,**

**School of Computing Science &**

**Engineering,**

**Galgotias University**

## TABLE OF CONTENTS

CHAPTER NO.	TITLE	PAGE NO.
1.	Abstract	1
2.	Introduction	2
3.	Existing System	5
4.	Proposed system	6
5.	Implementation or architecture diagrams	08
6.	Output / Result / Screenshot	15
7.	Future Enhancement	19
8.	Conclusion	20
9.	References	21

## **1. Abstract**

The main objective of this project is to form a community of cyber security professionals and enthusiasts that could work together and grow towards a better future. It will allow the users to access latest information, happenings and news of the Cyber World, connect with different like-minded people and chat with them, share their journey and ideas with the people in order to help each other grow personally and professionally in the field of cyber security using knowledge sharing, learning module and courses & guidance on the platform.

This application will be one stop destination for students, professionals, hackers, and people in the cyber world who want to learn & grow in the field of cyber security.

This application will work as a missing link between the general people and the Cyber world leading them towards a great and secure upcoming future.

## 2. Introduction

### i. Overall Description:

In current scenario, cyber security has become one of the important and required aspect of Information Technology. Whatever is present on the cyber network need security to protect it and data today means Money in business world, making information and data security vital.

At present there is no platform that act as a source of authentic knowledge for people in the field of cyber security, leading to users wasting their time in visiting different websites and application to gather latest news, happening, and to get authentic knowledge source.

Students who are interested to learn this new skill and choose cyber security as a career option also get demotivated owing to availability of proper information. It is also difficult to find good talent for such a vital task. Hence, proposed web application caters to all these set of problems by providing a social media or an interactive platform to the people interested or working in the field cyber security.

User login to the application by creating a profile mentioning all about him and his journey in the field of cyber security. Here user will be able to chat and share ideas with other students, professionals in the field. Also, latest news source integrated from various different sources all across the web will be available to the user, keeping him up to date. If the user wants to learn anything in cyber security or related fields then different courses and module would be made available to him according to the topic required by the user. The web application would be a great platform for sharing of knowledge & information through people interaction and gaining different skills in the field of cyber security. The user would also be able to get guidance from experts on the platform whenever they required according to their need and the topic they require. Finding good talent for any work in the field of

cyber security would be easy on the platform, as the platform will act as a talent pool in form of its users.

**ii. Purpose:**

The main purpose of proposing this application is:

- To provide students and professionals in field of cyber security a platform that connects them to each other.
- To provide the user a genuine and trustable source of information and news related to cyber world and security.
- To save peoples time and efforts to make them more productive.
- To provide good quality learning courses and modules in cyber security.
- Increase the efficiency of people in the field.
- Keeping people updated and provide all round guidance.
- To provide a platform to interact to achievers in the Cyber World.
- Providing a handy application that could work on various devices.

**iii. Motivations & Scope:**

Cyber security has emerged as a very vital aspect of information technology, as it deals with providing security to the data and information on the cyber space. Hence more and more people are required in this field. But we don't see many options present to the aspiring students to learn this skill and make a career out of it due to lack of proper guidance and authentic information source. Also, it is difficult to find good source of news and happenings related to the cyber security on the internet that are up to date and authentic. Lack of proper knowledge and guidance about the field makes it much less popular unlike Artificial Intelligence, Machine learning, IOT, Cloud computing etc. Hence, the proposed platform would be able to fill this gap and help the interested students learn and working

professionals connect to people from similar background and share knowledge and help each other.

The major scope of this project is to educate people interested in the Cyber field so as to increase the learning, communication and spreading the knowledge about the field of Cyber Security.

### **3. Existing System**

In the current scenario, when we talk about Cyber Security then there is nearly no clarity about the field and also no particular path to enter this field. If we are interested in this field then we try to find a particular path of getting into it and also there is no single platform present right now which provides full knowledge of cyber security such as news, bug fixes and much more. Cyber security users have to visit different websites to gather the news related to cyber world, learn things from the best resources available which multiple time rather than guiding them just throws them in somewhere between the starting and the ending of their interest. Many people do not have the time to visit different websites to gather the information. Ultimately, this would be the waste of time and efforts as the person will most probably find different things about the same event on different platforms which makes the information unreliable and redundant. Other than this the users usually face one more major issue while visiting different website for news is that they encounter a lot of fake news and information that not only misguides but also possesses various threats to the user. And this makes him unable to trust any website and ultimately the person loses the interest in the field along with making him unable to work but if he is provided a single platform where he could learn, interact and share things according to his needs this will or sure help him make his/her career in the field of Cyber Security and shaping their future.



## 4. Proposed System

The proposed scenario is to develop a single platform through which we will eliminate the problems faced by people in the current situations. This application will provide all the information and news related to cyber world at one place. So it will save time and efforts of the users by making the proposed scenario more efficient.

Following are the modules of the project:

### a) **Social media module:**

This is the module where the people will create their profiles on the platform and register themselves. After this they will be able to share their posts on the platform and create content according to them. They can also connect to the other people on the platform.

This module has three sub-modules:

- **Profiler** : in this module the user will register himself/herself on the platform and will create their profiles. This profile will contain all the information about them, their names, photos, qualifications, experiences (if any), and much more.
- **Content publishing:** this module will allow the user to post anything he wants on the platform. He will be able to create post and share it to everyone on the platform.
- **Chat Server:** this module will allow the user to communicate to other users through messages.

### b) **News module:**

This module will allow the users to read the news about the cyber world in just one click. In this module we will integrate different sources like websites, etc. to bring the latest news to the user. The news will be available to them in the form of headlines that will work as a hyperlink to the source and will take the user there for reading the whole article.

**c) Learning & Guidance Module:**

This module is dedicated for people who are new to the world of cyber security and they just know the destination not the path to reach the destination. They will be able to find and explore the path along with the courses required to become what they want in the Cyber field.

Along with this if they aren't clear about the destination also and are lost in between then they can connect to dedicated subject matter expert directly and can get the right path.

**d) Service module:**

In this module the companies who need the experienced or other kind of Cyber Security people will be able to share their requirements and search the required people and hire them for work.

## 5. Implementation

Implementation is the most crucial stage in achieving a successful system and giving the user's confidence that the new system is workable and effective. Implementation of a modified application to replace an existing one. This type of conversation is relatively easy to handle, provide there are no major changes in the system.

### i. Hardware Requirements:

The hardware used for the implementation of this project is as follows:

Processor	:	Intel Pentium Dual Core
RAM	:	2 GB
Monitor	:	15.6" Led screen
Hard Disk	:	20 GB
Keyboard	:	Standard Keyboard
Mouse	:	3 keys Mouse

### ii. Software Requirements:

The software used for the development of the project is:

OPERATING SYSTEM	:	Windows 8/8.1/10
ENVIRONMENT	:	Visual Studio
LANGUAGE	:	PHP, Javascript, CSS, HTML
BACKEND	:	MySQL

### iii. System Design:

Design is multi-step process that focuses on data structure software architecture, procedural details, etc. and interface between modules. The design process also

translates the requirements into the presentation of software that can be accessed for quality before coding begins.

Computer software design changes continuously as new methods; better analysis and broader understanding evolved. Software Design is at relatively early stage in its revolution. Therefore, Software Design methodology lacks the depth, flexibility and quantitative nature that are normally associated with more classical engineering disciplines. However techniques for software designs do exist, criteria for design qualities are available and design notation can be applied.

- **Input Design:**

Input design is the process of converting user-originated inputs to a computer-based format. Input design is one of the most expensive phases of the operation of computerized system and is often the major problem of a system. In the project, the input design is made in various web forms with various methods.

- **Output Design:**

Output design generally refers to the results and information that are generated by the system for many end-users; output is the main reason for developing the system and the basis on which they evaluate the usefulness of the application. In the project, once questions are posted, It stores in to the data base. The questions are viewed and also the user who needs the details about the question can register and see the related answer which is to be posted this site.

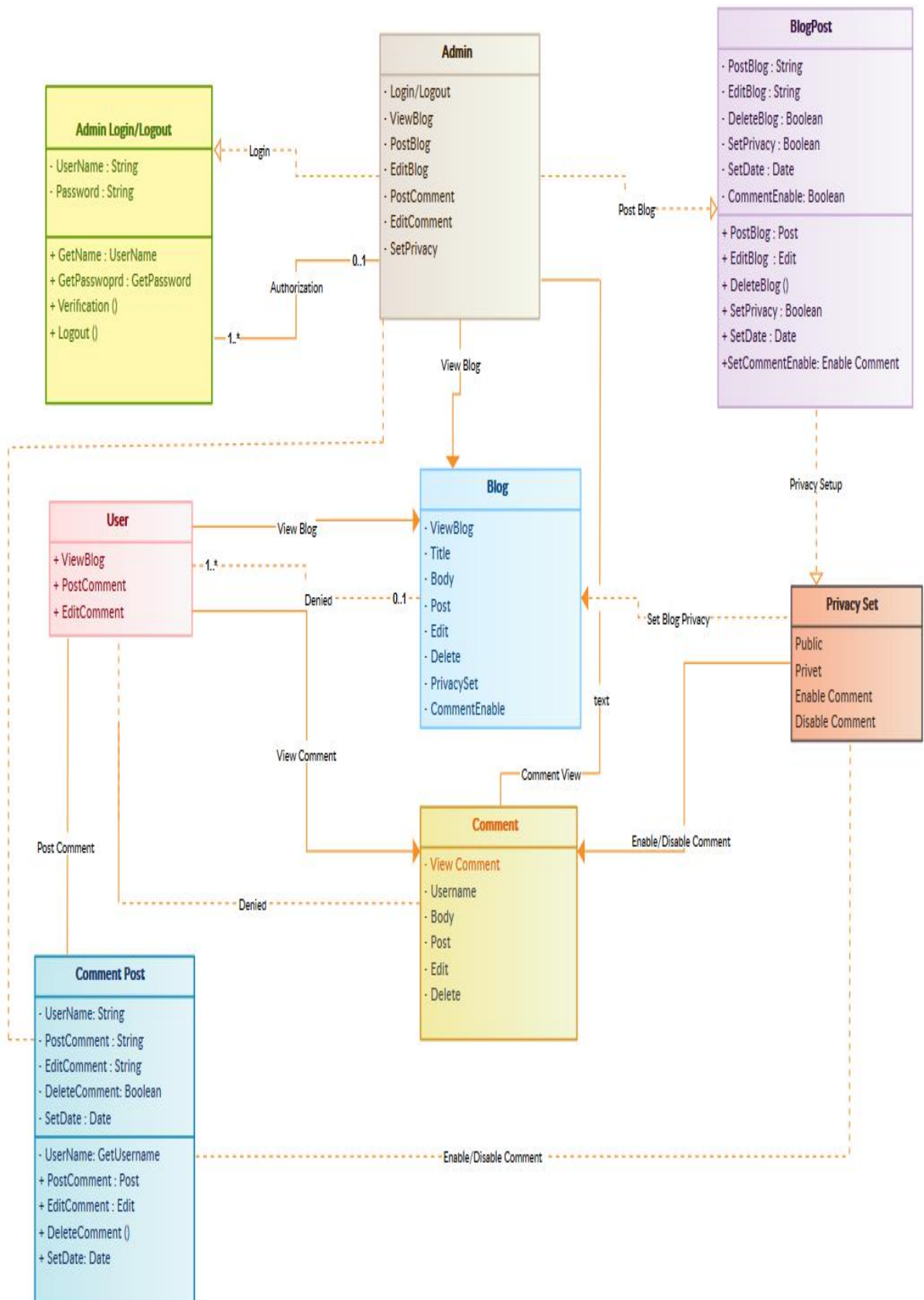
- **Database Design:**

The database design is a must for any application developed especially more for the data store projects. Since the chatting method involves storing the message in the table and produced to the sender and receiver, proper handling of the table is a must.

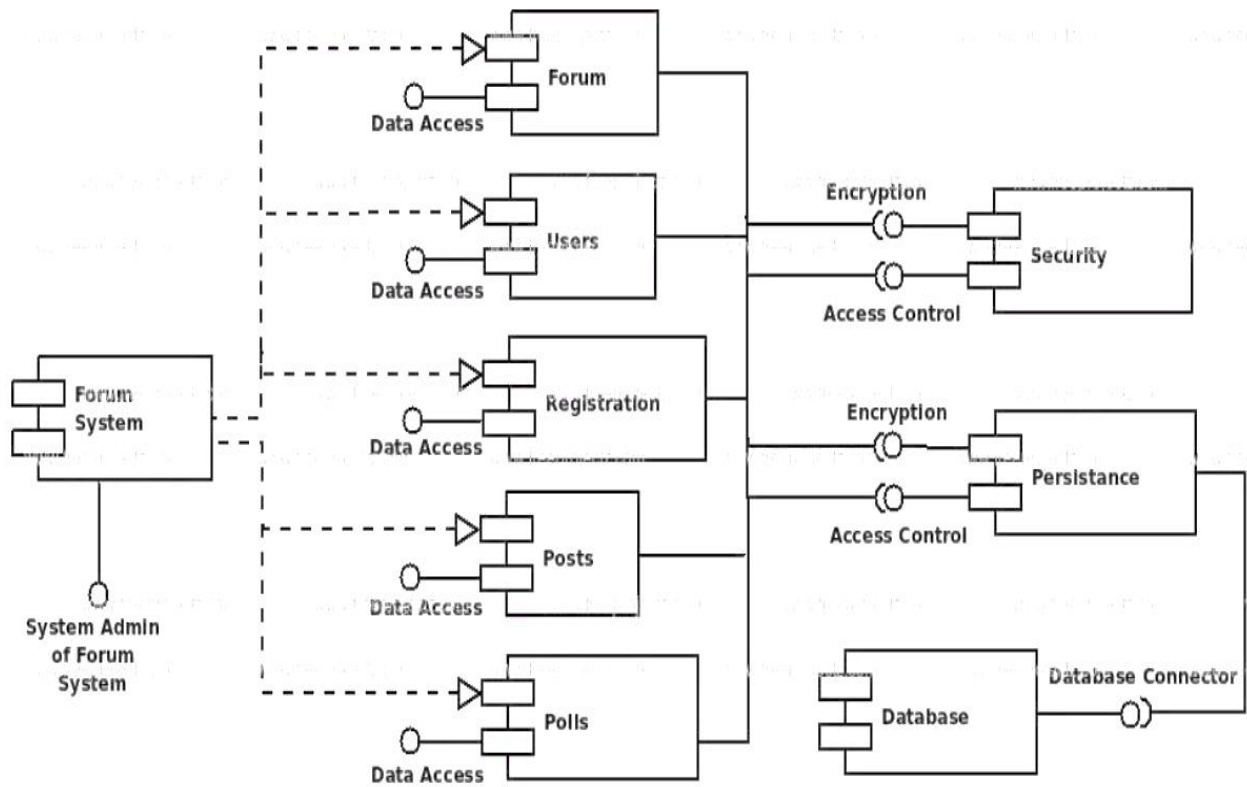
In the project, login table is designed to be unique in accepting the username and the length of the username and password should be greater than zero.

#### iv. Architectural Diagrams:

- Class Diagram:

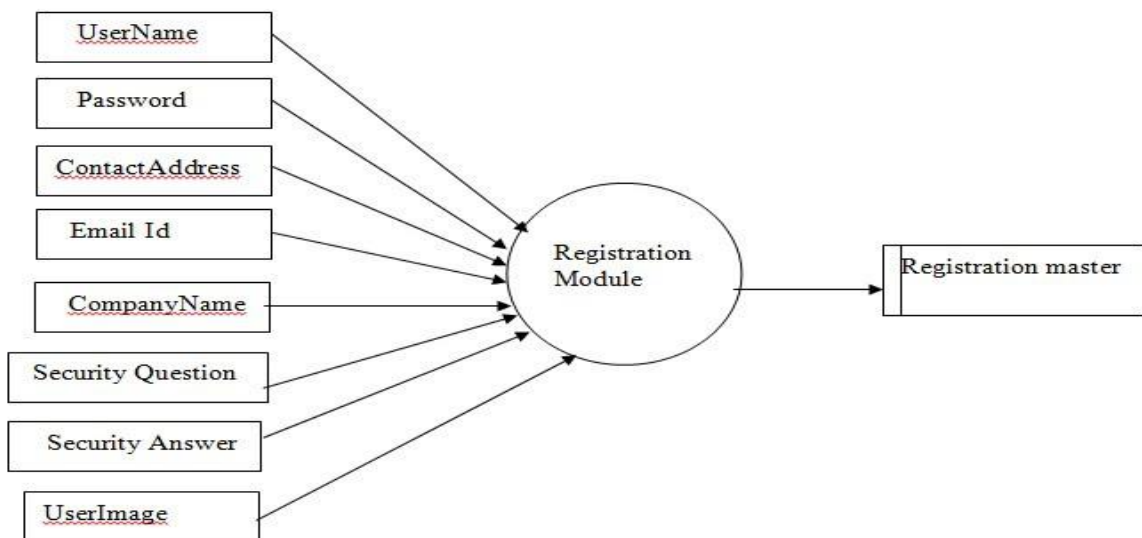


- **Component Diagram:**

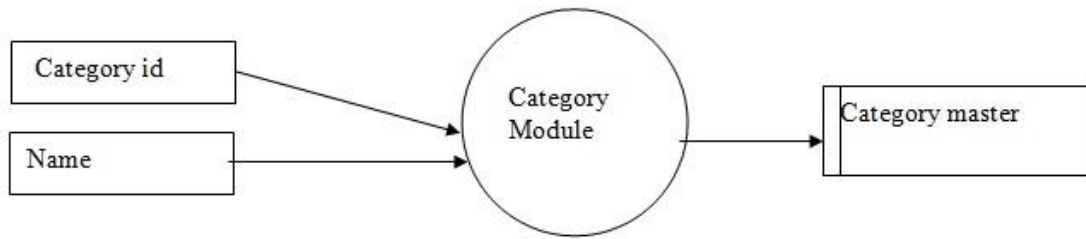


- **Data Flow Diagrams:**

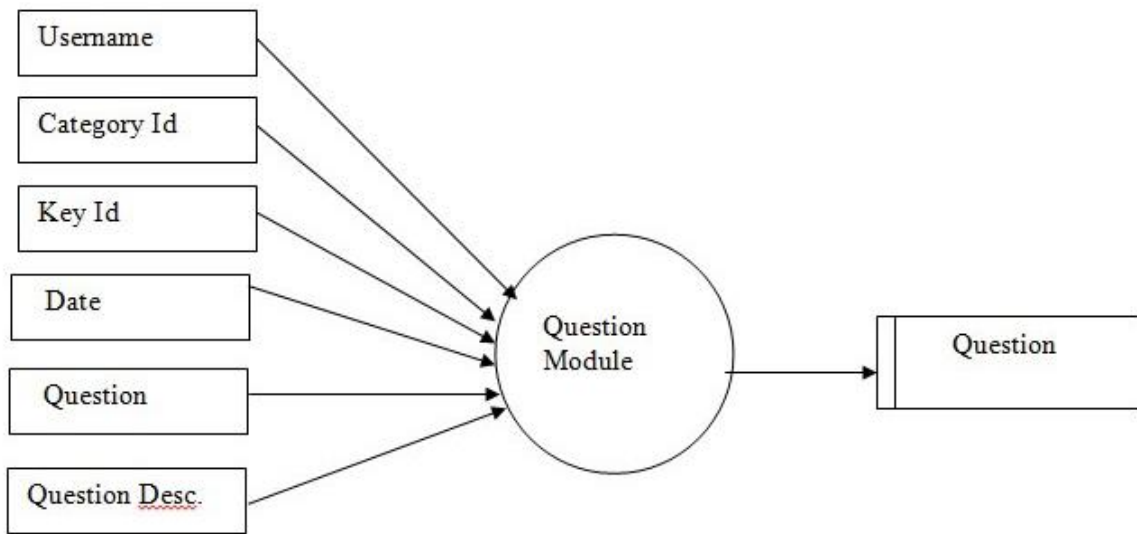
- ✓ **Registration module**



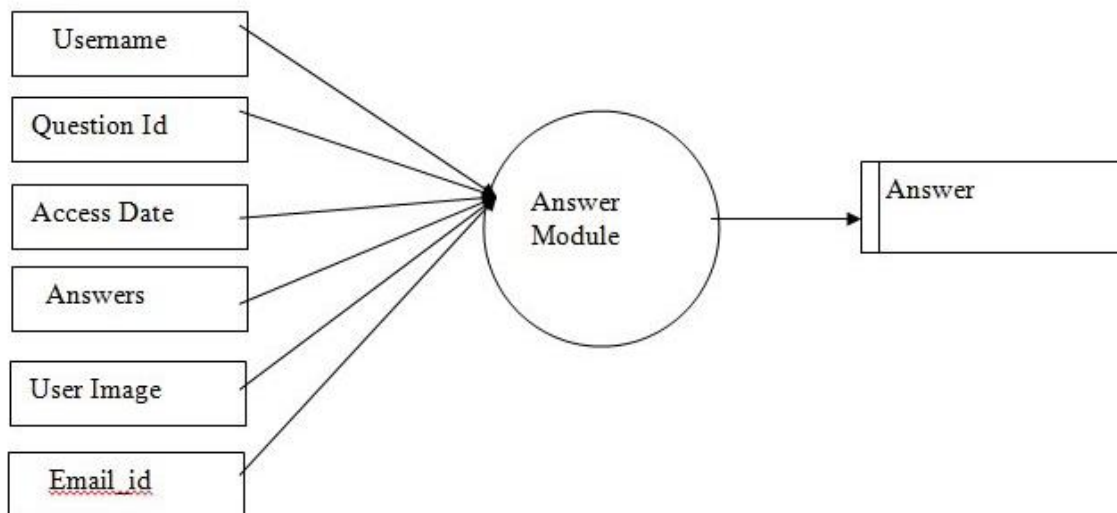
✓ **Category Module:**



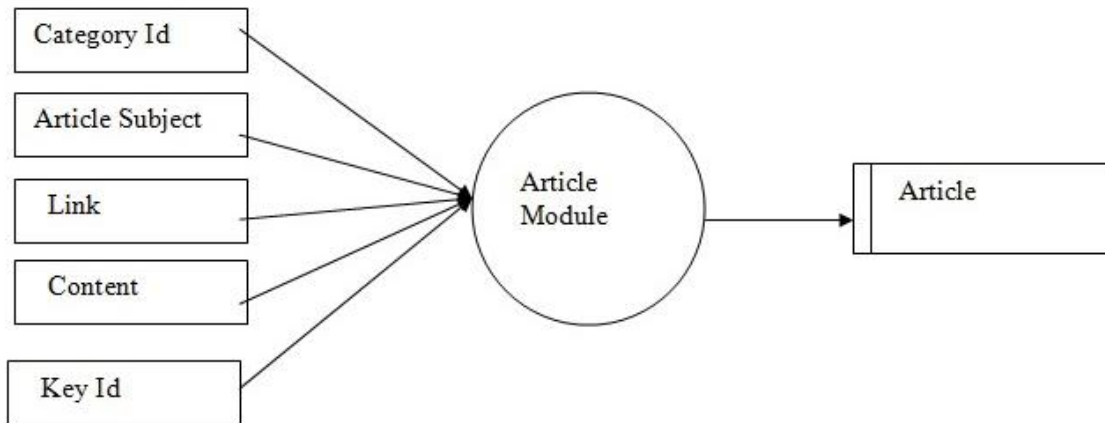
✓ **Post Question:**



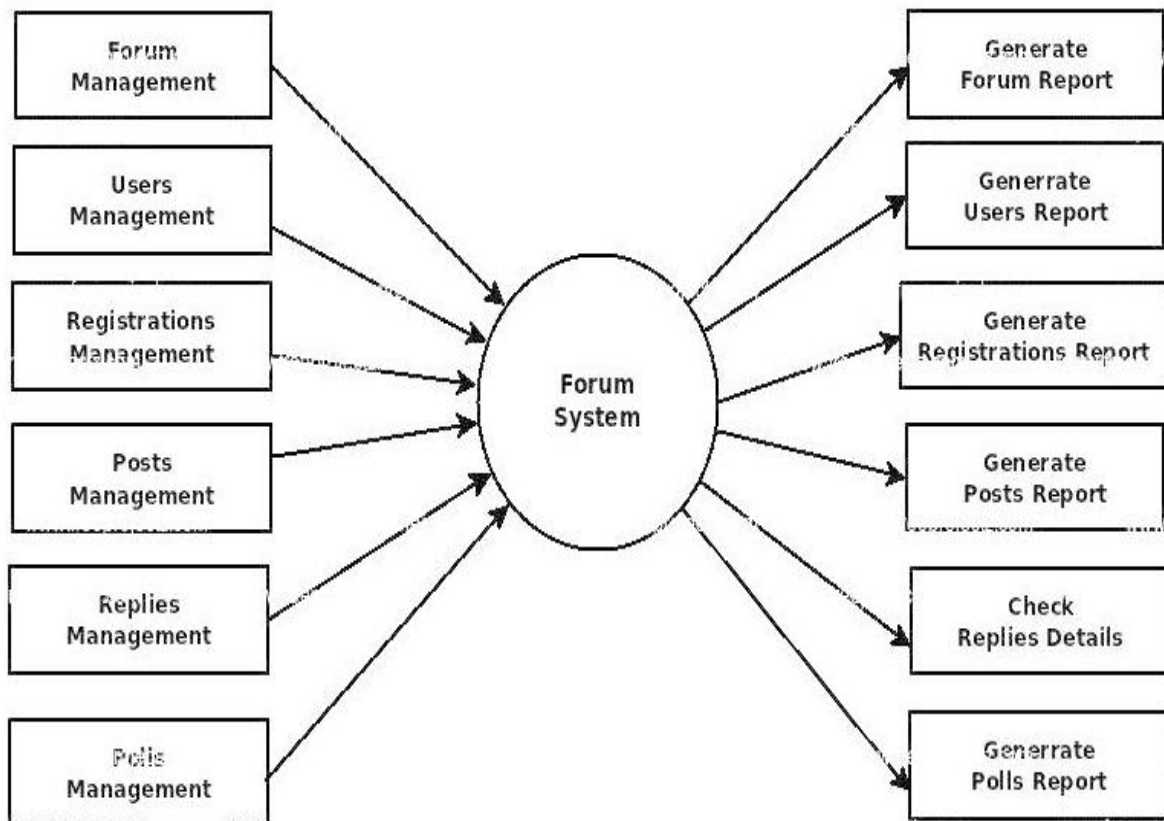
✓ **Answer Module:**



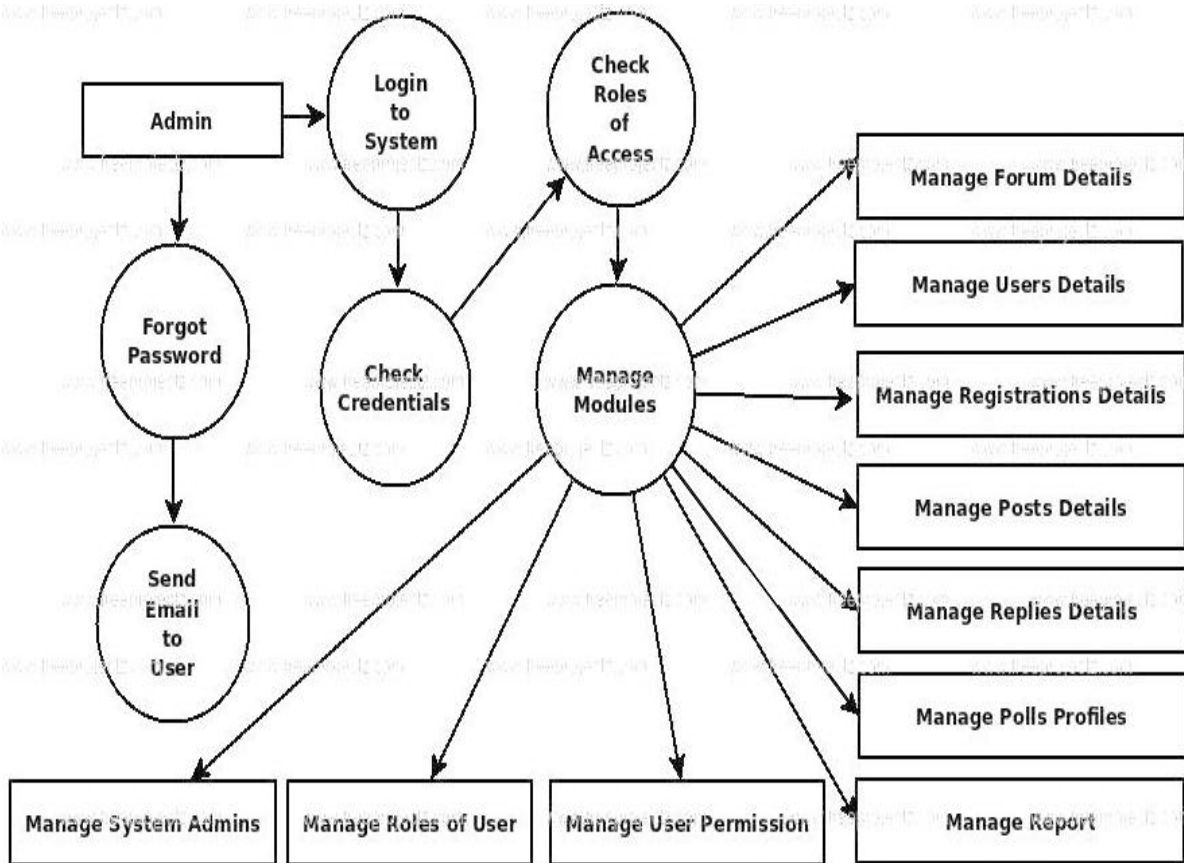
✓ **Article Module:**



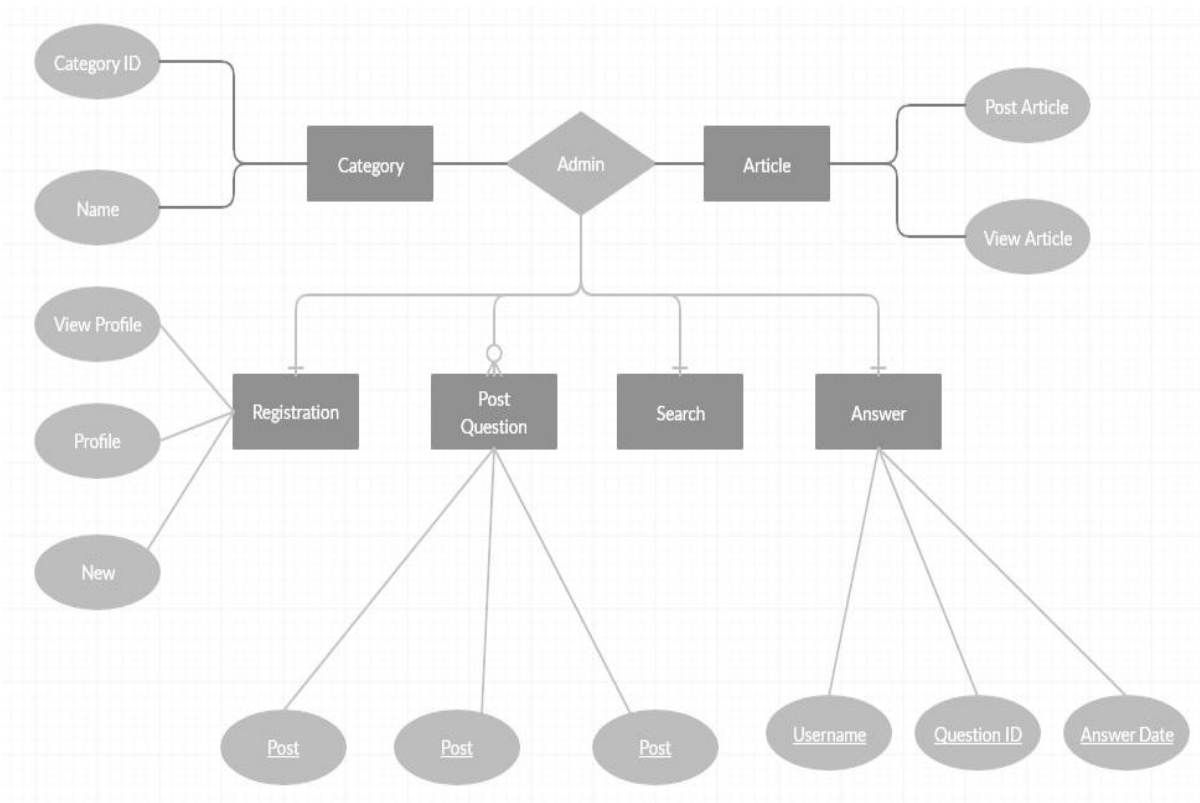
✓ **Admin Module:**







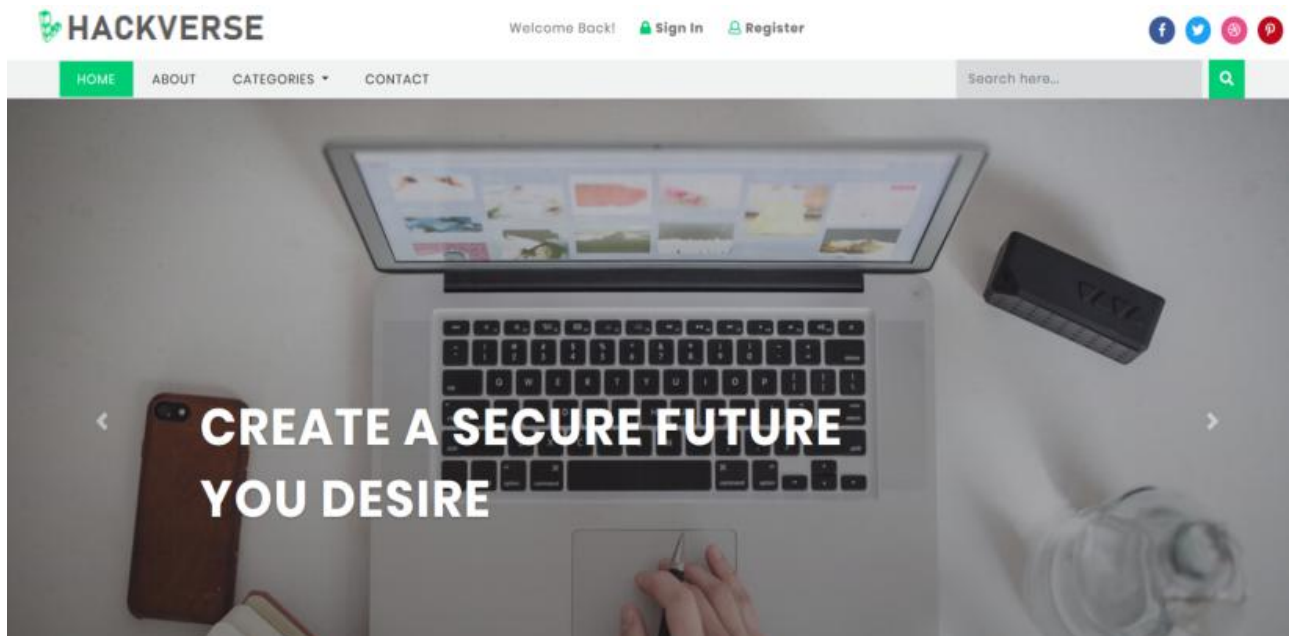
- **E R Diagram:**








## 6. Output

Once all the implementation is done we will get the resulting output as following screenshots:

- Home Screen:



 <p><b>The challenges of being a writer</b></p> <p>🕒 2018-04-27   👤 etemesi 🏷️ witting, blogging</p>	 <p><b>The subtle art of not giving a fuck-Mark Manson</b></p> <p>🕒 2018-04-27   👤 admin 🏷️ books, reading, novels</p>	<h3>Categories</h3> <table border="1"><tr><td>tricks</td><td>0</td></tr><tr><td>hacks</td><td>2</td></tr><tr><td>offers</td><td>1</td></tr><tr><td>devices</td><td>1</td></tr><tr><td>cyber security</td><td>0</td></tr><tr><td>Ethical Hacking</td><td>0</td></tr></table>	tricks	0	hacks	2	offers	1	devices	1	cyber security	0	Ethical Hacking	0
tricks	0													
hacks	2													
offers	1													
devices	1													
cyber security	0													
Ethical Hacking	0													
		<h3>Stay Connected</h3> <ul style="list-style-type: none"><li>Twitter</li><li>Facebook</li><li>Dribbble</li><li>Pinterest</li></ul> <h3>Older Posts</h3> <ul style="list-style-type: none"><li> Benefits of living in this world</li></ul>												

- **Signin & Register Pages:**

**Sign In Here**

[Sign Up](#)

Username

Password

Forgot your password? [Click here](#)

Remember me

Sign In

**Sign Up Here!**

Username

✔ Username is available and you can take it.

Password Confirm Password

Email Address

Group

If you choose to sign up to a group marked with an asterisk (\*), you won't be able to log in until the admin approves you. You'll receive an email when you are approved.

Full Name

Address

City

Phone

Sign Up

- **User Panel:**

BLOG ADMIN
Messages 7 Alerts 3 ajay

- [Dashboard](#)
- [Blogs](#)
- [Categories](#)
- [Published](#)
- [Drafts](#)

## Hello ajay !

[View Website](#) / [Dashboard](#)

📢 Welcome to your Blog Dashboard!!
✕

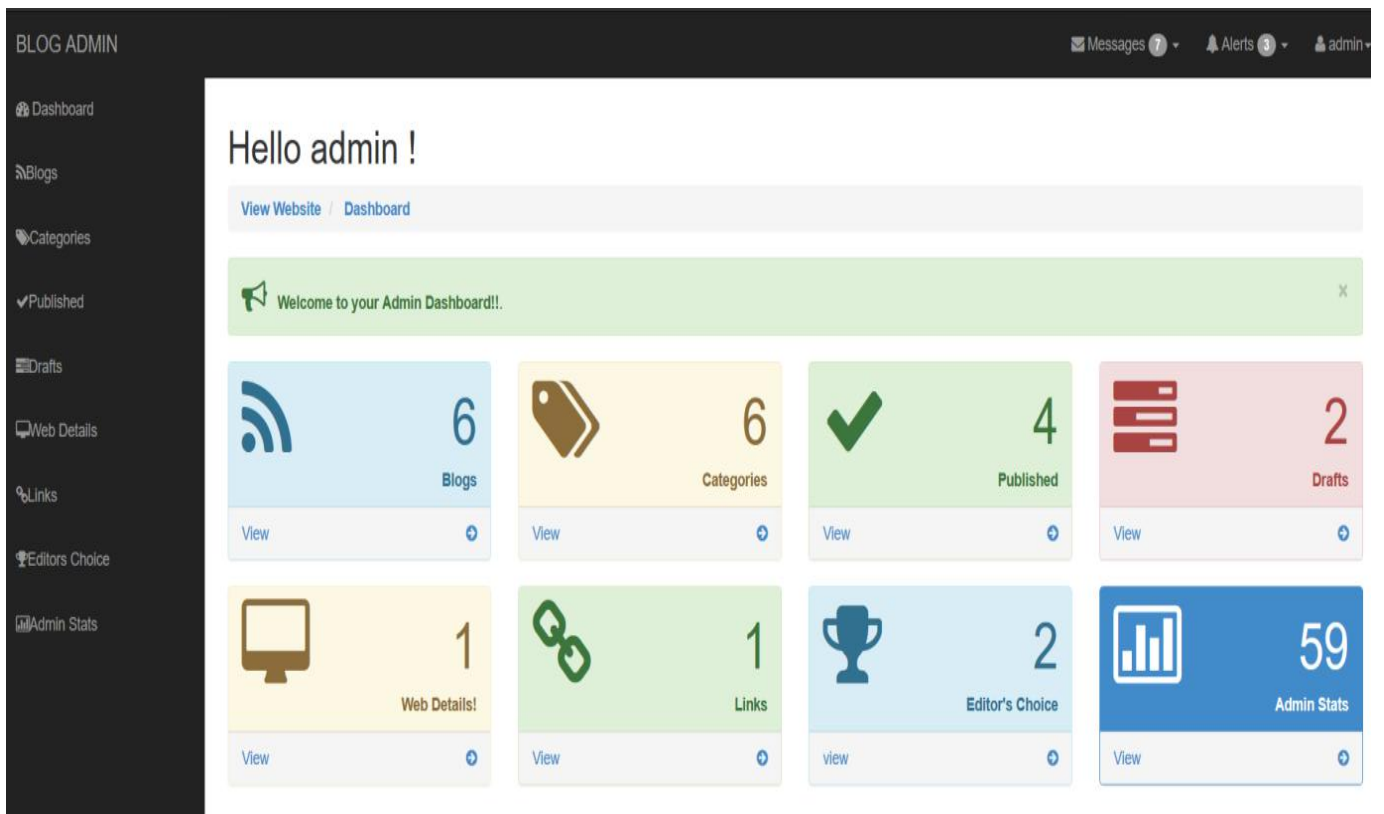
0  
Blogs  
[View](#)

6  
Categories  
[View](#)

0  
Published  
[View](#)

0  
Drafts  
[View](#)

- **Admin Panel:**



- **Blog Page:**



## **7. Future Enhancements**

Every application has its own merits and demerits. The project has covered almost all the requirements. Further requirements and improvements can easily be done since the coding is mainly structured or modular in nature. Changing the existing modules or adding new modules can append improvements. Further enhancements can be made to the application, so that the web site functions very attractive and useful manner than the present one.

The major future enhancements that can be done are as follows:

- News functionality could be added in a way that it could collect the latest news as soon as any information of the news is available through any source.
- A dedicated learning platform containing the best possible knowledge sources will be made available for the use of students.
- A dedicated free lancing service platform will also be introduced to it.

## **8. Conclusion**

It is concluded that the application works well and satisfy the both registered and unregistered. 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.

This will be a great initiative for cyber security professionals and others interested in the field to be a part of community where they will be able to share their knowledge and gain a lot of it from others together making the future of cyber word a more safe and secure place.

## 9. References

- [www.codeproject.com/KB/custom-controls/asppopup.aspx](http://www.codeproject.com/KB/custom-controls/asppopup.aspx)
- <http://www.developerfusion.com/code/4673/programatically-load-user-controls/>
- <http://www.developerfusion.com/code/4596/how-to-access-a-mysql-database-with-net/>
- <http://www.developerfusion.com/code/3826/adding-controls-to-placeholders-dynamically/>
- [http://aspalliance.com/1125\\_Dynamically\\_Templated\\_GridView\\_with\\_Edit\\_Delete\\_and\\_Insert\\_Options](http://aspalliance.com/1125_Dynamically_Templated_GridView_with_Edit_Delete_and_Insert_Options)
- [www.codeproject.com/KB/custom-controls/asppopup.aspx](http://www.codeproject.com/KB/custom-controls/asppopup.aspx)
- <http://www.developerfusion.com/code/4673/programatically-load-user-controls/>
- <http://www.developerfusion.com/code/4596/how-to-access-a-mysql-database-with-net/>
- <http://www.developerfusion.com/code/3826/adding-controls-to-placeholders-dynamically/>
- [http://aspalliance.com/1125\\_Dynamically\\_Templated\\_GridView\\_with\\_Edit\\_Delete\\_and\\_Insert\\_Options](http://aspalliance.com/1125_Dynamically_Templated_GridView_with_Edit_Delete_and_Insert_Options)