

Annexure-1

Techbay

Final Project Report

Submitted in partial fulfillment of the requirements for the award of

**BACHELOR OF ENGINEERING
IN
CLOUD COMPUTING**

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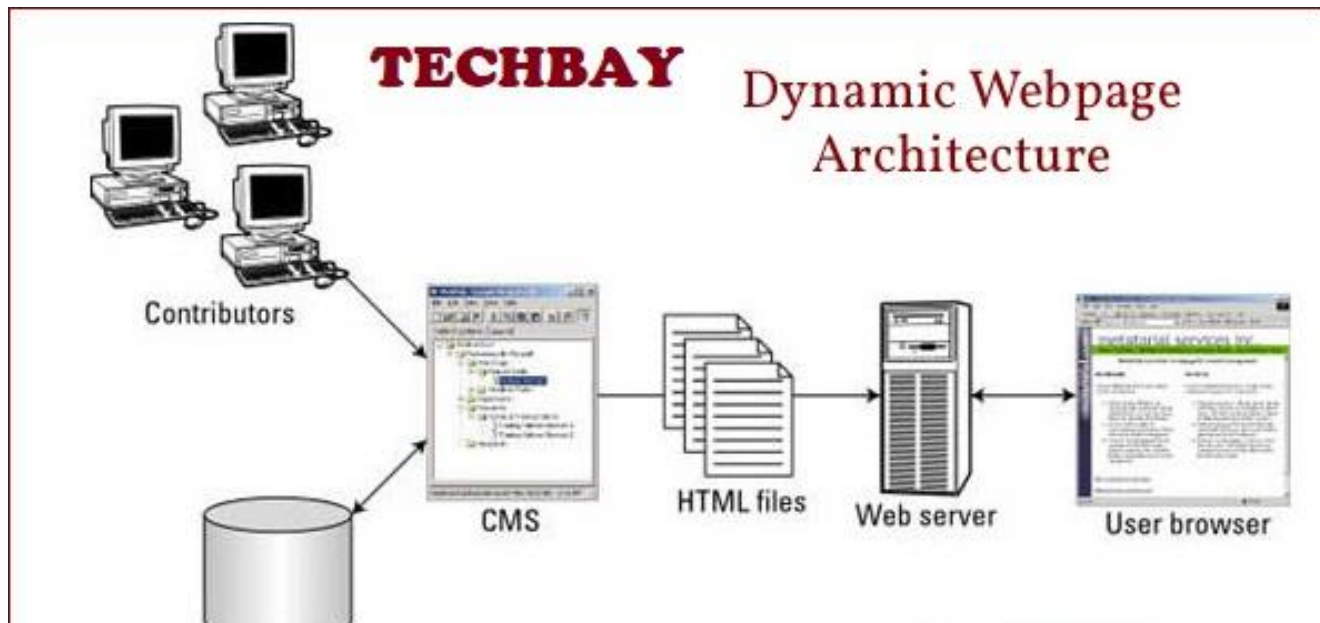
**CHANDIGARH UNIVERSITY
Gharuan, Mohali**

Annexure-4

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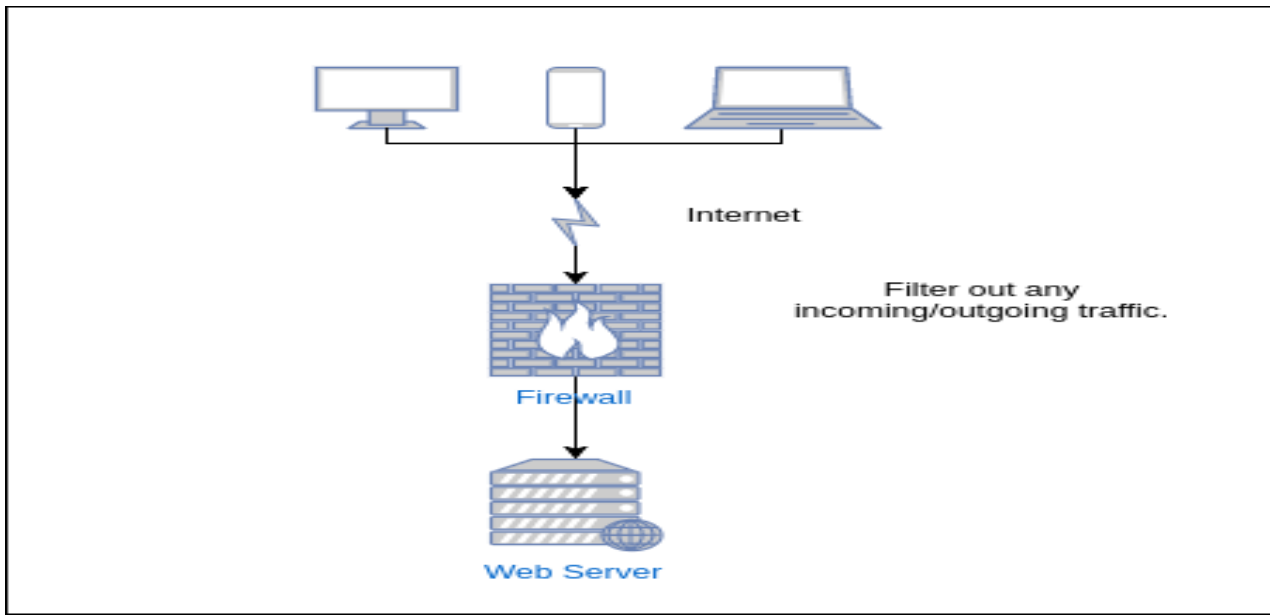
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1.DEFINITION



Techbay mostly shares articles and guides related to new gadgets such as TV, mobile, tablets, laptops and gaming devices as well. . It mainly covers the latest news related to gadgets, best guides for gadgets and also tutorials relate to gadget. If you are a gadget lover, then this websites really worth's and you must need to check out this website for finding latest and upcoming gadgets news.

1.1 PROBLEMS FACED BY EXISTING MANUAL SYSTEM



The phase of system analysis process deals with problems that are affecting in the current manual system.

As the growing trend in InfoTech World of computers need of accuracy, perfect ness, speed and high memory data storage is a must. Each and every problem must be solved with a least amount of time and energy.

The problems faced by existing system are described as below:

- System needs more information about new entry of news
- System needs to maintain quantity records
- System need to keep record of content
- System needs to update and delete the record
- System also needs a search area
- It also needs a security system to prevent data



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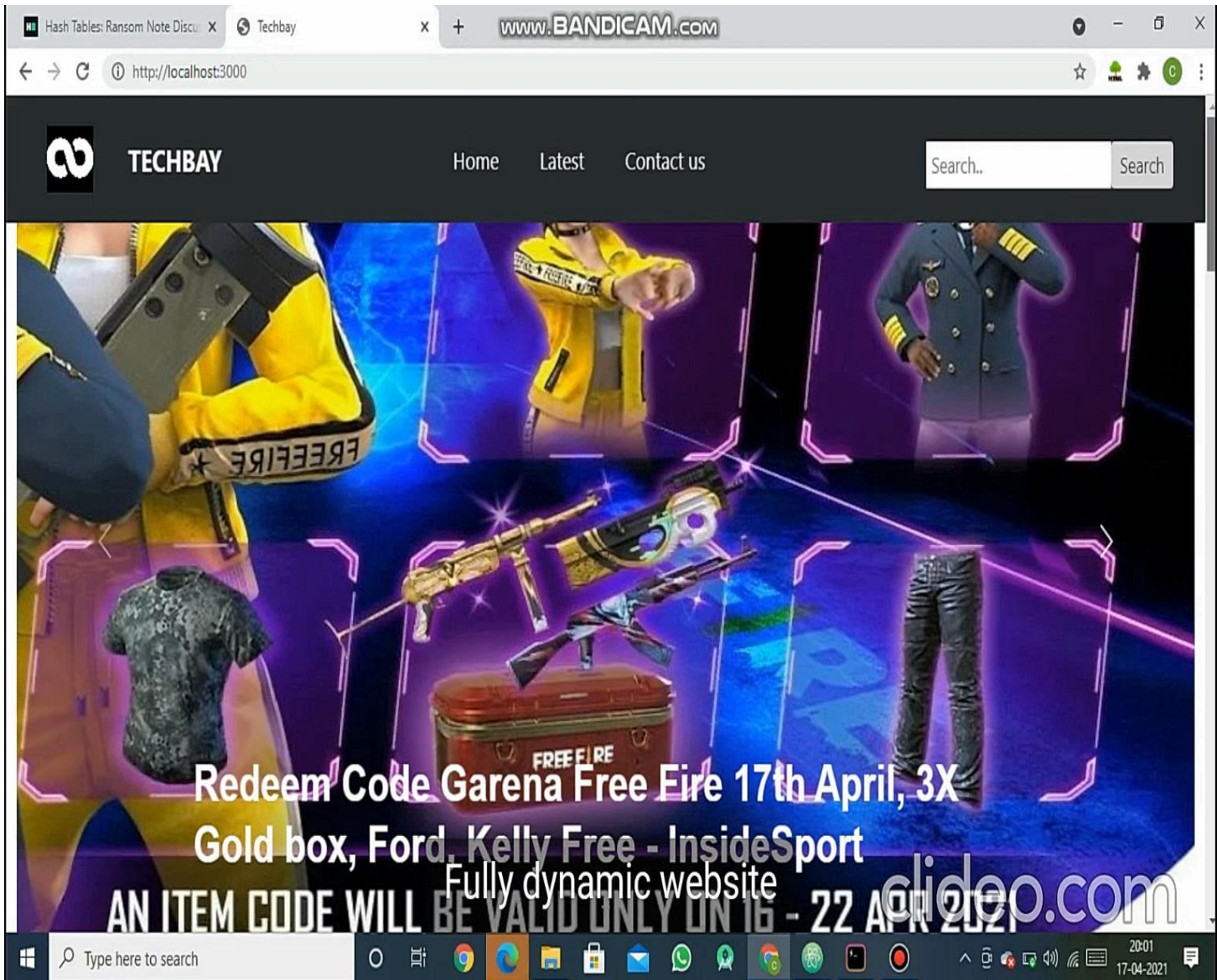


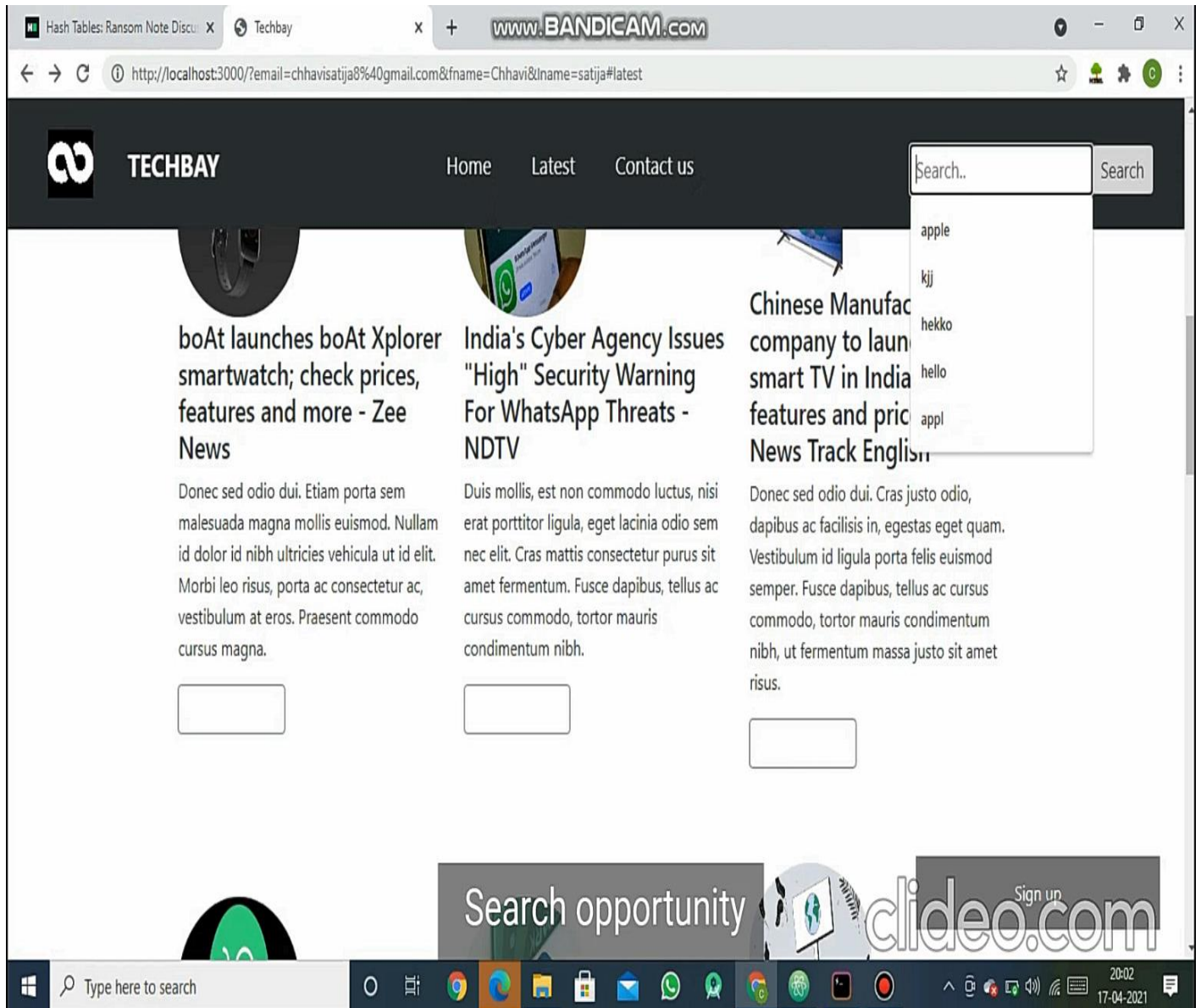
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2.1 INTRODUCTION TO THE PROPOSED SYSTEM

Our project Tech Bay is all about web development. It includes both front end and back end functionalities. From html css bootstrap to mongodb sql and api, this project has it all.

What this website basically does is it provides daily news related to technology. Whenever a fresh gadget comes this website updates dynamically and provides all the news related to that.

The unique feature it has is that viewer can subscribe to our newsletter and he will get notifications time to time regarding latest news.

Another feature worth mentioning is the use of AWS.

As we are students of cloud so that's why we decided to include something from our field and what's better than AWS.

We will host our website dynamically on AWS using it's features.

This way we can make our website a little different from others without compromising it's features.

2.2 FEATURES OF PROPOSED SYSTEM

The Techbay website of the organization is developed to overcome the most of the problems.

Fully Dynamic website- A well laid out process spanning the entire development life cycle

Login and Registration system is available. Efficient use of client side scripting for enhanced user interactivity, Optimal server side scripting for faster loading of pages.

Full control for you in customisation of content and data

Smart Content Load For resource-heavy and long single page websites, we prefer lazy loading and infinite scrolling approach. These features ensure that the web browsers load only above-the-fold content first, that people can see without any scrolling, and keep on loading the content as they scroll down the page. It improves page loading speed and enriches user experience.

Motion UI increases user engagement with your website. It may include various elements like videos, shapes, text, illustrations, etc. It finds usage in several spaces like welcoming users, navigations and transitions, system notifications, results of action, etc.

The **Authentication** and **Authorize** System was implemented.- The Resource Server asks the Resource Owner to authenticate itself and for the authorization to share data. After successful **authentication**, the Resource Server shares an **authorization** code with the client application

Search Opportunity Providing a search function that searches your Web pages is a design strategy that offers users a way to find content. Users can locate content by searching for specific words or phrases, without needing to understand or navigate through the structure of the Web site.

Latest fast updates-Every Minute Latest and fast updates

Web Content Management Systems -

Content management in Web sites is a combination of quality information, formal processes, and supporting systems architecture that help organizations to dynamically contribute, collaborate and control page elements such as text, graphics, and multimedia. This heterogeneous nature of content is managed by WCMS. Currently, there are countless WCMS software packages on the market that provide some sort of content management. The most basic advantage of a WCMS is the consistency that it provides to the design, layout, and organization of a site, bringing everything together in a uniform package. It is hard to determine how seriously the developers of a third-party plugin take security or if they have bad intentions and use the plugin to attack sites that use it.

3.FEASIBILITY STUDY

A feasibility study is undertaken to determine the possibility or probability of either improving the existing system or developing a completely new system.

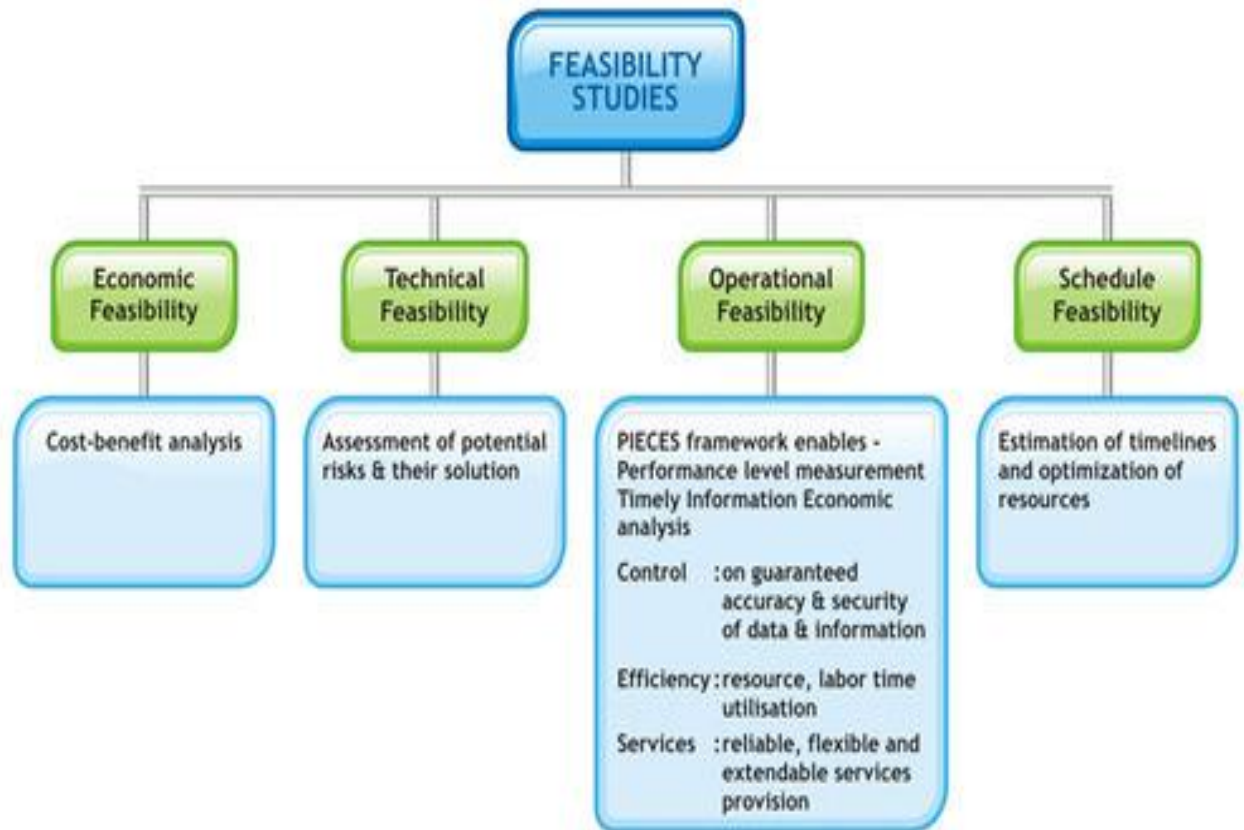
It helps to obtain an overview of the problem and to get rough assessment of whether feasible solution exists.

This is essential to avoid committing large resources to a project and then repent on it later.

Need for Feasibility Study:

The feasibility study is needed to

- (1) Answer the question whether a new system is to be installed or not?
- (2) Determine the potential of the existing system.
- (3) Improve the existing system.
- (4) Know what should be embedded in the new system.
- (5) Define the problems and objective involved in a project.
- (6) Avoid costly repairs at a later stage when the system is implemented.
- (7) Avoid crash implementation of a new system.
- (8) Avoid the 'Hardware Approach' i.e. getting a computer first and then deciding how to use



3.1 Technical Feasibility:

Technical Feasibility determines whether the work for the project be done with the present equipment, current procedures, existing software's technology and available personnel?

If new technology is needed then what alternatives will be needed in the present structure and work ethos?

This will require a close examination of the present system.

The technical feasibility should ask questions related to:

- 1) Adequacy of available technology.
- 2) Adequacy of hardware.
- 3) Available of computer.
- 4) Operating time and support facilities, etc.

Technical feasibility determines whether the technology needed for the proposed system is available and how it can be integrated within the “Hostel Management System” and Technical evaluation must also assess whether the existing system can be upgraded to use the new technology and whether the “Hostel Management System” has the expertise to use it.

The technical feasibility in the proposed system deals with the technology used in the system. It deals with the hardware and software used in the system whether they are of latest technology or not. It happens that after a system is prepared a new technology arises and the user wants the system based on that technology. Thus it is important to check the system to be technically feasible.

The minimum memory requirement is 32MB of RAM while 64MB is better to have for better performance. As far as software is concerned, licensed version of Microsoft Access 2000 and Visual Basic 6.0 (Professional Version) should be installed on the server. There should be printer attached to the network for printing of Merit list of the admission.

3.2 Economic feasibility:

Economic feasibility looks at the financial aspects of the project. Economic feasibility concerns with the returns from the investments in a project. It determines whether it is worthwhile to invest the money in the proposed system. It is not worthwhile spending a lot of money on a project for no returns.

To carry out an economic feasibility for a system, it is necessary to place actual money value against any purchases or activities needed to implement the project.

The “Hostel Management System” plans to acquire the necessary hardware and software requires for the system and there is no hindrance whether economical or otherwise towards its purchase. A brief description of the hardware and software required in the system is given later in the report.

3.3 Operational feasibility:

Operational feasibility covers two aspects. One is the technical performance aspect and other is the acceptance within the “Hostel Management System” Operational feasibility determines how the proposed system will fit in the current operations and what, if any job restructuring and retraining may be needed to implement the system.

In the system operational feasibility checks, whether the user who is going to use the system is able to work with the software’s with which the system is coded and also the mind of the user going to use the system. If the user does not understand or is able to work on the system further development is of waste.

3.4 Technological Feasibility and Cost Analysis-

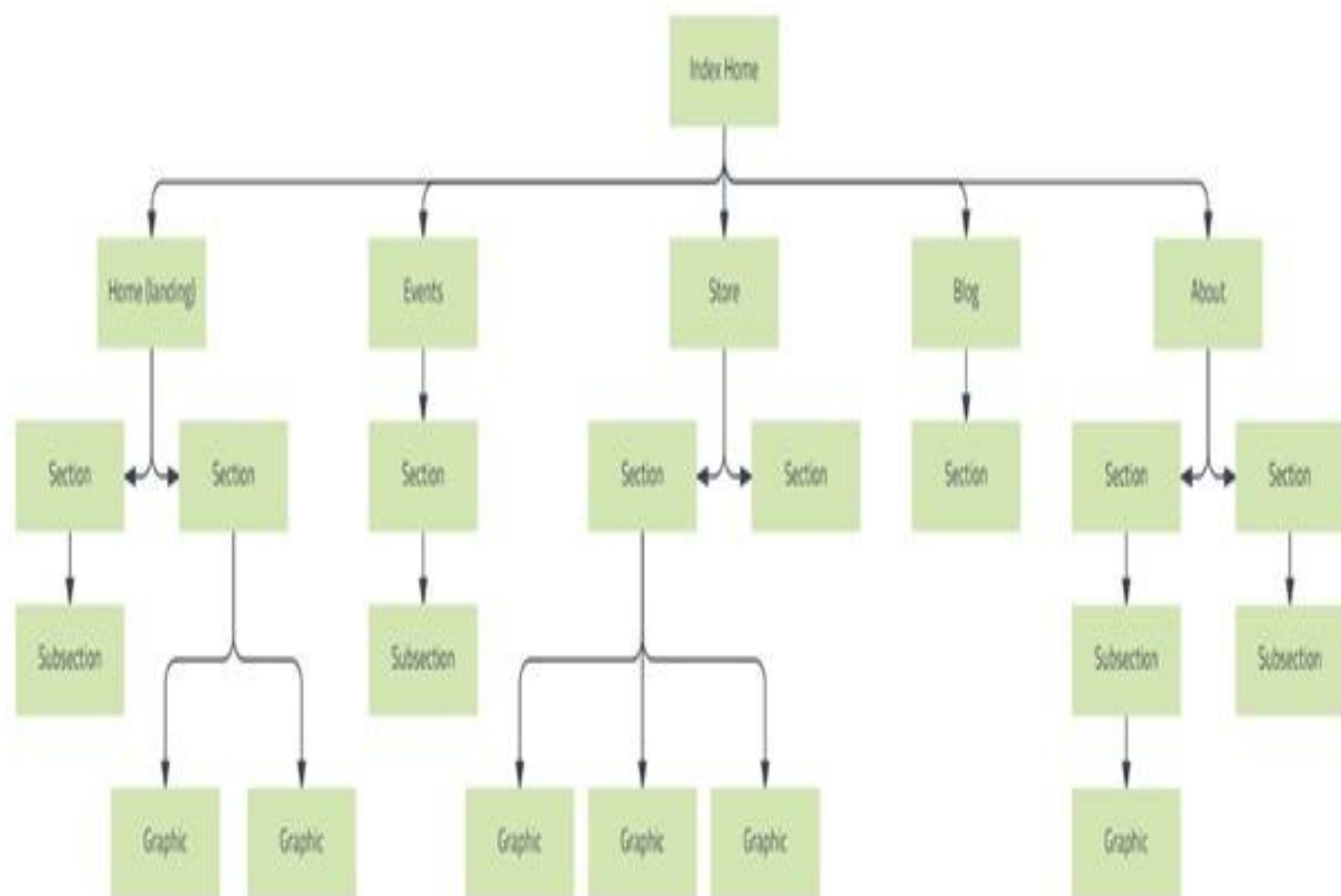
Technology Feasibility and Cost Analysis is performed to determine the potential economic viability of a process or technology, and helps to identify which technologies have the greatest likelihood of economic success.

Results from technology feasibility analysis efforts provide input to balanced portfolio development and technology validation plans. The economic competitiveness of a technology is assessed by evaluating its implementation costs for a given process compared to the costs incurred by current technology.

These analyses are therefore useful in determining which projects have the highest potential for near-, mid-, and long-term success. Parameters studied include production volume benefits, economies of scale, process configuration, materials, and resource requirements. Of principle importance, technology feasibility analyses can help direct research toward areas in which improvements will result in the largest cost reductions.

Additionally, advancement toward the final goal of commercialization can be measured as the economics of a process are evaluated throughout the life of the project. Tools used for technology feasibility analysis include process modeling (e.g., ASPEN Plus®), equipment cost modeling, and cash flow analysis. Technology feasibility analysis is performed on a regular and ongoing basis, in the areas of delivery, storage, and fuel cells.

4. Basic Flow Chart –



5.IMPORTANT CODE

5.1 Package.json file-

```
{
  "name": "api",
  "version": "1.0.0",
  "description": "",
  "main": "server.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1",
    "start": "node server.js"
  },
  "author": "",
  "license": "ISC",
  "dependencies": {
    "@mailchimp/mailchimp_marketing": "^3.0.36",
    "body-parser": "^1.19.0",
    "ejs": "^3.1.6",
    "express": "^4.17.1",
    "mailchimp": "^1.2.1",
    "request": "^2.88.2"
  }
}
```

5.2 Server.js code-

```
const express=require("express");
const app=express();
const https=require('https');
const ejs=require('ejs');
const bodyparser=require('body-parser');
const request=require("request");
const mailchimp=require("@mailchimp/mailchimp_marketing");
var user;
let appledata=[];

app.use(bodyparser.urlencoded({extended:true}));
app.use(express.static('public'));
app.engine('html', require('ejs').renderFile);
app.set('view engine','html');

app.get("/",function(req,res){

    https.get("https://newsapi.org/v2/top-headlines?country=in&category=technology&apiKey=60f8555bbd6a4b00aa09cef65d589f19",function(response){
        console.log(response.statusCode);
        var data;
        response.on("data",function(chunk){
            if (!data) {
                data = chunk;
            } else {
                data += chunk;
            }
        });
        response.on("end",function(){
            var newsdata=JSON.parse(data);

            var articles = newsdata.articles;

            var title=newsdata.articles[14].title;
            var imageUrl =newsdata.articles[14].urlToImage;
            var title2=newsdata.articles[1].title;
            var imageUrl2 =newsdata.articles[1].urlToImage;
            var title3=newsdata.articles[12].title;
            var imageUrl3 =newsdata.articles[12].urlToImage;
            //for LATEST column-1
            var heading1= newsdata.articles[14].title;
            var image_heading1=newsdata.articles[14].urlToImage;
            var heading2= newsdata.articles[15].title;
            var image_heading2=newsdata.articles[15].urlToImage;
            var heading3= newsdata.articles[16].title;
            var image_heading3=newsdata.articles[16].urlToImage;
            // for Latest column-2
            var heading4= newsdata.articles[7].title;
            var image_heading4=newsdata.articles[7].urlToImage;
            var heading5= newsdata.articles[8].title;
            var image_heading5=newsdata.articles[8].urlToImage;
            var heading6= newsdata.articles[9].title;
            var image_heading6=newsdata.articles[9].urlToImage;
            // for latest column-3
            var heading7= newsdata.articles[10].title;
            var image_heading7=newsdata.articles[10].urlToImage;
            var heading8= newsdata.articles[11].title;
            var image_heading8=newsdata.articles[11].urlToImage;
```

```

var image_heading1=newsdata.articles[7].urlToImage;
var heading5= newsdata.articles[8].title;
var image_heading5=newsdata.articles[8].urlToImage;
var heading6= newsdata.articles[9].title;
var image_heading6=newsdata.articles[9].urlToImage;
// for latest column-3
var heading7= newsdata.articles[10].title;
var image_heading7=newsdata.articles[10].urlToImage;
var heading8= newsdata.articles[11].title;
var image_heading8=newsdata.articles[11].urlToImage;
var heading9= newsdata.articles[12].title;
var image_heading9=newsdata.articles[12].urlToImage;
// for latest column-4
var heading10= newsdata.articles[13].title;
var image_heading10=newsdata.articles[13].urlToImage;
var heading11= newsdata.articles[14].title;
var image_heading11=newsdata.articles[14].urlToImage;
var heading12= newsdata.articles[15].title;
var image_heading12=newsdata.articles[15].urlToImage;

```

```

res.render('index.html',{
  heading:title,
  url1:imageurl,
  heading2:title2,
  url2:imageurl2 ,
  heading3:title3,
  url3:imageurl3,
  col_1_image1:image_heading1,
  col_1_Heading1: heading1,
  col_1_image2:image_heading2,
  col_1_Heading2: heading2,
  col_1_image3:image_heading3,
  col_1_Heading3: heading3,
  col_2_image1:image_heading4,

  col_2_Heading1: heading4,
  col_2_image2:image_heading5,
  col_2_Heading2: heading5,
  col_2_image2:image_heading5,
  col_2_Heading3: heading6,
  col_2_image3:image_heading6,

  col_3_Heading1: heading7,
  col_3_image1:image_heading7,
  col_3_Heading2: heading8,
  col_3_image2:image_heading8,
  col_3_Heading3: heading9,
  col_3_image3:image_heading9,

  col_4_Heading1:heading10,
  col_4_image1:image_heading10,
  col_4_Heading2:heading11,
  col_4_image2:image_heading11,
  col_4_Heading3:heading12,
  col_4_image3:image_heading12

```

```

});
})
})
})

```

```

        if (!data) {
            data = chunk;
        } else {
            data += chunk;
        }
    });
    response.on("end",function(){

        var newdata=JSON.parse(data);
        var articles = newdata.articles;

        var title=newdata.articles[15].title;
        var description=newdata.articles[15].description;
        var content=newdata.articles[15].content;
        var imageUrl =newdata.articles[15].urlToImage

        res.render('content6.html',{
            title:title,
            desc:description,
            content:content,
            headimage:imageurl
        })
    })
})
})

app.get("/views/apple",function(req,res){
    https.get("https://newsapi.org/v2/everything?q=Apple&from=2021-03-23&sortBy=popularity&apiKey=60f8555bbd6a4b00aa09cef65d589f19",function(response){

        var data;
        response.on("data",function(chunk){
            if (!data) {
                data = chunk;
            } else {
                data += chunk;
            }
        });
        response.on("end",function(){
            appledata=JSON.parse(data);
            for(var i=0; i<appledata.articles.length;i++){
                var searchtitle= appledata.articles[i].title;
                var searchDes=appledata.articles[i].description;
                var urlimage=appledata.articles[i].urlToImage;
            }

            console.log(urlimage);
            res.render("apple.ejs",{
                appledata:appledata,
                title:searchtitle,
                imageUrl:urlimage,
                description:searchDes
            });
        })
    })
})

app.listen(3000,function(){
    console.log("Server is running at port 3000");
})

```

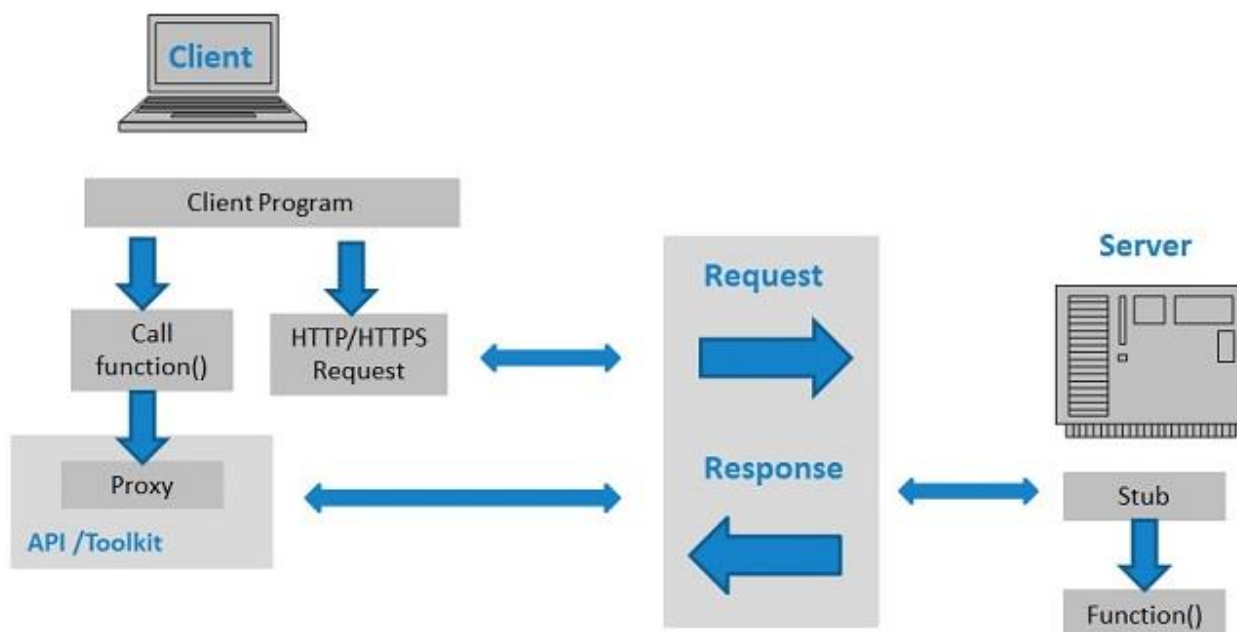
6. IMPLEMENTATION

Implementation is the stage in the project where the theoretical design is turned into a working system and is giving confidence on the new system for the users that it will work efficiently and effectively. It involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve the change over, an evaluation of change over methods. Apart from planning major task of preparing the implementation are education and training of users. The implementation process begins with preparing a plan for the

implementation of the system. According to this plan, the activities are to be carried out, discussions made regarding the equipment and resources and the additional equipment has to be acquired to implement the new system. In network backup system no additional resources are needed.

Implementation is the final and the most important phase. The most critical stage in achieving a successful new system is giving the users confidence that the new system will work and be effective. The system can be implemented only after thorough testing is done and if it is found to be working according to the specification. This method also offers the greatest security since the old system can take over if the errors are found or inability to handle certain type of transactions while using the new system.

Web Services



6.1 User Testing

After the system is implemented successfully, training of the user is one of the most important subtasks of the developer. For this purpose user manuals are prepared and handed over to the user to operate the developed system. Thus the users are trained to operate the developed system. Both the hardware and software securities are made to run the developed systems successfully in future. In order to put new application system into use, the following activities were taken care of:

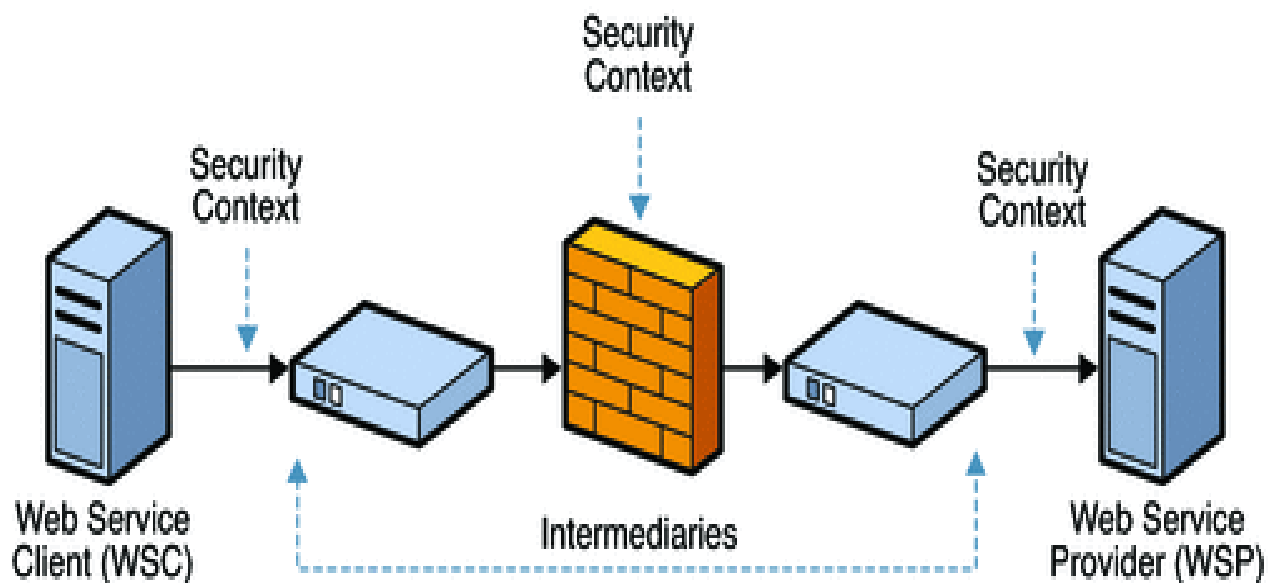
- 1) Preparation of user and system documentation
- 2) Conducting user training with demo and hands on
- 3) Test run for some period to ensure smooth switching over the system

6.2 Security and Maintenance

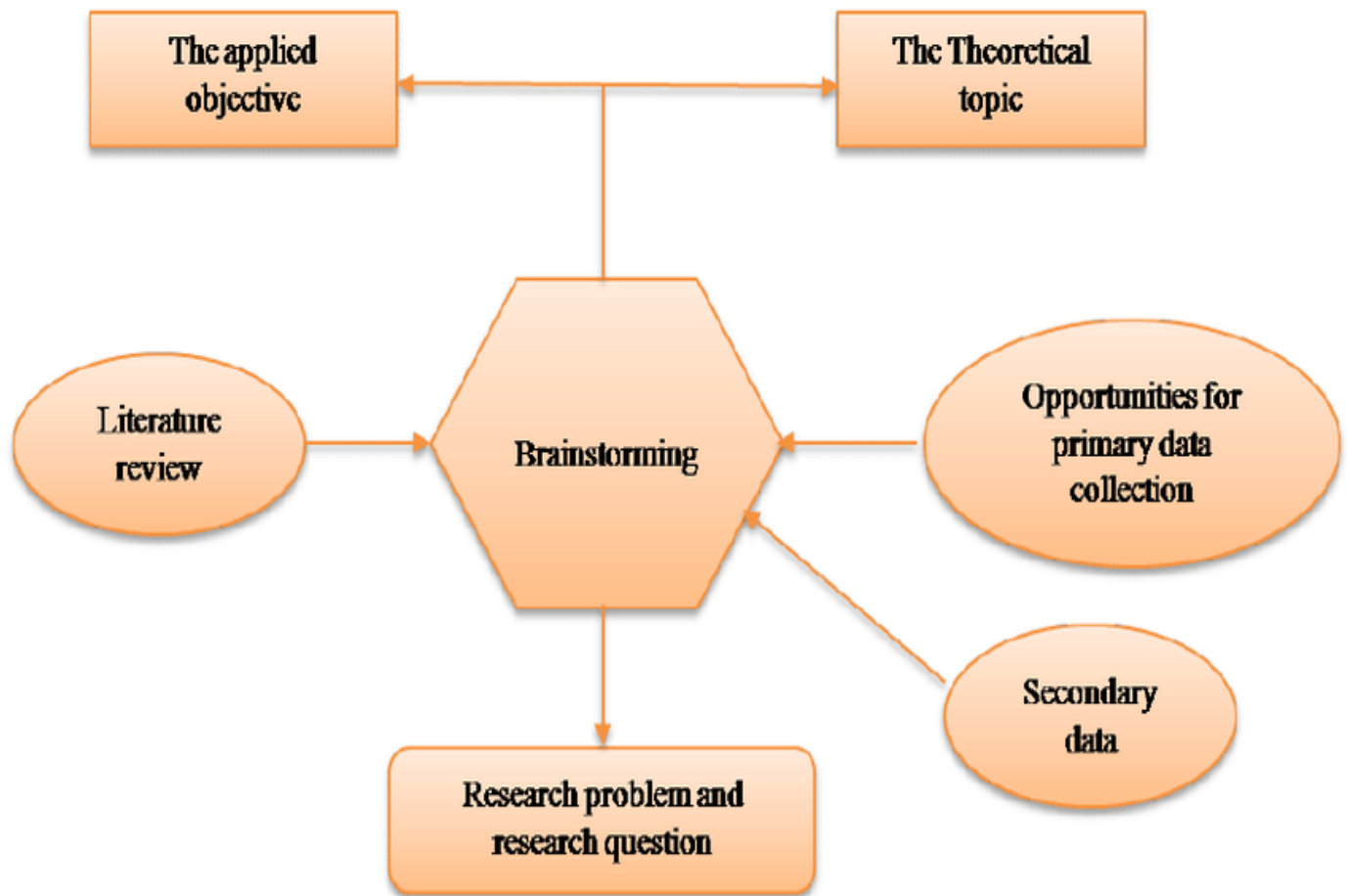
Maintenance involves the software industry captive, typing up system resources .It means restoring something to its original condition. Maintenance follows conversion to the extend that changes are necessary to maintain satisfactory operations relative to changes in the user's environment. Maintenance often includes minor enhancements or corrections to problems that surface in the system's operation. Maintenance is also done based on fixing the problems reported, changing the interface with other software or hardware enhancing the software.

Any system developed should be secured and protected against possible hazards. Security measures are provided to prevent unauthorized access of the database at various levels. An uninterrupted power supply should be so that the power failure or voltage fluctuations will not erase the data in the files.

Password protection and simple procedures to prevent the unauthorized access are provided to the users .The system allows the user to enter the system only through proper user name and password



7. PROBLEM FORMULATION



Too many textures and colors.-You are trying to add interest, but you just add clutter. Limit colors and fonts. Maintain a thematic color scheme. For professional sites, try to limit the variety of fonts to three or fewer.

Design for the wrong reasons-Always begin by identifying your target audience and customizing design and content. You may want your site to look "modern" or like another site you've seen, but if you haven't checked in with what your audience needs and wants, you can fail miserably.

Your site isn't optimized for mobile-You shouldn't need to be reminded of this, but numbers don't lie. Mobile is overtaking desktop. It's increasingly likely that your visitors see your site on a tiny screen. If they have to pinch and stretch to read, they'll find a better source of information. Be sure to test your site on smartphone and tablet.

Balancing automated testing- Test too much, you spend time building tests. Test too little, stuff will break in production.

Keeping a good balance between long term and short term design decisions- Too short, and the code will break apart upon your next change. Too long, your team won't be agile enough.

Communicate key design concepts-best practices and library usage throughout the team. With too little freedom, people will get bored and do a bad job. With too much freedom people will create clusters of good code that doesn't work well together. I don't want a cathedral nor a bazaar

8.CONCLUSION

To conclude the description about the project :

Every day of a news cycle seems to bring a new revelation, a new controversy, or a new talking point. During these blink-and-you'll-miss-it months, those who are committed to staying informed about the new tech often rely on tech news sites that are always being updated with the latest breaking news. Reuters, the wire service that acts as the news source for most news outlets, is one of the best options to choose from.

We are making a website that will keep you updated with latest tech news using the latest and most suited tools.

References

- [1]. P. Priya¹, V. Saranya², S. Shabana³, Kavitha Subramani⁴, "The Optimization of Website development and Management System by Technopedia". Department of Computer Science and Engineering, Panimalar Engineering College, Chennai, India, Volume 3, Special Issue 1, February 2014
- [2]. Tushar Pandit, Satish Niloor and A.S. Shinde, "MAKING A DYNAMIC WEBSITE". Dept. of I.T Sinhgad Academy of Engineering, Pune, India. Year 2015.
- [3]. Narendra Gupta¹, Ramakant Gawande² and Nikhil Thengadi³, "MBB: Application". Final Year, CSE Dept., JDIET, Yavatmal, India. VOLUME-2, SPECIAL ISSUE-1, MARCH-2015.
- [4]. Vikas Kulshreshtha, Dr. Sharad Maheshwari, "DATABASE Management". International Journal of Engineering Research and Applications (IJERA) ISSN: 2248-9622 Vol. 1, Issue 2, pp.260-263.
- [5]. Sultan Turhan.
- [6]. T.Hilda Jenipha^{*1} R.Backiyalakshmi^{*2}, "WEBSITE DEVELOPEMENT in Cloud Computing". Department of Computer Science and Engineering, PRIST University, Puducherry, India. e-ISSN : 2320-0847 p-ISSN : 2320-0936 Volume-03, Issue02, pp-105-108. Year 2014