STUDENT BONAFIDE MANAGEMENT SYSTEM

A MINI PROJECT REPORT

Submitted by

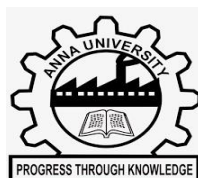|	
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BONAFIDE CERTIFICATE

Certified that this project report titled "**STUDENT BONAFIDE MANAGEMENT SYSTEM"** is the Bonafide work of **THIRUMALAIJOTHI.R (962620104024)** , **JEYAROSI.S (962620104009) PRINCYPACKIAM.A(962620104019), NAGAJOTHI.R (962620104017)** who carried out the work under my supervision**.**

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ABSTRACT

Education establishments especially the tertiary education needs innovation to improve college management. The issue that should be addressed in manual college management includes claiming bonafide, requesting leave and miscellaneous feedback service. Also, the document downloaded from this webapp will be having a digital signature as an indication of original verified document. Writing requisition letter consumes more time and paper work. The manual process was strenuous for students and administration. Even if the application was rejected the reason will be notified to the applicant. The required document can be downloaded in a portable document format through Gmail. The functional module design for Digitalization of college administration system is provided, in which three types of users are designed in this system, that is, students, staffs and administration.

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LIST OF ABBREVIATION

HTML   Hyper Text Markup Language

OS   Operating System

IBM   International Business Machines Corporation

JS   JavaScript

CSS   Cascading Style Sheets

PHP   Hypertext Preprocessor

RAM   Random Access Memory

API   Application Programming Interface

CHAPTER 1

INTRODUCTION

Bonafide Certificate is a document which is issued as a proof that an individual belongs to the particular education institute or a particular organization. It is a certificate of proof that he/ she is a student of a particular class and course in the institution during a specified time period. A person would require a bonafide certificate in number of cases like seeking employment, applying for education loan, applying for visa, etc.

Purpose of Bonafide Certificate

- To apply educational loans
- To visit an industry for project
- To attend a seminar/conferences/workshops in other colleges
- For availing travel concessions to students
- Passport application
- To joining public library
- Visa extension to students

Bonafide certificate usually includes the name of the school, information of students and the entrance number, the class in which the student is currently studying in case of students. In case the certificate is issued to an employee, it would contain contact information of the employee, his/her position with the company and important details about the employer. In some cases, date of birth is also provided in the certificate based on the nature of certificate and the requirement.

Bonafide certificate is needed for various purposes for students. The manual work in both bonafide and loan applying makes the task difficult for student. But when it comes to online the student can access it from anywhere an deny time. Students can apply loan for any bank by this application. Bonafide certificates can be received by required mail which is given by the students. The manual work is mostly reduced by making all facilities in online.

1.1 HARDWARE DESCRIPTION

System	:	Pentium IV 3.5 GHz or Latest Version.
Hard Disk	:	40 GB.
Monitor	:	14' Color Monitor.
Mouse	:	Optical Mouse.
Ram	:	1 GB.

1.2 SOFTWARE DESCRIPTION

Operating system	:	Windows 10
Software tool	:	React JS, Node JS
Database	:	MySQL

1.3 BONAFIDE CERTIFICATE

A bonafide certificate is a certificate issued by an organization to certify that a particular person belongs to that organization. Usually, educational institutions issue this certificate to its students. Companies may also do so for their employees.

1.3.1 Uses of a Bonafide Certificate

Since the bonafide certificate acts as proof of being part of an organization, it is usually demanded in the following cases:

- A student seeking to obtain student concessions offered by public transport agencies such as city buses, local trains, and metros may be required to produce this certificate while applying for the concession.

- The certificate may also be required while applying for a passport.

- Certain lending institutions offer loans to students at concessional rates. The student may be required to produce this certificate to receive this benefit.

- The documents produced before various traffic authorities to apply for a driving license may include a bonafide certificate as additional ID proof.

- To apply for various student scholarships.

1.3.2 Application for Bonafide Certificate

In order to avail the certificate, an application must first be made to the head of the relevant institution/organization. Some institutions may have a prescribed application form for this purpose. In case there is no application form, a letter may be written.

.

Date: __/__/20

Name of Applicant:
Roll No.:

To,
Office of,
Head of Department/Faculty Advisor
University of XXX XXX
Address:

Sub: Application in Request of Bonafide Certificate

Sir/Ma'am,

This is in request for a Bonafide Certificate to be issued in favour of me, [Name of Applicant] studying in Semester_____of _____<Course>_____ as I have been _____<reason>_____.

Hope my request is granted at the earliest.

Thanking You
_____
      {Signature}
_____
   {Name of Applicant}
_____
{Relevant Details, if applicable}

Fig 1.1: Sample Bonafide Certificate

CHAPTER 2

SYSTEM ANALYSIS

2.1 EXISTING SYSTEM

The existing system of applying bonafide certificate is based mainly on manual paper work. Students are asked to write a letter with required details in order to apply for the certificate. Then they should get approval from their faculty up to the College Dean, which takes a lot of time and effort.

In order to get the Bonafide certificate, an application letter must be made to the head of the institution/organization. The bonafide certificate is a document that performs as genuine proof that an individual belongs to a particular institution.

Some organizations may have a prescribed application form for this purpose. In the case of no application form, one must write a letter requesting.

- The application should be in the prescribed format.
- The application should be drafted clearly.
- It must include all the details necessary.
- The relevant person should be addressed.
- Must contain all the necessary proofs like student ID card, mark sheets, etc.

Purpose of bonafide certificate is very important for college students as it not only helps to prove the association with the institute but also helps in getting a

visa, loans and other student benefits which are vital for college students. Moreover, it is essential for getting internships and jobs.

2.1.1 Advantages

- In-person communication, hence any queries can be solved at once.

- Only paperwork, so that no additional knowledge is required.

2.1.2 Disadvantages

- This procedure is hectic and time-consuming.

- Induces unnecessary wandering of students inside the college campus.

- Lot of paper work.

- Requires separate document management files and in-charge persons.

2.2 PROPOSED SYSTEM

College students may find some difficulties in applying academic documents or certificates through mail, e-mail or in-person. Such procedure is hectic and time-consuming. The aim of this project is to be developing a web application tool for document digitization, to simplify the application procedures for students. This project proposes a website for students to apply for their academic documents or certificates online and download from the same after verification. Once an application is submitted by a student, it is verified and accepted by the class advisor at first, followed by the HOD and finally by the Dean of the college with a digital signature.

After the certificate is accepted and verified by the College Dean and signed digitally, it will be available to download for the applicant. If the submitted application got rejected by any of the verifiers, then the applicant can review the reason for the rejection of the certificate in the same website. Also in this website, students can submit any complaints or feedbacks regarding the college and the services. The purpose of developing this website is to completely digitize the procedure of applying for academic documents or certificates and to eliminate unnecessary wandering of students inside the college and for the ease of the staffs involved in the application verification process.

2.2.1.Advantages

- Easy to claim and download online at anytime and anywhere.

- No unnecessary wandering of students inside the college campus.

- Claimed and verified at their convenient times.

- Any queries can be discussed within the webapp itself.

CHAPTER 3

SYSTEM DESIGN
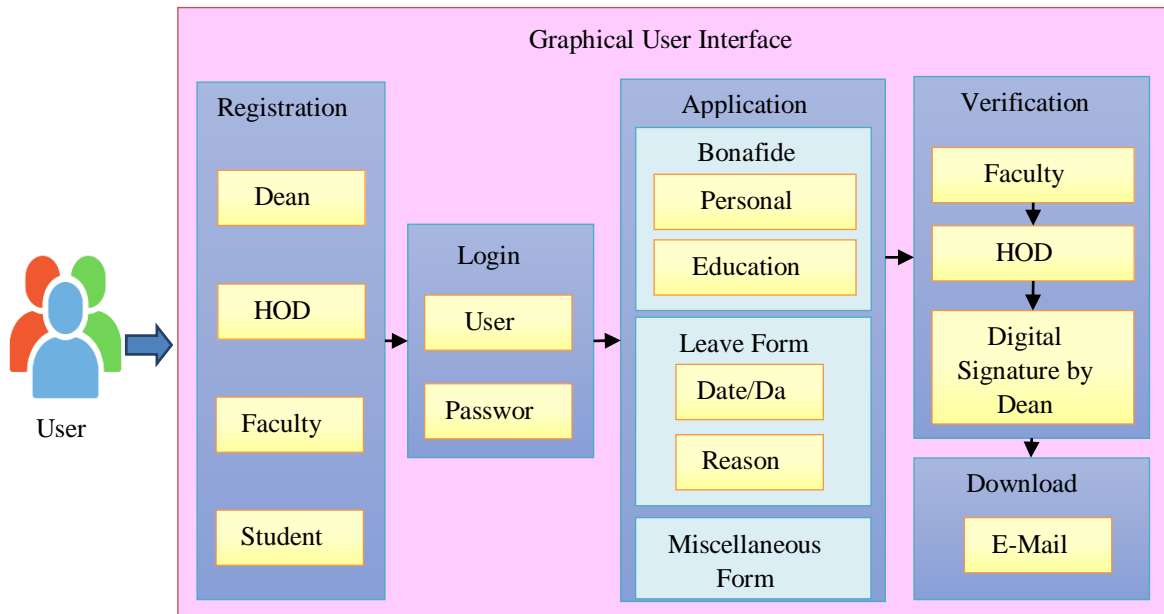
3.1 BLOCK DIAGRAM

FIG 3.1: BLOCK DIAGRAM

3.2 EXPLANATION

Online Bonafide Generation System is also useful administration system and is full of features for everyone involved in college activities. This college administration system includes an easy-to-use and to perform administration and management related tasks. This system administration system enables administrators to manage user information along with their privileges and access rights. College administrators can additionally manage records, configure rules, generate reports, and coordinate and manage databases with this system of college administration system.

3.2.1 Registration: In registration module, the faculties, HODs, Dean and the students are asked to register into the website using necessary details and to create an ID and password for login.

3.2.2 Login: In login module, the registered users can login into the website with their valid ID and password.

3.2.3 Application: In application module, the students can apply for bonafide certificate, can request for leaves and can provide feedback through a miscellaneous form.

3.2.4 Verification: In verification module, the bonafide certificate and leave requests applied by the students can be verified by the faculties and then by the HODs and finally approved by the Dean and affix it with a digital signature.

3.2.5 Download: In download module, the students can download their applied documents directly with verified digital signature via their e-mail.

3.3 MODULES

3.3.1 Student Module

In student module, the students are allowed to login into the website using their registered ID and password. Then they can apply for the bonafide certificate by providing necessary details and can also apply for leaves with reason. Once the certificate or leave request has been approved, they can directly download the document via their e-mail.

3.3.2 Staff Module

To realize the need for a specialized access portal for the teachers as they are an integral part in the education system .The staff module features the submission of student's details and Bonafide reports of students. Teachers are provided with passwords to access this portal so as to ensure security to reduce the stress and efforts of teachers in managing the student records and academic curriculums. The staffs are also responsible for responding to the leave requests raised by the students. The application of bonafide certificate and leaves were first verified by the class advisor, followed by the HOD and finally it would be approved by the Dean of the college and affixes a digital signature as an indication of successful verification.

CHAPTER 4

SYSTEM IMPLEMENTATION

4.1 React JS

React (also known as React.js or React JS) is a JavaScript library for building user interfaces. It is maintained by Facebook and a community of individual developers and companies.

React can be used as a base in the development of single-page or mobile applications, as it is optimal for fetching rapidly changing data that needs to be recorded. However, fetching data is only the beginning of what happens on a web page, which is why complex React applications usually require the use of additional libraries for state management, routing, and interaction with an API: Redux, React Router and axios are examples of such libraries.

React JS is an open-source JavaScript library which is used for building user interfaces specifically for single page applications. It's used for handling view layer for web and mobile apps. React also allows us to create reusable UI components. React was first created by Jordan Walke, a software engineer working for Facebook. React first deployed on Facebook newsfeed in 2011 and on Instagram.com in 2012.
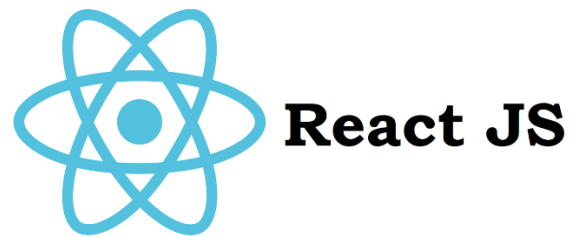
Fig 4.1: React.js

React allows developers to create large web applications which can change data, without reloading the page. The main purpose of React is to be fast, scalable, and simple. It works only on user interfaces in application. This corresponds to view in the MVC template. It can be used with a combination of other JavaScript libraries or frameworks, such as Angular JS in MVC.

Basic usage

The following is a rudimentary example of React usage in HTML with JSX and JavaScript.

```
<div id="myReactApp"></div>

<script type="text/babel">

 class Greeter extends React.Component {

render() {

    return <h1>{this.props.greeting}</h1>

  }
```

```
    }
```

```
ReactDOM.render(<Greeter          greeting="Hello          World!"          />,
document.getElementById('myReactApp'));
```

```
</script>
```

The Greeter class is a React component that accepts a property greeting. The React DOM .render method creates an instance of the Greeter component, sets the greeting property to 'Hello World' and inserts the rendered component as a child element to the DOM element with id my React App.

When displayed in a web browser the result will be

```
<div id="myReactApp">
```

```
<h1>Hello World!</h1>
```

```
</div>
```

4.2 SOFTWARE IMPLEMENTATION

Implementation includes all those activities that take place to convert from the old system to the new. The old system consists of manual operations, which is operated in a very different manner from the proposed new system. A proper implementation is essential to provide a reliable system to meet the requirements of the organizations. An improper installation may affect the success of the computerized system.

4.2.1 Implementation Methods

There are several methods for handling the implementation and the consequent conversion from the old to the new computerized system.

The most secure method for conversion from the old system to the new system is to run the old and new system in parallel. In this approach, a person may operate in the manual older processing system as well as start operating the new computerized system. This method offers high security, because even if there is a flaw in the computerized system, we can depend upon the manual system. However, the cost for maintaining two systems in parallel is very high. This outweighs its benefits.

Another commonly method is a direct cut over from the existing manual system to the computerized system. The change may be within a week or within a day. There are no parallel activities. However, there is no remedy in case of a problem. This strategy requires careful planning.

A working version of the system can also be implemented in one part of the organization and the personnel will be piloting the system and changes can be made as and when required. But this method is less preferable due to the loss of entirety of the system.

The implementation plan includes a description of all the activities that must occur to implement the new system and to put it into operation. It identifies the personnel responsible for the activities and prepares a time chart for implementing the system.

The implementation plan consists of the following steps.

- List all files required for implementation.

- Identify all data required to build new files during the implementation.

- List all new documents and procedures that go into the new system.
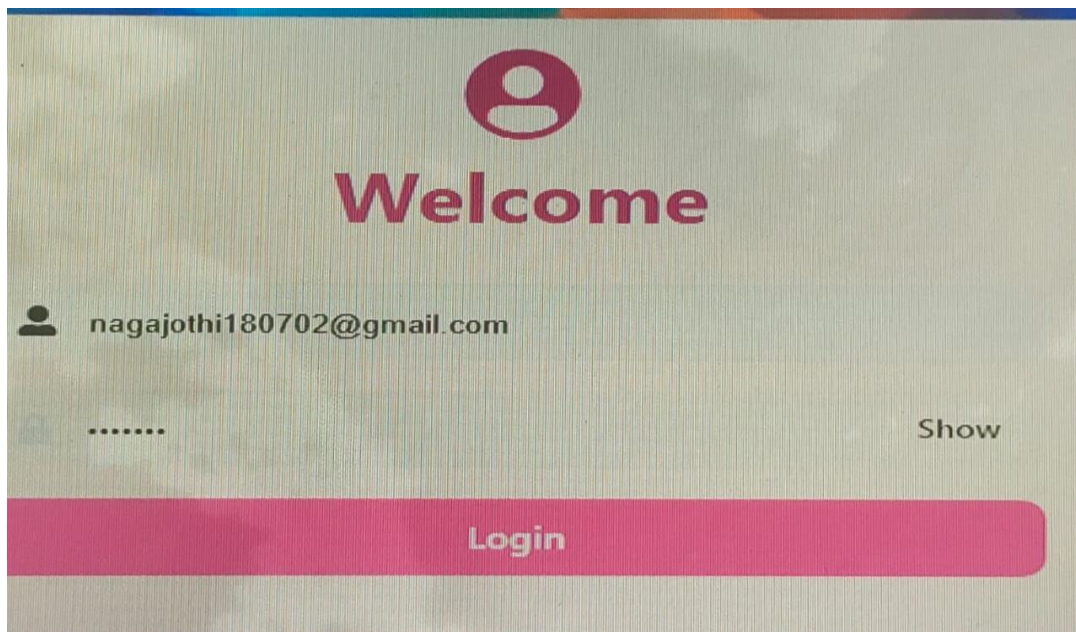
The implementation plan should anticipate possible problems and must be able to deal with them. The usual problems may be missing documents; mixed data formats between current and files, errors in data translation, missing data
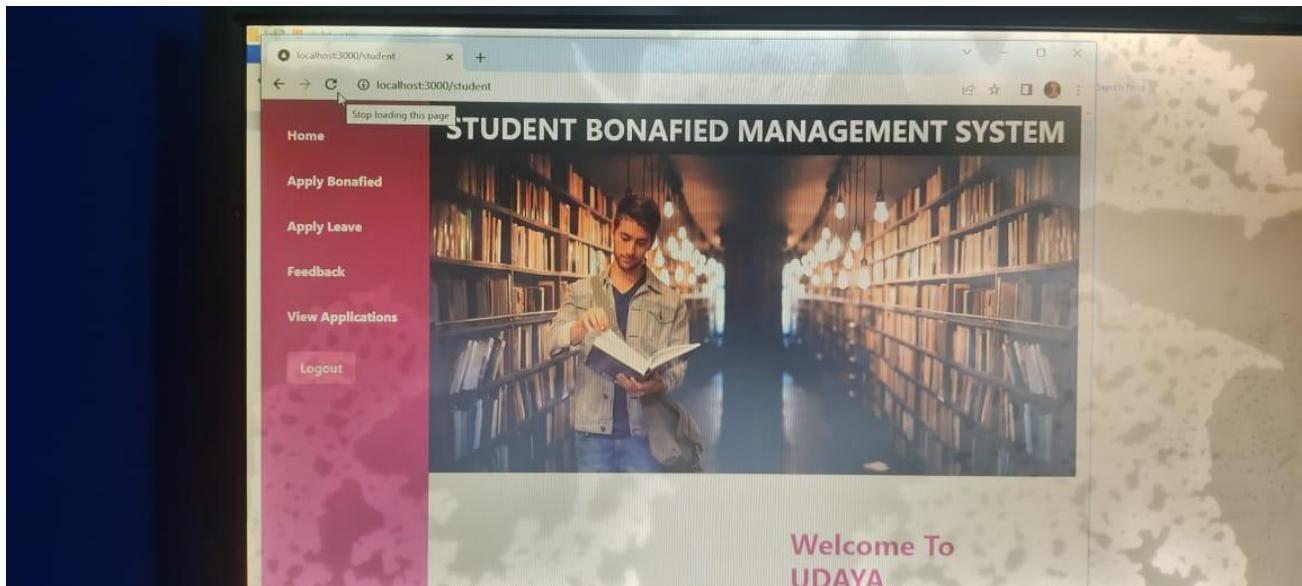
CHAPTER 5

RESULT AND DISCUSSION

5.1 SAMPLE SCREENSHOTS:

LOGIN PAGE:

5.1 fig LOGIN PAGE

- Allows a user to check in to an application using their social network account
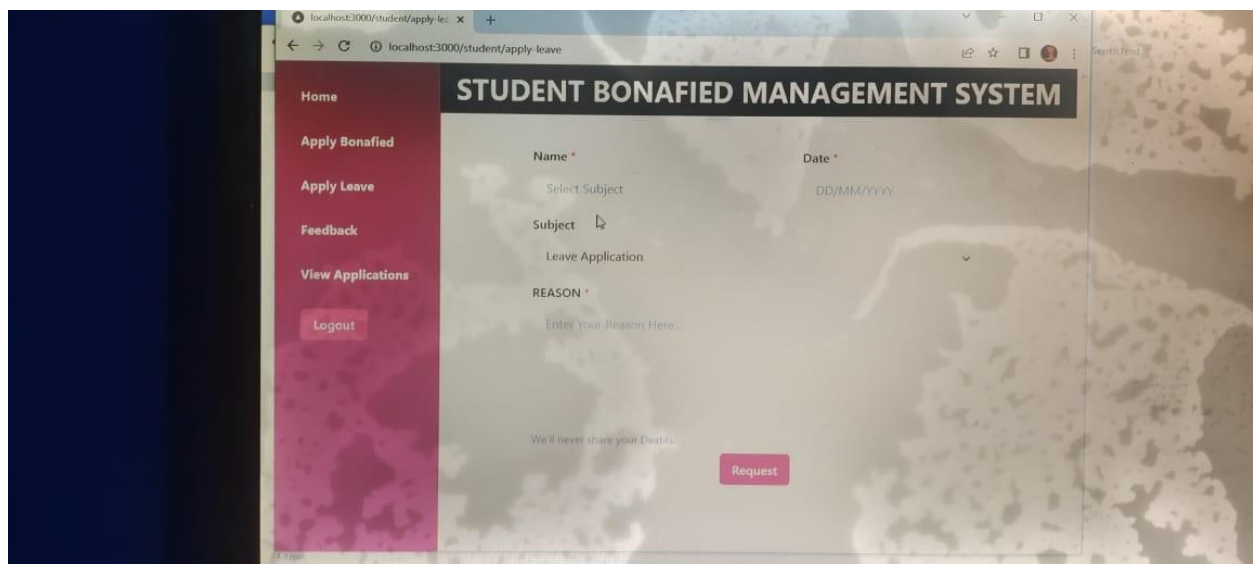
HOME PAGE:

5.2 fig HOME PAGE

- A home page is the primary web page that a visitor will view when they navigate to a website via a search engine,
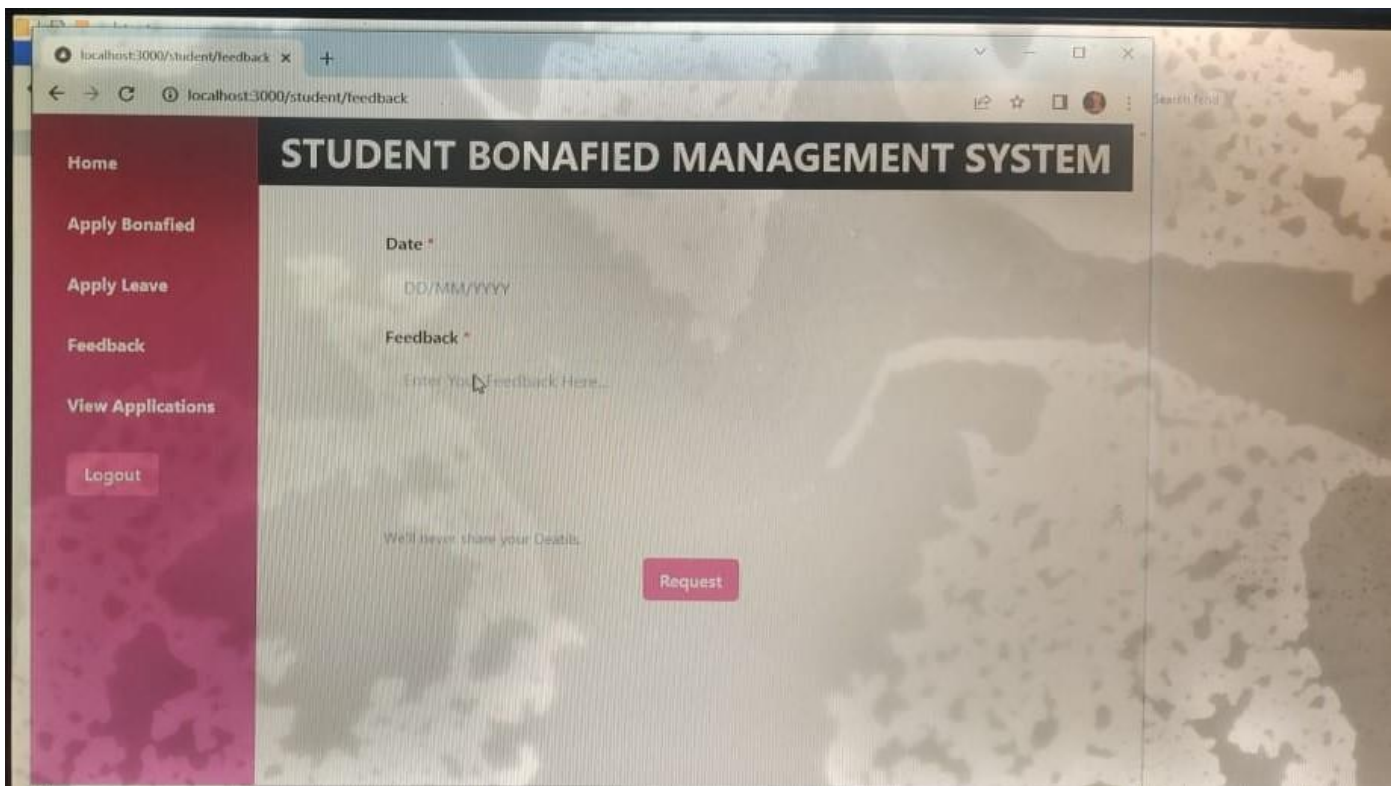
APPLICATION PAGE:

5.3 FIG :APPLICATION PAGE

- A computer software package that performs a specific function directly for an end user or, in some cases, for another application

FEEDBACK PAGE:

5.4 fig FEEDBACK PAGE

- A feedback form is a way to collect opinions about your company's service.

CHAPTER 6

CONCLUSION AND FUTURE ENHANCEMENT

6.1 CONCLUSION

The design is fully functional. It will create an efficient method for claiming, verifying and downloading the bonafide certificate and leave form. This system provides better certificate application system with a digital signature and also lot of convince than the old system. The process is very fast, data can be easily entered lot of time is also saved. This system is useful for the student to apply for bonafide certificate and leave request easily and without any waste of time during working hours or break hours. Applying for Bonafide certificate is also user friendly for the student. The burden of waiting for the long Time for the signature of the Dean is completely avoided. Since, this web app does not require physical presence, it can be used at the convenient time of the users.

6.2 FUTURE ENHANCEMENT

In future, this system can be enhanced to provide an option to apply for education loan. Since, education loan can be easily applied using the digital bonafide certificate and hence, if both are available in the same website, then it can provide a lot of convenience for the college students. The process will be very fast, data can be easily entered and a lot of time can also be saved. The education

loan management system will be useful for the students for their studies and they can easily get benefited by this system.

APPENDIX

```
{

 "kind": "collection  Type",

 "collection Name": "bonafieds",

 "info": {

  "singular Name": "bonafied",

  "pluralName": "bonafieds",

  "displayName": "bonafied",

  "description": ""

 },

 "options": {

  "draftAndPublish": true

 },

 "pluginOptions": {},

 "attributes": {

  "name": {
```

```
    "type": "string"

  },

  "date": {

    "type": "string"

  },

  "subject": {

    "type": "string"

  },

  "reason": {

    "type": "text"

  },

  "sentby": {

    "type": "string"

  },

  "status": {

    "type": "string"

  },

  "acceptby": {

    "type": "string"
```

```
    },

    "fathersName": {

      "type": "string"

    },

    "mothers Name": {

      "type": "string"

    },

    "year": {

      "type": "string"

    },

    "department": {

      "type": "string"

    },

    "academicYear": {

      "type": "string"

    },

    "degree": {

      "type": "string"

    },
```

```
    "regNo": {

     "type": "string"

    }

   }

 }
```

6.3 REFERENCES

[1] D. Lee and L. Y. Deng, "Digital Certificate Mobile Agent Technologies in Distance Learning," 22nd International Conference on Advanced Information Networking and Applications - Workshops (aina workshops 2008), 2008, pp. 1474-1479.

[2] Jin Mei-shan, Qiu Chang-li, Li Jing., "The Designment of student information management system based on B/S architecture". 978-1-4577-1415-3/12 2012 IEEE.

[3] Mary Jane Magno-Tan, Allan V. Crisostomo, Bill Villaflor, and James C. Faller, "Cloud-Based College Management Information System for Universities", International Journal of Information and Education Technology, Vol. 4, No. 6, December 2014.

[4] M.A. Norasiah and A. Norhayati., "Intelligent student information system". 4th International conference on telecommunication technology proceedings, Shah Alam, Malaysia, 0-7803-7773-7/03 2003 IEEE.

[5] R. B. Guin, S. Chakrabarti, C. Tarafdar, and S. Mandal, "A smart architectural concept for the making of a university education system using cloud

computing paradigm," in Proc. 2011 World Congress on Information and Communication Technologies, Mumbai, 2011, pp.48-52.

[6]   S.R.Bharamagoudar, Geeta R.B., S.G.Totad, "Web Based Student Information Management System", International Journal of Advanced Research in Computer and Communication Engineering Vol. 2, Issue 6, June 2013.

[7]   Srikant Patnaik, Khushboo kumari Singh, Rashmi Ranjan, Niki Kumari, "College Management System", International Research Journal of Engineering and Technology (IRJET), Volume: 03 Issue: 05, May-2016.

[8]   TANG Yu-fang, ZHANG Yong-sheng, "Design and implementation of college student information management system based on the web services". Natural Science Foundation of Shandong Province (Y2008G22), 978-1-4244-3930-0/09 2009 IEEE.

[9]   Zhibing Liu, Huixia Wang, Hui Zan, "Design and implementation of student information management system." 2010 International symposium on intelligence information processing and trusted computing. 978-0-7695-4196-9/10 IEEE.

[10] Zhi-gang YUE, You-wei JIN, "The development and design of the student management system based on the network environment",2010 International Conference on Multimedia Communications, 978-0-7695-4136-5/10 2010 IEEE.