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**A Project Report**

**On**

**“News Portal”**

**Submitted to:**

**Department of Computer Science and Information Technology, NCCS College**

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# ABSTRACT

This project ‘News Portal’ is an online platform whose main objective is to provide the service of news article anytime and anywhere. It is a website focused to provide important news to all types of users. Its goal is to provide quick information about activities happening around the world to various people through the medium of internet. Its aim is to provide a better alternative to reading newspapers and magazines. The users simply need to open the website through their browser on their device to access the news for free of cost. Authors who post news have to register an account and login to our website to post new articles and news or to edit the ones that are already posted.

CONTENTS

[ACKNOWLEDGEMENT i](#_Toc111836180)

[ABSTRACT ii](#_Toc111836181)

[1.1 Introduction 1](#_Toc111836182)

[1.1.1 Project Background 1](#_Toc111836183)

[1.1.2 Objective 1](#_Toc111836184)

[1.1.3 Scope 1](#_Toc111836185)

[1.1.4 Limitations 1](#_Toc111836186)

[CHAPTER 2: REQUIREMENT ANALYSIS 2](#_Toc111836187)

[2.1 Requirement analysis and Feasibility Analysis 2](#_Toc111836188)

[2.1.1 Requirement identification 2](#_Toc111836189)

[2.1.1.1 Study of existing system 2](#_Toc111836190)

[2.1.2 Feasibility study 2](#_Toc111836191)

[**2.1.2.1** **Technical** 2](#_Toc111836192)

[**2.1.2.2** **Operational** 2](#_Toc111836193)

[**2.1.2.3** **Economical** 2](#_Toc111836194)

[2.1.3 Gantt Chart 3](#_Toc111836195)

[CHAPTER 3: SYSTEM DESIGN 4](#_Toc111836196)

[3.1 System design and Program model flow 4](#_Toc111836197)

[3.1.1 System Design 4](#_Toc111836198)

[3.1.2 Program working features 4](#_Toc111836199)

[Figure 1 Program Block Diagram 5](#_Toc111836200)

[CHAPTER 4: PROJECT IMPLEMENTATION 5](#_Toc111836201)

[4.1 Tools and Technology 6](#_Toc111836202)

[4.1.1 Analysis and design tools 6](#_Toc111836203)

[4.1.2 Implementation tools 6](#_Toc111836204)

[4.1.3 Development Methodology 6](#_Toc111836205)

[4.2 Admin Module 7](#_Toc111836206)

[4.3 Author Module 7](#_Toc111836207)

[4.4 Reader Module 7](#_Toc111836208)

[CHAPTER 5: SYSTEM TESTING 8](#_Toc111836209)

[5.1 Unit Testing 8](#_Toc111836210)

[i. Login Test 8](#_Toc111836211)

[ii. Post News Test 9](#_Toc111836212)

[5.2 System Testing 9](#_Toc111836213)

[CHAPTER 6: CONCLUSION AND FUTURE WORK 10](#_Toc111836214)

[6.1 Conclusion 10](#_Toc111836215)

[6.2 Future enhancement 10](#_Toc111836216)

[REFERENCES 11](#_Toc111836217)

**List of Tables**

[**Login Test** 8](#_Toc91444090)

[**System Test** 9](#_Toc91444091)

CHAPTER 1: INTRODUCTION

# Introduction

## Project Background

NewsBox is a website responsible for the gathering and broadcasting of news and current affairs in the Nepal and around the world. Its main goal is to provide a proper platform to read news on any device at any time.

## Objective

The main objectives of the “NewsBox” are:

1. Provides all type of news to the user and they could read anytime.
2. To make NewsBox available on all the internet accessible devices.
3. Helping readers and authors around the world to find a global audience.

## Scope

1. It is developed to read and add news articles online
2. The reader can leave their comments and review.
3. Update news easily
4. Instant & fresh news from all over the world

## Limitations

1. Requires good internet to access the website
2. Not accessible by people in remote places

# CHAPTER 2: REQUIREMENT ANALYSIS

# Requirement analysis and Feasibility Analysis

## Requirement identification

### Study of existing system

This project is to help the users to read news and for authors to post articles on the website. People are busy in their day-to-day jobs or their schools and colleges. Not everyone has time to read a newspaper or magazine. This project is aimed at solving such problem so people can read news anywhere and whenever they are free. This also save a lot of time for people.

## Feasibility study

### **Technical**

Different types of tools and algorithm are used during the preparation of this project. The only device necessary for running the project is a laptop, which is available easily. This project itself is user friendly and easy to use. And internet was used for references and solving the various problems faced.

### **Operational**

In this test, the operational scope of the system is checked. The system under consideration should have enough operational reach. It is observed that the proposed system is very user friendly and since the system is built with enough help, even persons with little knowledge of windows can find the system very easy.

### **Economical**

No big budget is required as it is a small college project. There is no need for professional level personnel hiring or any external devices for completion the project.

## Gantt Chart

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Development  phase | Day 1-4 | Day 5-8 | Day 9-12 | Day 13-16 | Day 17-21 |
| research |  |  |  |  |  |
| analysis |  |  |  |  |  |
| design |  |  |  |  |  |
| coding |  |  |  |  |  |
| testing |  |  |  |  |  |
| implementation |  |  |  |  |  |
| Documentation |  |  |  |  |  |

# CHAPTER 3: SYSTEM DESIGN

# System design and Program model flow

## System Design

The system design is very simple and easy to understand by the user. The design id based on the easy accessibility of the program. The user too will have ease to go with the flow of the program. This project is design for increasing the functionality and better implementation of the daily lecture. The system design is user friendly as well as interactive. This system can be managed very easily. The overall system design is based on the comfortable and simple concept where user has less difficulty to understand the system design.

# Program working features

1. Two types of users: admin, author and general user.
2. Only one having the specific id and password can login.
3. **Admin**

* Add news to website
* Edit existing news
* Delete existing news from database
* Manage user and authors
* Check functionality of the website

1. No two user can have same id which helps in reducing redundancy.
2. **Authors**
3. **Reader**
   * Can read news
   * The reader can leave their comments and review.

## Figure 1 Program Block Diagram

# CHAPTER 4: PROJECT IMPLEMENTATION

# Tools and Technology

## Analysis and design tools

Various Microsoft office tools like MS word and power points are used. The coding is done using compiler application VS Code. Python framework Django is used along with dbsqlite3 for DBMS.

## Implementation tools

* **Python**

Python is a high-level, interpreted, general-purpose programming language. Its design philosophy emphasizes code readability with the use of significant indentation. Python is dynamically-typed and garbage-collected.

* **Django**

Django is a high-level Python web framework that encourages rapid development and clean, pragmatic design. Built by experienced developers, it takes care of much of the hassle of web development, so you can focus on writing your app without needing to reinvent the wheel. It’s free and open source.

## Development Methodology

Waterfall model is followed for developing the system. The different phases that are required in this development methodology are requirement analysis, system design, implementation, testing, development and maintenance. The Project Manager and senior developers analyze all the functional and non-functional requirement of the system that needs to be developed. Knowing the requirements for the system we get a clear understanding and view about what the system is supposed to be.

# Admin Module

The admin has control over what user and author can access. The admin can add, update, delete, check news and its contents.

# Author Module

Author refers to the users who login to add the movies. Author can login to the website and add, edit, or delete their posts.

# Reader Module

Reader are those people who access the website to read news and post their opinions and views regarding it.

# CHAPTER 5: SYSTEM TESTING

Testing is the process of validating and verifying the program or application. System testing begins with initial testing by the developer himself/herself. It helps to ensure that the system meets the given specifications. Different test data are provided and tested to know about the correctness of the system. The system is tested in series by different individuals developing the system with different sets of test data. After a successful completion of testing from the individuals it has been deployed in the existing system

# 5.1 Unit Testing

Unit Testing concentrates on each unit of software as implemented in the source code. It only tests the functionality of the units themselves.

## Login Test

|  |  |  |  |
| --- | --- | --- | --- |
| Scenario | Step | Test Data | Expected Result |
| User Login | * Open the website * Enter email and password | Username: badal  Password: nccscollege | Successful login and redirect to news homepage |
| Check login with wrong password | * Open the program * Enter random username and password | Username: badal  Password: 123454321 | Error message “Incorrect password” |

**Table 3 Login Test**

## Post News Test

|  |  |  |
| --- | --- | --- |
| Scenario | Step | Expected Result |
| Login as author | * Open the website * Go to add news button * Fill the contents of a news | Successful addition of news. |

# 5.2 System Testing

System testing is performed to ensure that all modules and programs work together without error. Entire system test has been done and the results have been verified to see if all the modules are working.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No** | **Test Case** | **Expected Result** | **Actual Result** | **Remarks** |
| 1 | Login Test | Login as admin and author | Login as admin and author | No error |
| 2 | Adding, editing, and deleting Test | Adding, editing, and deleting news | Adding, editing, and deleting news | No error |

**Table 5 System Test**

# CHAPTER 6: CONCLUSION AND FUTURE WORK

## 6.1 Conclusion

In this project we have learned how to start, setup, and bring online a news website. Starting a news website is an exciting adventure. We’ve also learnt about various problems that can arise while bringing up such website online. With this project we also learnt how we could solve the major problem people face when reading paper-based news.

## 6.2 Future enhancement

1. Discussion forum for readers.
2. Mobile Application
3. Review threads

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