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# **ONLINE NEWS PORTOL SYSTEM**

<sup>1</sup>Eadala Anil Kumar, <sup>2</sup>P.T.S. Priya,

<sup>1</sup>MCA 2<sup>nd</sup> Year, <sup>2</sup>Assistant Professor, <sup>1</sup>Master of Computer Applications, <sup>1</sup>Sanketika Vidya Parishad Engineering college, Visakhapatnam, India

#### **ABSTARCT**

The purpose of the Online News Portal System project is to develop an online news system and provides news for viewers. All the news regarded to the category will be updated regularly by admin. Users satisfaction related to news will be fulfilled. The idea is anyone can send a news item to the news website which is managed by the administrator to whom the editors panel kept in charge for this to make it visible for the masses. The project is developed by using python programming and MYSQL on the backend. For the front end, we use Html5, twitter bootstrap CSS and java script.

The title of the project is "Online News Portal System" will handle whole the activities of anews portal system. The development of a portal for web based newspaper generally means creating a website in which the management of all news items is done by the admin where all people(viewers) can view and know all the relevant information about the designing of a newspaperwhich displays the news which a normal person wants to show. This portal provides dynamic news for all the viewers. All the news regarded to the category will be updated regularly by admin.

**KEYWORDS:** Multimedia news portal, intelligent information systems, user profiling, audio analysis, video analysis. **INTRODUCTION** 

The "Online News Portal" has been developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate and in some cases reduce the hardships faced by this existing system. Online news portal can lead to error free, secure and reliable fast news management system.

Online News Portal allows users to read up to date news related to many fields likeentertainment, national, international, business, sports etc. without any payment or login. He can also contact us to give suggestions and can also give us feedback related to our site. New news can be added only by the admin and only admin have the right to update or delete any news

#### **SCOPE**

The project has a wide scope, as it is not intended to a particular organization. This project is going to develop generic software, which can be applied by any businesses organization. Moreover it provides facility to its users. Also the software is going to provide a huge amount of summary data.

## PROBLEM STATEMENT

Managing your Online news portal management system may seem tricky, but this is part of user service system (application support direct contact with user).

### **EXISTING SYSTEM**

In the existing online news portal project in python, if a person wants to get some news about the world or what is going on around him/her, then he/she needs to go through the newspaper. It is a very long process. First to buy the news paper and then go through every page of the paper. If someone is looking for some specific sector news, then it go tough for them to get the news directly.

#### **DISADVANTAGES:**

- •Short life span
- Poor print quality
- •High cost
- Lack of Selectivity

#### PROPOSED SYSTEM

The Online News Portal system is available in the market that can serve users to take appointment and view our appointment status online. The purpose of project is to online management of news i.e adds latest news and also categorizes them. It helps to user to read up to date news related to many fields like entertainment, national, international, business, sports etc. without any payment or login. This project also helps in administrative work such as keep information of customers and bookings. In this Admin section admin can add/update/delete the category. Admin can also restore deleted category. In this Admin section admin can add/update/delete the Subcategory. Admin can also restore deleted Subcategory. Admin can add

/update / delete news posts. Admin can also view deleted news post in trash post section and restore deleted posts. Admin can manage the contact of about us and contact us page. Admin can approve/ unapproved / delete reader comments.

#### **ADVANTAGES:**

- •Enhanced Communication
- Increased efficiency
- •Better customer service
- •Cost savings
- •Reduce manual operation

#### **MODULES:**

#### **ADMIN MODULE:**

- •Manage News category wise
- •Add/edit /delete news
- •Manage breaking news
- •Manage comments

#### **USER MODULE:**

- •Read News
- Post comments

#### REQUIREMENT ANALYSIS

#### FEASIBILITY STUDY

The feasibility of the project is analysed in this phase and business proposal is put forth with a very general plan for the project and some cost estimates. During system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the company. For feasibility analysis, some understanding of the major requirements for the system is essential.

An important outcome of preliminary investigation is the determination that the system request is feasible. This is possible only if it is feasible within limited resource and time. The differenfeasibilities that have to be analysed are

- •Technical Feasibility
- •Economical Feasibility
- •Operational Feasibility

#### TECHNICAL FEASIBILITY

According to Roger S. Pressman, Technical Feasibility is the assessment of the technical resources of the organization. The organization needs IBM compatible machines with a graphical web browser connected to the Internet and Intranet. The system is developed for platform independent environment. Java Server Pages, JavaScript, HTML, SQL server and WebLogic Server are used to develop the system. The technical feasibility has been carried out. The system is technically feasible for development and can be developed with the existing facility.

#### **ECONOMICAL FEASIBILITY**

Economic Feasibility or Cost-benefit is an assessment of the economic justification for a computer based project. As hardware was installed from the beginning & for lots of purposes thus the cost on project of hardware is low. Since the system is a network based, any number of employees connected to the LAN within that organization can use this tool from at any time. The Virtual Private Network is to be developed using the existing resources of the organization. So the project is economically feasible.

Cost Benefit Analysis

A cost-benefit analysis is the process of comparing the projected or estimated costs and benefits (or opportunities) associated with a project decision to determine whether it makes sense from a business perspective.

Generally speaking, cost-benefit analysis involves tallying up all costs of a project or decision and subtracting that amount from the total projected benefits of the project or decision. (Sometimes, this value is represented as a ratio.)

If the projected benefits outweigh the costs, you could argue that the decision is a good one to make. If, on the other hand, the costs outweigh the benefits, then a company may want to rethink the decision or project.

There are enormous economic benefits to running these kinds of analyses before making significant organizational decisions. By doing analyses, you can parse out critical information, such as your organization's value chain or a project's ROI.

Cost-benefit analysis is a form of data-driven decision-making most often utilized in business, both at established companies and startups. The basic principles and framework can be applied to virtually any decision-making process, whether business-related or otherwise.

#### **OPERATIONAL FEASIBILITY**

Operational Feasibility deals with the study of prospects of the system to be developed. This system operationally eliminates all the tensions of the Admin and helps him in effectively tracking the project progress. This kind of automation will surely reduce the time and energy, which previously consumed in manual work. Based on the study, the system is proved to be operationally feasible.

#### SOFTWARE REQUIREMENT SPECIFICATION

The purpose of SRS (Software Requirement Specification) document is to describe the external behaviour of the web based newspaper. It defines the operations, performance and interfaces and quality assurance requirement of the web based newspaper. The complete software requirements for the system are captured by the SRS (Software Requirement specification).

#### **FUNCTIONAL REQUIREMENTS**

Functional requirements drive the application architecture of a system. A requirements analyst generates use cases after gathering and validating a set of functional requirements. Functional requirements may be technical details, data manipulation and other specific functionality of the project is to provide the information to the user.

#### **PYTHON**

Python is an interpreted, high-level, general-purpose programming language. Created by Guido van Rossum and first released in 1991, Python's design philosophy emphasizes code readability with its notable use of significant whitespace. Its language constructs and object-oriented approach aim to help programmers write clear, logical code for small and large-scale projects.

Python is dynamically typed and garbage-collected. It supports multiple programming paradigms, including procedural, object-oriented, and functional programming. Python is often described as a "batteries included" language due to its comprehensive standard library.

Python interpreters are available for many operating systems. A global community of programmers develops and maintains C Python, an open source reference implementation. A non-profit organization, the Python Software Foundation, manages and directs resources for Python and C Python development.

Python is an easy to learn, powerful programming language. It has efficient high-level data structures and a simple but effective approach to object-oriented programming. Python's elegant syntax and dynamic typing, together with its interpreted nature, make it an ideal language for scripting and rapid application development in many areas on most platforms.

#### **HISTORY**

Python was conceived in the late 1980s by Guido van Rossum at Centrum wiskunde & Informatica (CWI) in the Netherlands as a successor to the ABC language (itself inspired by SETL), capable of exception handling and interfacing with the Amoeba operating system. Its implementation began in December 1989. Van Rossum shouldered sole responsibility for the project,

as the lead developer, until 12 July 2018, when he announced his "permanent vacation" from his responsibilities as Python's Benevolent Dictator For Life, a title the Python community bestowed upon him to reflect his long-term commitment as the project's chief decision-maker.[37] He now shares his leadership as a member of a five-person steering council. In January 2019, active Python core developers elected Brett Cannon, Nick Coghlan, Barry Warsaw, Carol Willing and Van Rossum to a five-member "Steering Council" to lead the project.

Python 2.0 was released on 16 October 2000 with many major new features, including a cycle- detecting garbage collector and support for Unicode.

Python 3.0 was released on 3 December 2008. It was a major revision of the language that is not completely backward-compatible.[43] Many of its major features were backported to Python 2.6.x and

2.7.x version series. Releases of Python 3 include the 2to3 utility, which automates (at least partially) the translation of Python 2 code to Python 3.

Python 2.7's end-of-life date was initially set at 2015 then postponed to 2020 out of concern that a large body of existing code could not easily be forward-ported to Python 3.

#### **PYTHON LIBRARIES**

After Modules and Python Packages, we shift our discussion to Python Libraries. This Python Library, we will discuss Python Standard library and different libraries offered by Python Programming Language: pandas, Matplotlib, scipy, numpy, etc.

What is the Python Libraries?

We know that a module is a file with some Python code, and a package is a directory for sub packages and modules. But the line between a package and a Python library is quite blurred.

A Python library is a reusable chunk of code that you may want to include in your programs/ projects. Compared to languages like C++ or C, a Python libraries do not pertain to any specific context in Python. Here, a 'library' loosely describes a collection of core modules. Essentially, then, a library is a collection of modules. A package is a library that can be installed using a package manager like rubygems or npm.

#### **DATABASE TABLES**

#### 1. ADMIN

	S.NO	Data Type	Constrain
1.	Admin id	Int	Primary key
2.	Admin Username	Varchar	Not null
3.	Admin Password	Varchar	Not null
4.	Admin Email	Varchar	Not null
5.	Is Active	Int	Not null
6.	Creation Date	Timestamp	Not null
7.	Updation Date	Timestamp	Not null

## 2. CATAGORY

S.NO	Name	Data Type	Constrain
1.	ID	Int	Primary key
2.	Category Name	Varchar	Not null
3.	Description	Medium text	Not null
4.	Posting Date	Timestamp	Not null
5.	UpdationDate	Timestamp	Not null
6.	Is Active	Int	Not null

#### 3. PAGES

S.no	Name	Data Type	Constrain
1.	ID	Int	Primary key
2.	Page Name	Varchar	Not null
3.	Page Title	Medium text	Not null
4.	Description	Long text	Not null
5.	Posting date	Timestamp	Not null
6.	Updating date	Timestamp	Not null

## 4. COMMENTS

S.NO	Name	Data Type	Constrain
1.	ID	Int	Primary key
2.	Post id	Char	Not null
3.	Name	Varchar	Not null
4.	Email	Varchar	Not null
5.	Comment	Medium text	Not null
6.	Posting date	<b>Timestamp</b>	Not null
7.	status	Int	Not null
S.NO	Name	Data Type	Constrain
1.	ID	Int	Primary key
2.	Post id	Char	Not null
3.	Name	Varchar	Not null
4.	Email	Varchar	Not null
5.	Comment	Medium text	Not null
6.	Posting date	Timestamp	Not null
7.	status	Int	Not null

## 5. POSTS

S.NO	Name	Data Type	Constrain

1.	ID	Int	Primary key
2.	Post title	Long text	Not null
3.	Category id	Int	Not null
4.	Subcategory id	Int	Not null
5.	Post details	Long text	Not null
6.	Posting date	Timestamp	Not null
7.	Updation date	Timestamp	Not null
8.	Is Active	Int	Not null
9.	Post Url	Medium text	Not null
10.	Post image	Varchar	Not null

#### **6. SUB CATAGORY**

S.NO	Name	Data Type	Constrain
1.	Subcategory id	Int	Primary key
2.	Category id	Int	Not null
3.	Subcategory	Varchar	Not null
4.	SubcatagoryDescription	Medium text	Not null
5.	Posting date	Timestamp	Not

## Normalization Regarding the project tablesNormalization:-

Normalization is the process of identifying the logical associations between data items and designing a database that will represents such associations but without suffering the update anomalies.

## First Normalization Form (1NF)

1NF disallows attributes, muti valued attributes and composite attributes and their combination.

Form the above table mapping where going to remove multivalued attributes and composite attributeand their combination to make it in First Normal Form.

1. The composite and multivalued attributes in the admin table can be normalized as follows

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#### **Admin Table**

dmin ID AdminUsername	AdmidPassword	Admin Email	Is_Active	
-----------------------	---------------	-------------	-----------	--

#### **Category Table**

Category ID	CategoryName	Description	PostingDate	UpdationDate	Is_Active	
-------------	--------------	-------------	-------------	--------------	-----------	--

#### **Comment Table**

CommentID	PostID	Name	Email	Comment	PostingDate	Status

## Page Table

PageID Pa	PageName PageTitle	Description	PostingDate	UpdatingDate
-----------	--------------------	-------------	-------------	--------------

#### **Post Table**

PostID	PostTitle	Category	Subcategor	PostDetai	PostingD	Is_Active	PostingU	PostImag	Updation
		ID	yID	18	ate		11	C	Date

## **Subcategory Table**

SubcategoryID CategoryID SubcatDescription PostingDate UpdationDate Is_Active
---

## **Second Normal Form**

In 2NF a non key attribute must functionally depend on part of the primary key.

1. There is partial dependence in admin table. So it can be normalized as follows

#### **Work Table**

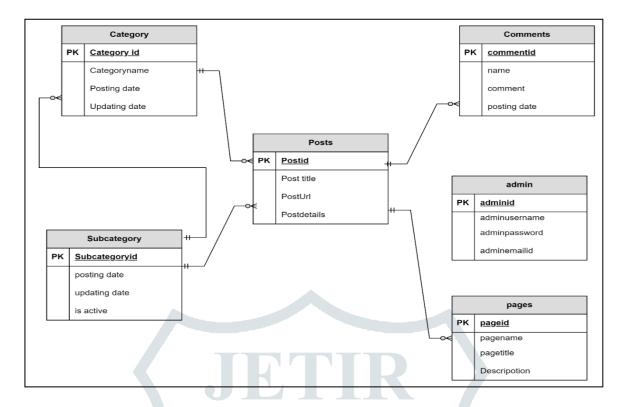
Work ID AdminID CategoryID CommentID PageID PostID SubcategoryID							
	Work ID	AdminID	CategoryID	CommentID	PageID	PostID	SubcategoryID

### Third Normal Form(3NF)

In 3NF we must remove transitivity dependency, no non key fields are transitively dependent uponkey fields.

Common_ID	Work_ID

#### RELATIONSHIP BETWEEN TABLES



## TABLE DESCRIPTION : ADMINISTRATOR

S.N O	FIELDNAM E	FIELDDESCRIPTI ON	DATATYPE &SIZE	INPUTFORMAT	PK\ FK	OTHERCONST RAINT	TABLENA ME	REMA RKS
1.	Admin_ID	Adminidentific	Varchar(1	Adm01	PK		Admin	
		ation	0)					
2.	Name	Adminname	Char	Abc	Pk	$\Lambda_{-}$	Admin	
3.	Email	Adminemailad	Varchar(2	Abc123@gm	_	notnull	Admin	
		dress	0)	ail.com				
4.	Password	Authentication	Varchar(1	Abc123	1	Notnull	Admin	
			0)					
5.	Post_id	Postidentificati	Varchar(1	Content	Fk		Post	
		on	0)					
6.	Category_	Categoryidentif	Char(10)	Politics	Fk	_	Category	
	id	ication						
7.	Comment	Commentidenti	Char(10)	Content	Fk	_	Commen	
	_id	fication					t	
8.	Page_id	Pgeidentificatio	Char(10)	Homepage	Fk	_	Page	
		n						
9.	Subcatego	Subcatidentific	Char(20)	President	Fk	_	subcateg	
	ry_id	ation					ory	
10	Updated_a	Timinginfo	Time	10:00am	Fk	_	accessco	
•	t						ntrol	
11	Created_at	Websiteinfo	Char(20)	laptop	fk	_	accessco	
							ntrol	

#### INTRODUCTION TO TESTING

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault or weakness in a work product. It provides a way to check the functionality of components, subassemblies, assemblies and/or a finished product It is the process of exercising software with the intent of ensuring that the Software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of test. Each test type addresses a specific testing requirement.

#### TYPES OF TESTS

#### **Unit testing**

Unit testing involves the design of test cases that validate that the internal program logic is functioning properly, and that program inputs produce valid outputs. All decision branches and internal code flowshould be validated. It is the testing of individual software units of the application .it is done after the completion of an individual unit before integration. This is a structural testing, that relies on knowledge of its construction and is invasive. Unit tests perform basic tests at component level and test a specific business process, application, and/or system configuration. Unit tests ensure that each unique path of a business process performs accurately to the documented specifications and containsclearly defined inputs and expected results.

#### **Integration testing**

Integration tests are designed to test integrated software components to determine if they actually runas one program. Testing is event driven and is more concerned with the basic outcome of screens or fields. Integration tests demonstrate that although the components were individually satisfaction, as shown by successfully unit testing, the combination of components is correct and consistent. Integration testing is specifically aimed at exposing the problems that arise from the combination of components.

#### **Functional test**

Functional tests provide systematic demonstrations that functions tested are available as specified bythe business and technical requirements, system documentation, and user manuals. Functional testingis centered on the following items:

Valid Input: identified classes of valid input must be accepted.

Invalid Input: identified classes of invalid input must be rejected.

Unit testing involves the design of test cases that validate that the internal program logic is functioning properly, and that program inputs produce valid outputs. All decision branches and internal code flowshould be validated. It is the testing of individual software units of the application it is done after the completion of an individual unit before integration. This is a structural testing, that relies on knowledge of its construction and is invasive. Unit tests perform basic tests at component level and test a specific business process, application, and/or system configuration. Unit tests ensure that each unique path of a business process performs accurately to the documented specifications and containsclearly defined inputs and expected results.

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Functions: identified functions must be exercised.

Output: identified classes of application outputs must be exercised. Systems/Procedures:

interfacing systems or procedures must be invoked.

processes must be considered for testing. Before functional testing is complete, additional tests are identified and the effective value of current tests is determined.

#### **System Test**

System testing ensures that the entire integrated software system meets requirements. It tests a configuration to ensure known and predictable results. An example of system testing is the configuration oriented system integration test. System testing is based on process descriptions and flows, emphasizing pre-driven process links and integration points.

#### White Box Testing

White Box Testing is a testing in which in which the software tester has knowledge of the inner workings, structure and language of the software, or at least its purpose. It is purpose. It is used to test areas that cannot be reached from a black box level.

## **Black Box Testing**

Black Box Testing is testing the software without any knowledge of the inner workings, structure or language of the module being tested. Black box tests, as most other kinds of tests, must be written from a definitive source document, such as specification or requirements document, such as specification or requirements document. It is a testing in which the software under test is treated, as a black box .you cannot "see" into it.

#### **Unit Testing**

Unit testing is usually conducted as part of a combined code and unit test phase of the software lifecycle, although it is not uncommon for coding and unit testing to be conducted as two distinct phases.

Test strategy and approach Field testing will be performed manually and functional tests will be written in detail. software applications, e.g. components in a software system or – one stepup – software applications at the company level – interact without error Functional tests provide systematic demonstrations that functions tested are available as specified bythe business and technical requirements, system documentation, and user manuals. Functional testingis centered on the following items:

Valid Input: identified classes of valid input must be accepted.

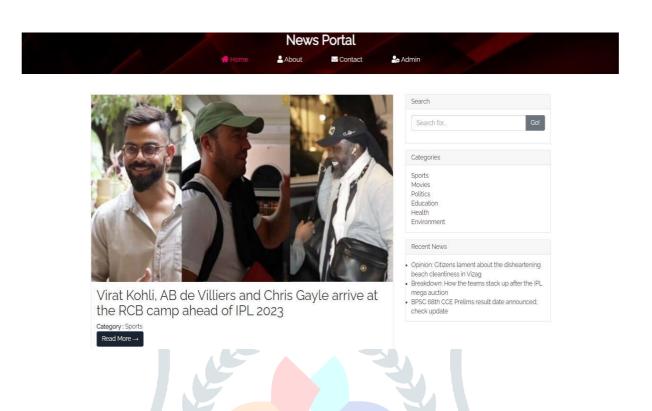
Invalid Input: identified classes of invalid input must be rejected.

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Integration tests are designed to test integrated software components to determine if they actually runas one program. Testing is event driven and is more concerned with the basic outcome of screens or fields. Integration tests demonstrate that although the components were individually satisfaction

#### **SCREENSHOTs**

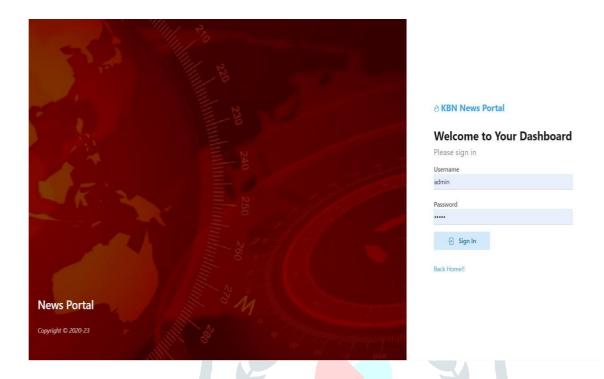
## **HOMEPAGE**



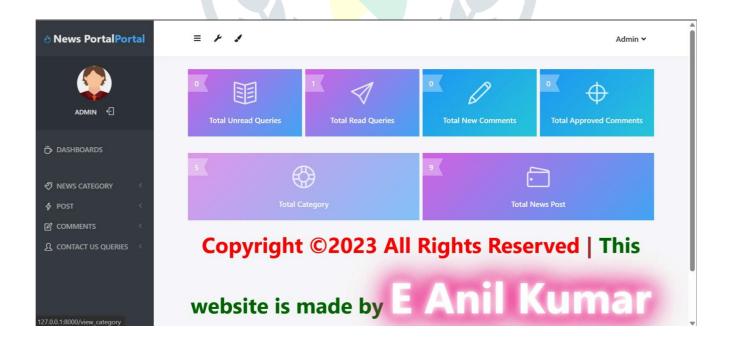
## CONTACT PAGE



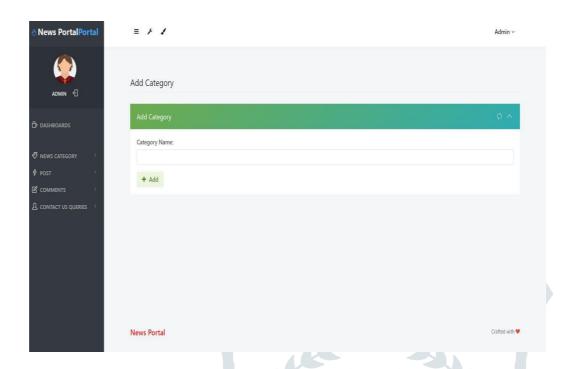
#### ADMIN LOGIN PAGE



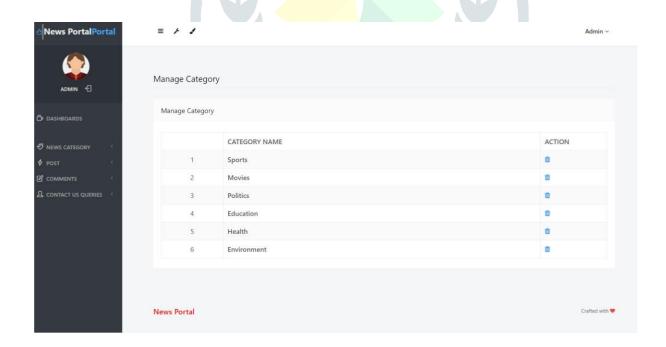
ADMIN DASHBOARD PAGE



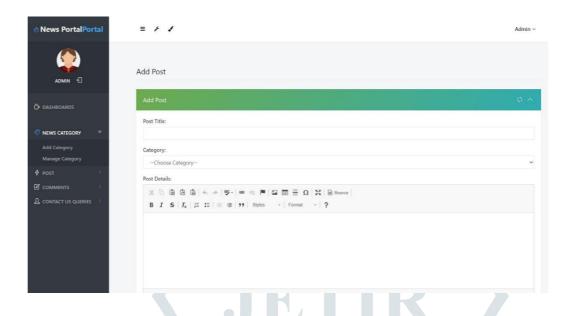
#### ADD CATEGORY PAGE



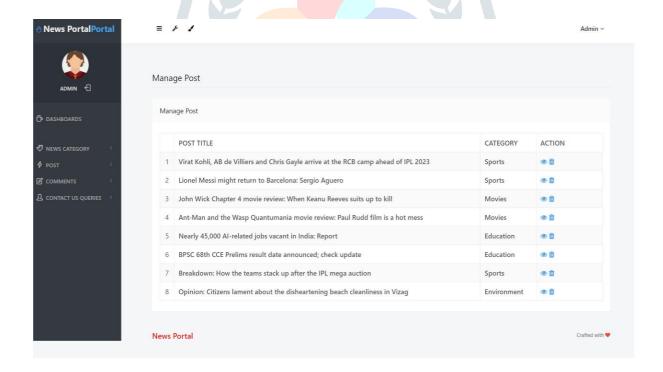
## MANAGE CATEGORY PAGE



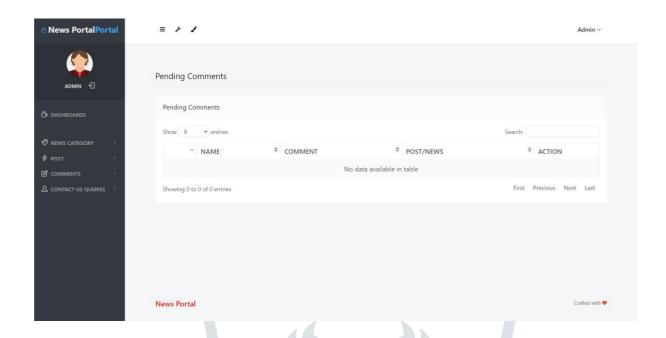
#### ADD POST PAGE



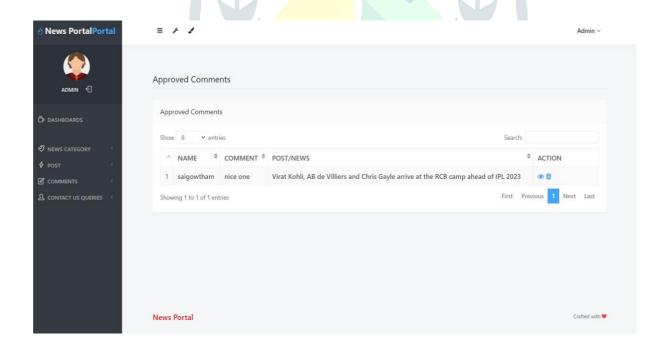
#### MANAGE POST PAGE



#### PENDING COMMENTS PAGE



## VIEW COMMENTS DETAILS PAGE



#### **CONCLUSION**

The project entitled "Online News Portal" is developed using HTML, CSS and Bootstrap as front end and Python, Sqlite database in back end to computerize the process of online management of news post. This project covers only the basic features required. Unit testing involves the design of test cases that validate that the internal program logic is functioning properly, and that program inputs produce valid outputs. All decision branches and internal code flowshould be validated. It is the testing of individual software units of the application .it is done after the completion of an individual unit before integration. This is a structural testing, that relies on knowledge of its construction and is invasive. Unit tests perform basic tests at component level and test a specific business process, application, and/or system configuration. Unit tests ensure that each unique path of a business process performs accurately to the documented specifications and containsclearly defined inputs and expected results.

#### SCOPE FOR FUTURE ENHANCEMENT

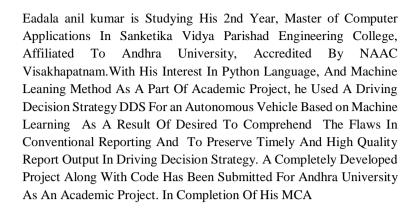
This web application involves almost all the features of the online news posting. The future implementation will be online help for the users and chatting with website administrator

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Pinnamaraju.p.t.s Priya working as Assistant professor in Master of computer application (MCA) Sanketika Vidya Parishad Engineering college, Visakhapatnam, Andhrapradesh. with 6 years of experience in master of computer applications(MCA), Accredited by NAAC. with her area of interests in C,Computer Organization, Engineering, IOT.