INFONEWS – A PERSONALISED NEWS AGGREGATOR

A MINI-PROJECT REPORT

Submitted by

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BONAFIDE CERTIFICATE

Certified that this mini project "INFONEWS-A PERSONALISED NEWS AGGREGATOR" is the bonafide work of "LOKESHWAR S – (2116220701146)" who carried out the project work under my supervision.

SIGNATURE

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INTERNAL EXAMINER   EXTERNAL EXAMINER

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My sincere thanks to my family members, friends and other staff members of Computer Science and Engineering.

ABSTRACT

INFONEWS is a comprehensive news aggregator designed to deliver real-time news updates from a variety of reliable sources across the web. The platform provides users with a personalized news experience by categorizing content based on user preferences and offering easy access to current events.

The aim of INFONEWS is to simplify the process of news consumption, making it efficient and user-friendly by gathering information from multiple sources and presenting it in a unified format.

The project leverages modern web technologies, including HTML, CSS, JavaScript, and PHP, to create an interactive and visually appealing platform. It features a robust backend supported by a database that stores user information and preferences, enabling personalized content delivery. The use of advanced techniques such as API integration for fetching news data and secure user authentication ensures a seamless experience. The platform's responsive design ensures compatibility across various devices, making news accessible anytime, anywhere.

In addition to providing a clean and organized news feed, INFONEWS offers key functionalities such as category-based news browsing, search features, and secure user authentication for personalized experiences. The project demonstrates a scalable architecture that can integrate additional features like contact support, newsletters, and notification systems in the future.

Overall, INFONEWS aims to be a reliable source of information, catering to the growing demand for accessible and trustworthy news in the digital era.

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CHAPTER 1

1. **INTRODUCTION**

INFONEWS is a web-based platform designed to make it easier for users to find and read news from different sources in one place. With so much news available online, it can be difficult to keep track of what's important. INFONEWS solves this by gathering news from various websites and organizing it based on categories like sports, technology, and politics, so users can quickly find the news that matters most to them.

The platform is built using simple web technologies like HTML, CSS, JavaScript, and PHP, along with a MySQL database for storing user and news information. INFONEWS connects to third-party news APIs to ensure that users always have access to the latest and most relevant news articles. It's designed to be easy to use, secure, and accessible on any device, including phones, tablets, and computers.

Overall, INFONEWS provides a simple, personalized way to stay updated on global news in a fast and convenient manner.

1.2 SCOPE OF THE WORK

The scope of the INFONEWS project covers the development of a

comprehensive news aggregation platform that provides users with an easy and personalized way to access news from various sources. It focuses on building a system that allows users to view news based on specific categories, trending topics, and their individual preferences. The platform's key goal is to simplify the process of finding and consuming relevant news content by centralizing articles from multiple websites into a single, user-friendly interface.

INFONEWS aims to serve a wide range of users by offering features like secure user registration and login, personalized dashboards, and category-based news browsing. It also includes functionalities such as search options and responsive design to ensure the platform works seamlessly across different devices, such as mobile phones, tablets, and desktops. In the future, the system could be extended to offer additional features like push notifications, user comments, and bookmarking capabilities.

Additionally, the project emphasizes data security, ensuring that user credentials are securely stored and encrypted. The platform's architecture is designed for scalability, allowing for future enhancements to accommodate more users, additional features, and new categories of news content as needed. This ensures the longevity and adaptability of the platform in an evolving digital environment.

1.3 AIM AND OBJECTIVES OF THE PROJECT

Aim: The aim of the INFONEWS project is to create an efficient, user-friendly news aggregation platform that consolidates news from various sources and presents it in an organized and personalized manner, enhancing the overall news consumption experience.

Objectives:

1. Develop a responsive platform that allows users to access news articles across multiple devices (desktop,laptops).
2. Integrate third-party APIs to fetch real-time news from news releasing sources, ensuring fresh and up-to-date content.

3. Implement user authentication with secure registration, login, and password encryption to manage personalized dashboards.
4. Enable category-based news browsing, allowing users to filter news by categories such as sports, technology, politics, and more.
5. Provide personalized news feeds based on user preferences, trending topics, and search capabilities.
6. Design an intuitive user interface with features such as horizontal carousels for easy navigation of news articles.
7. Ensure data security by encrypting user credentials and handling sensitive information with industry-standard practices.
8. Enhance the news consumption experience by centralizing news from multiple sources, reducing the time users spend searching for relevant content.

CHAPTER 2

SYSTEM SPECIFICATIONS

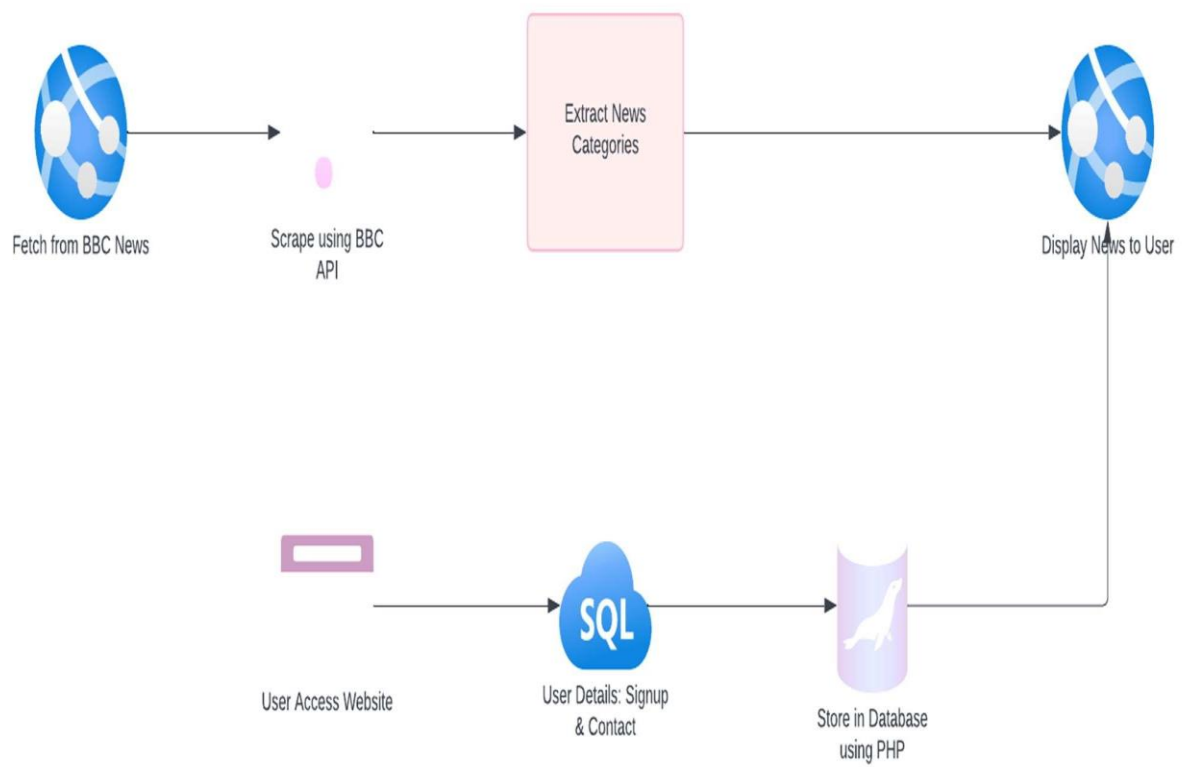## 2.1. SOFTWARE SPECIFICATIONS

Operating System   :   WINDOWS 7 AND PLUS

Front – End   :   HTML, CSS, JAVASCRIPT,BOOTSTRAP

Back – End   :   PHP, MYSQL

Database Management Systems :   PHP-MYADMIN,MYSQL

CHAPTER 3

ARCHITECTURE DIAGRAM

Fetch from BBC News

Scrape using BBC API

Extract News Categories

Display News to User

User Access Website

User Details: Signup & Contact

Store in Database using PHP

CHAPTER 4

MODULE DESCRIPTION

- **User Registration and Login Module:**

The User Registration and Login Module in the INFONEWS project allows users to create an account, log in securely, and manage their personalized news preferences. This module is a critical part of the system as it ensures user authentication and provides access to customized features such as saving news preferences, accessing personalized dashboards, and engaging with the platform in a secure manner.

- **Search and Filter Module:**

The Search and Filter Module for the INFONEWS - A News Aggregator Project provides users with powerful tools to quickly locate relevant articles based on their interests. This module features an intuitive search bar that allows users to input keywords, while advanced filtering options enable them to narrow down results by categories, publication dates, and sources. By streamlining the article discovery process, this module enhances user engagement and satisfaction, ensuring that users can effortlessly find the news that matters most to them.

- **API Integration Module:**

The API Description Module for the INFONEWS - A News Aggregator Project serves as a comprehensive resource for developers seeking to integrate external applications with the news aggregator's functionalities. This module provides detailed documentation on available endpoints, request methods, response formats, and authentication processes. By offering clear examples and guidelines, the API Description Module enables seamless integration, fostering collaboration and innovation while allowing third-party developers to access and utilize INFONEWS's rich content and services effectively.
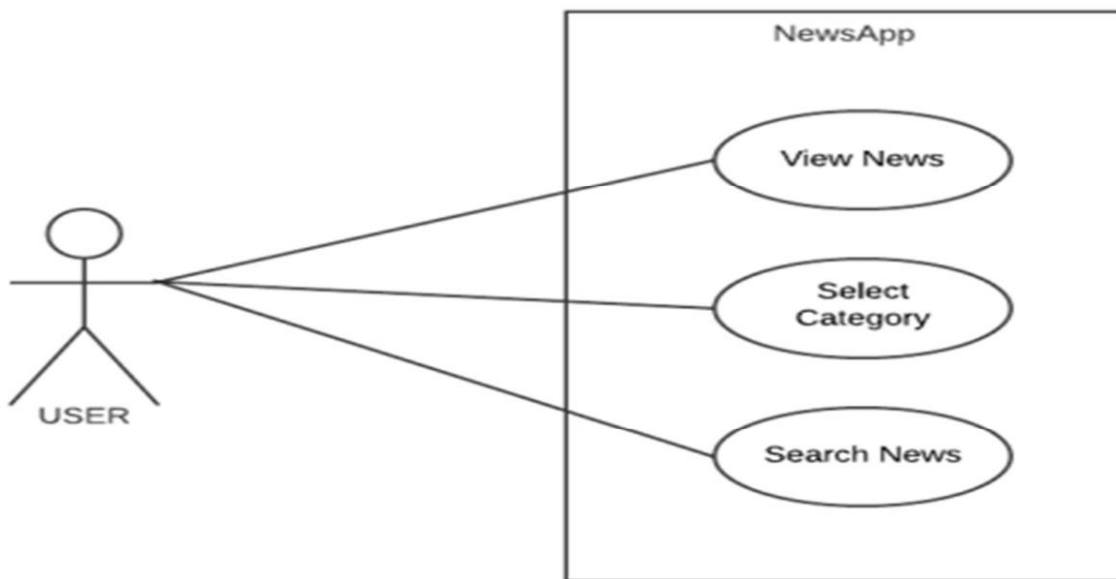
- **Contact and Support module:**

The Contact and Support Module for the INFONEWS - A News Aggregator Project serves as a vital communication channel between users and the support team. This module allows users to submit inquiries, feedback, or report issues through a userfriendly contact form. It also includes a comprehensive FAQ section addressing common questions and concerns, enabling users to find quick solutions independently. Additionally, the module provides contact information, such as email and phone support, ensuring users have multiple avenues to seek assistance. By enhancing user support and communication, this module fosters a positive user experience and builds trust within the INFONEWS community.
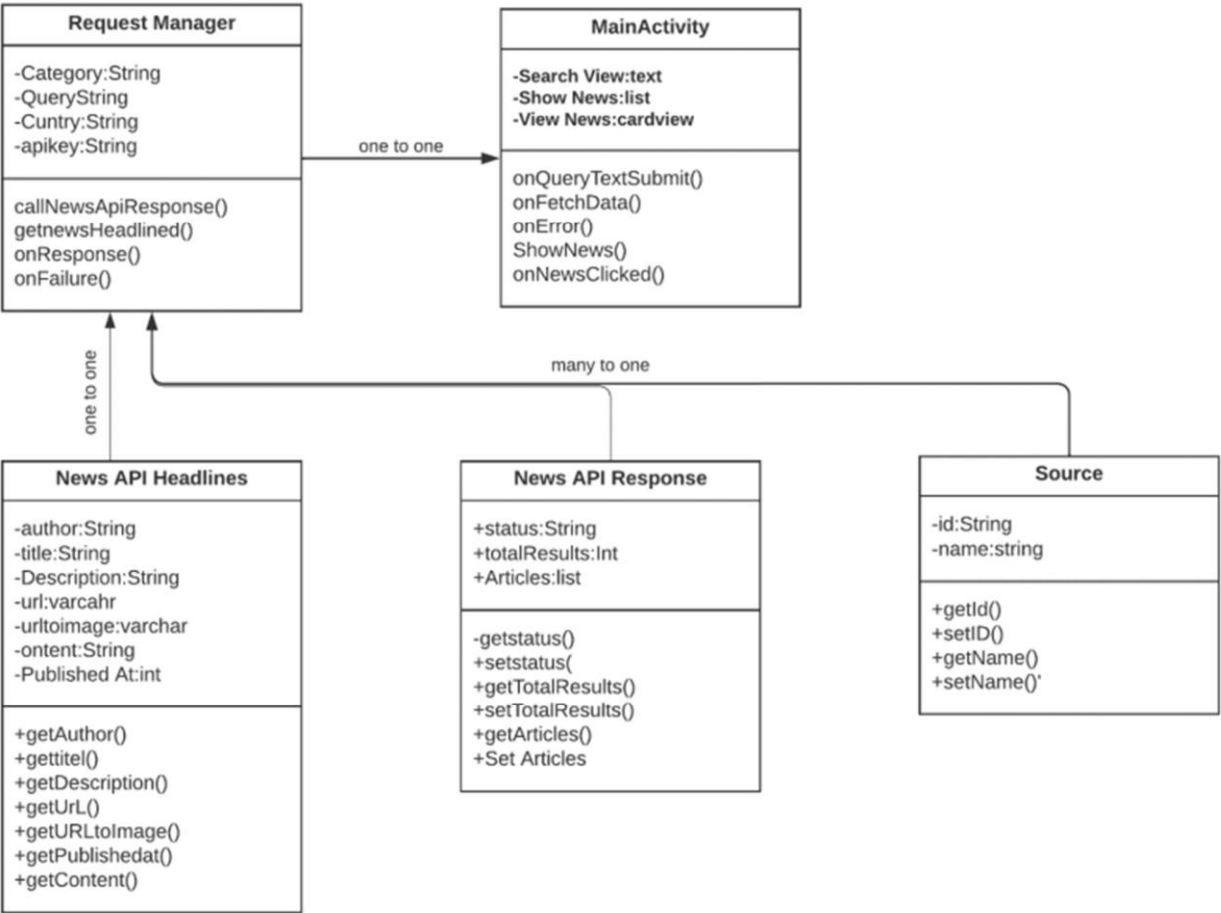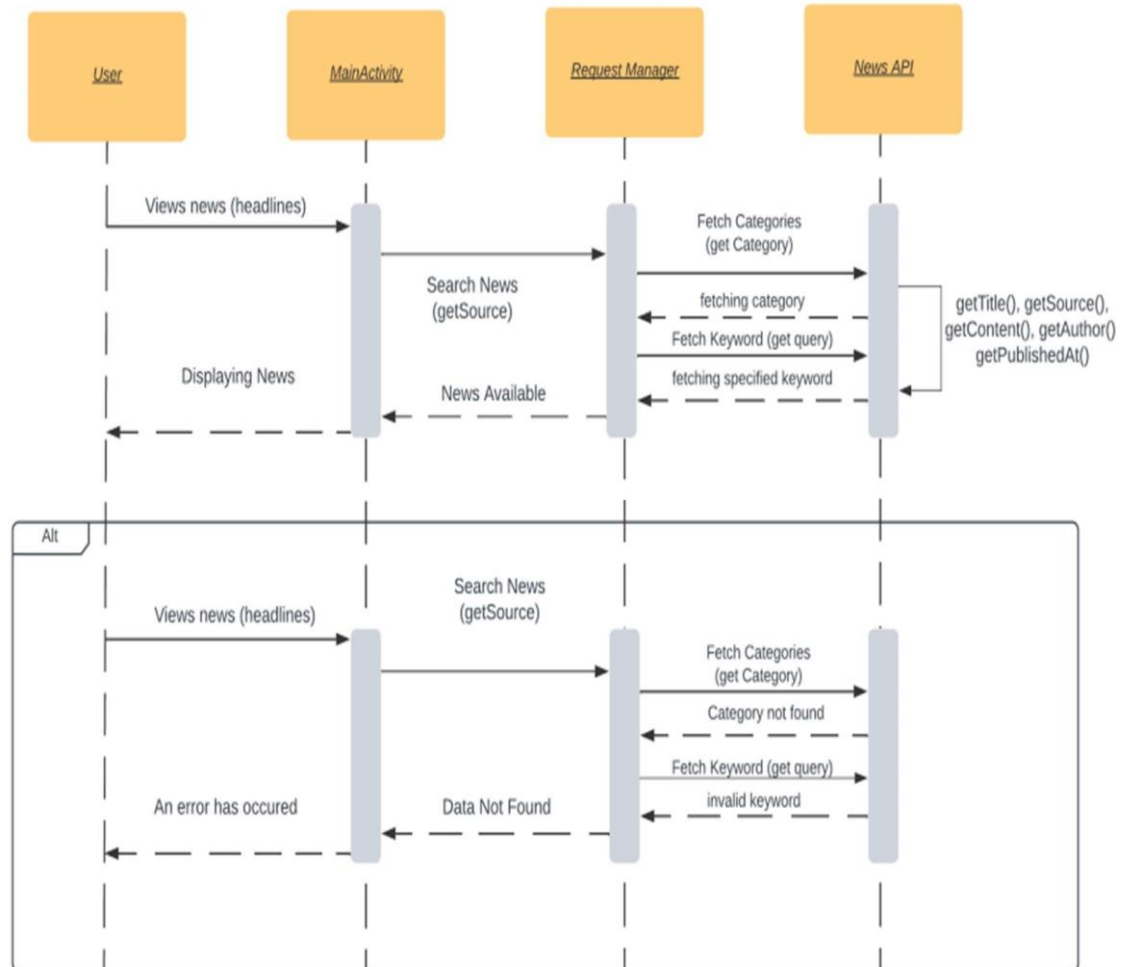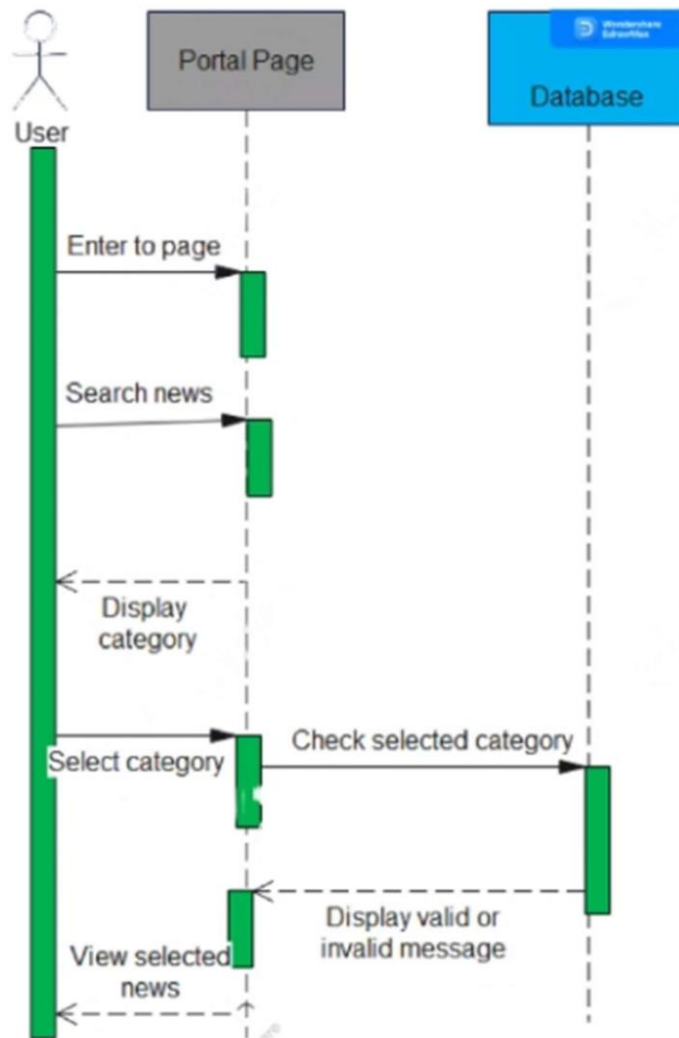
CHAPTER 5

SYSTEM DESIGN

5.1 USE CASE DIAGRAM

5.2 CLASS DIAGRAM

Request Manager

-Category:String
-QueryString
-Cuntry:String
-apikey:String

callNewsApiResponse()
getnewsHeadlined()
onResponse()
onFailure()

MainActivity

-Search View:text
-Show News:list
-View News:cardview

onQueryTextSubmit()
onFetchData()
onError()
ShowNews()
onNewsClicked()

one to one

one to one

many to one

News API Headlines

-author:String
-title:String
-Description:String
-url:varcahr
-urltoimage:varchar
-ontent:String
-Published At:int

+getAuthor()
+gettitel()
+getDescription()
+getUrL()
+getURLtoImage()
+getPublishedat()
+getContent()

News API Response

+status:String
+totalResults:Int
+Articles:list

-getstatus()
+setstatus(
+getTotalResults()
+setTotalResults()
+getArticles()
+Set Articles

Source

-id:String
-name:string

+getId()
+setID()
+getName()
+setName()'

5.3 SEQUENCE DIAGRAM

5.4 ACTIVITY DIAGRAM

CHAPTER 6

SAMPLE CODING

```html
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>INFONEWS</title>

<!-- Bootstrap 5 CSS -->
<linkhref="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0alpha1/dist/css/bootstrap.min.css
" rel="stylesheet">

<!-- Google Fonts --> <linkrel="stylesheet"
href="https://fonts.googleapis.com/css2?family=Poppins:wght@500&family=Roboto:
wght@500&display=swap">

<!-- FONT AWESOME ICONS-->
<linkrel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0-beta3/css/all.min.css">

<style> body { font-family: 'Segoe UI', Tahoma, Geneva,
Verdana, sans-serif; background-color: #f5f5f5;
}

.nav-link {
color: white !important;
}

.nav-link:hover { text-decoration:
underline;
}

.active-nav     {     color:
#208c5b  !important;  font-
weight: bold;
}
```

```css
.search-bar input {
border-radius: 50px;
padding: 0.75rem; width:
300px;
}

.search-bar button { border-radius:
50px;
}

.card img { height:
200px; object-fit:
cover;
}

footer {
background-color: #484e52;
color:        white;
padding:  20px  0;
text-align: center;
}

.footer-link { color:
white; text-
decoration: none;
margin: 0 10px;
}

.footer-link:hover { text-decoration:
underline;
}

/* Style to make the hamburger button visible */
.navbar-toggler { border:
none;
}
</style> </head>
<body>
```

```html
<!-- Navbar -->
<nav class="navbar navbar-expand-lg navbar-dark bg-dark fixed-top">
<div class="container">
```

```html
<button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-
bstarget="#navbarNav" aria-controls="navbarNav" aria-expanded="false"
arialabel="Toggle navigation">
<span class="navbar-toggler-icon"></span>
</button>
<div class="collapse navbar-collapse" id="navbarNav">
<ul class="navbar-nav me-auto">
<li class="nav-item">
<span class="navbar-brand">INFONEWS</span>
</li>
<li class="nav-item dropdown">
<a class="nav-link dropdown-toggle" href="#" id="categoriesDropdown" role="button"
data-bs-toggle="dropdown" aria-expanded="false">
Categories
</a>
<ul class="dropdown-menu" aria-labelledby="categoriesDropdown">
<li><aclass="dropdown-item"id="finance"href="#"
onclick="onNavItemClick('finance')">Finance</a></li> <li><a
class="dropdown-item"id="sports"href="#"
onclick="onNavItemClick('sports')">Sports</a></li> <li><a
class="dropdown-item" id="crypto" href="#"
onclick="onNavItemClick('crypto')">Crypto</a></li> <li><a
class="dropdown-item" id="international" href="#"
onclick="onNavItemClick('international')">International</a></li>
<li><a class="dropdown-item" id="technical" href="#"
onclick="onNavItemClick('technical')">Technical</a></li>
<li><a class="dropdown-item" id="AI" href="#"
onclick="onNavItemClick('AI')">AI</a></li> <li><a
class="dropdown-item" id="education" href="#"
onclick="onNavItemClick('education')">Education</a></li>
<li><a class="dropdown-item" id="Earth" href="#"
onclick="onNavItemClick('Earth')">Earth</a></li> <li><a
class="dropdown-item" id="Weather" href="#"
onclick="onNavItemClick('Weather')">Weather</a></li>
</ul>
</li>
<li class="nav-item">
<a                          class="nav-link"                          href="home.html"
onclick="curSelectedNav?.classList.remove('active');">Home</a>
</li>
<li class="nav-item">
<a                          class="nav-link"                          href="about.html"
onclick="curSelectedNav?.classList.remove('active');">About</a>
</li>
```

```html
<li class="nav-item">
<a                      class="nav-link"                      href="contact.html"
onclick="curSelectedNav?.classList.remove('active');">Contact</a>
</li>
<li class="nav-item">
<a                      class="nav-link"                      href="support.html"
onclick="curSelectedNav?.classList.remove('active');">Support</a>
</li>
</ul>

<div class="search-bar d-flex ms-3">
<input type="text" class="form-control me-2" id="search-text" placeholder="Search
news...">
<button class="btn btn-success" id="search-button">Search</button>
</div>

<!-- SIGN IN AND SIGN UP BUTTON -->
<div class="d-ms-3"></div>
<a href="lgin.html" class="btn btn-outline-light btn-sign me-2">Sign In</a>
<a href="signup.html" class="btn btn-outline-info btn-sign">Sign-Up</a>
</div>
</div>
</nav>

<!-- Main Content -->
<main class="container mt-5 pt-5">
<div class="row" id="cards-container">
<!-- Cards will be dynamically injected here -->
</div>
</main>

<!-- Template for News Card -->
<template id="template-news-card">
<div class="col-md-4 mb-4">
<div class="card h-100 shadow-sm">
<img src="https://via.placeholder.com/400x200" alt="news-image" class="card-imgtop"
id="news-img">
<div class="card-body">
<h5 class="card-title" id="news-title">News Title</h5>
<p class="text-muted small" id="news-source">Source · Date</p>
<p class="card-text" id="news-desc">Short description of the news goes here. It should
be engaging and concise.</p>
</div>
```

```
</div>
</div>
</template>

<!-- Footer -->
<footer>
<p>&copy; 2024 INFONEWS |
<a href="#" class="footer-link">Privacy Policy</a> |
<a href="#" class="footer-link">Terms of Service</a>
</p>
<div class="social-links mt-3">
<p>Follow BBC on:</p>
<a href="https://www.instagram.com/bbc" target="_blank" class="footer-link me-3">
<i class="fab fa-instagram"></i> Instagram
</a>
<a href="https://www.facebook.com/bbcnews" target="_blank" class="footer-link me3">
<i class="fab fa-facebook-f"></i> Facebook
        </a>
<a href="https://twitter.com/BBCWorld" target="_blank" class="footer-link me-3">
<i class="fab fa-twitter"></i> Twitter
</a>
<a       href="https://www.linkedin.com/company/bbc-worldwide"       target="_blank"
class="footer-link">
<i class="fab fa-linkedin-in"></i> LinkedIn
</a>
</div>
</footer>

<!-- Bootstrap 5 JS and dependencies -->
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0alpha1/dist/js/bootstrap.bundle.min.js"
></script>

<!-- JavaScript --> <script>
const API_KEY = "59bae22becca440b913af88855d9bef1"; const
url = "https://newsapi.org/v2/everything?q=";

window.addEventListener("load", () => fetchNews("India"));

async function fetchNews(query) { const res = await
fetch(`${url}${query}&apiKey=${API_KEY}`); const data =
await res.json(); bindData(data.articles);
}
```

```javascript
function bindData(articles) { const cardsContainer =
document.getElementById("cards-container"); const newsCardTemplate =
document.getElementById("template-news-card");

cardsContainer.innerHTML = "";

articles.forEach((article) => { if
(!article.urlToImage) return;

const cardClone = newsCardTemplate.content.cloneNode(true); fillDataInCard(cardClone,
article); cardsContainer.appendChild(cardClone);
});
}

function fillDataInCard(cardClone, article) { const newsImg =
cardClone.querySelector("#news-img"); const newsTitle =
cardClone.querySelector("#news-title"); const newsSource =
cardClone.querySelector("#news-source"); const newsDesc =
cardClone.querySelector("#news-desc");


}

let curSelectedNav = null; function
onNavItemClick(id) { fetchNews(id); const
navItem = document.getElementById(id);
curSelectedNav?.classList.remove("active");
curSelectedNav = navItem;
curSelectedNav.classList.add("active");
}

const searchButton = document.getElementById("search-button");
searchButton.addEventListener("click", () => { const query =
document.getElementById("search-text").value; if (!query) return;
fetchNews(query);
curSelectedNav?.classList.remove("active");  curSelectedNav
= null;
});
</script> </body></html>
```
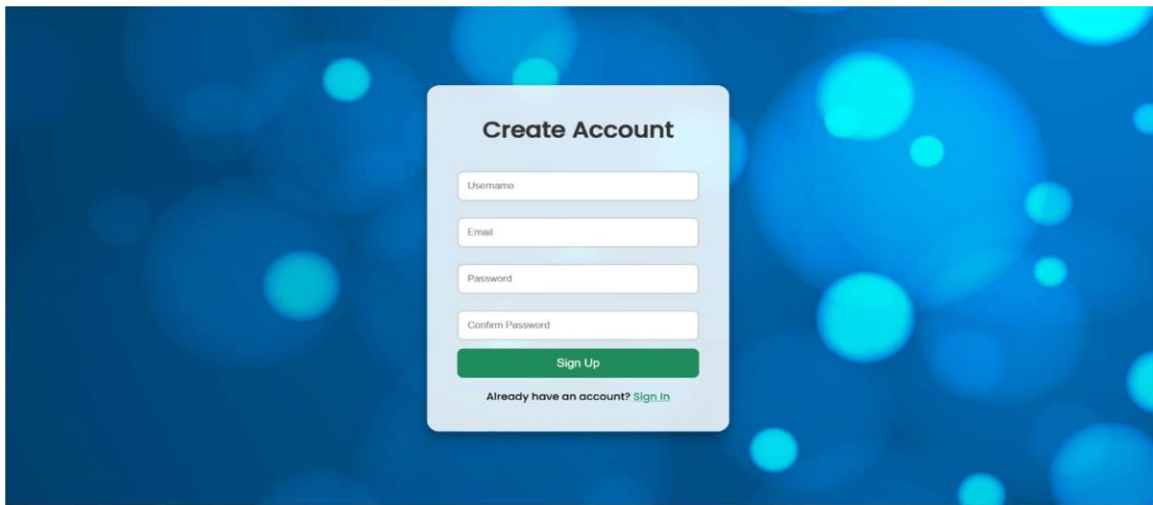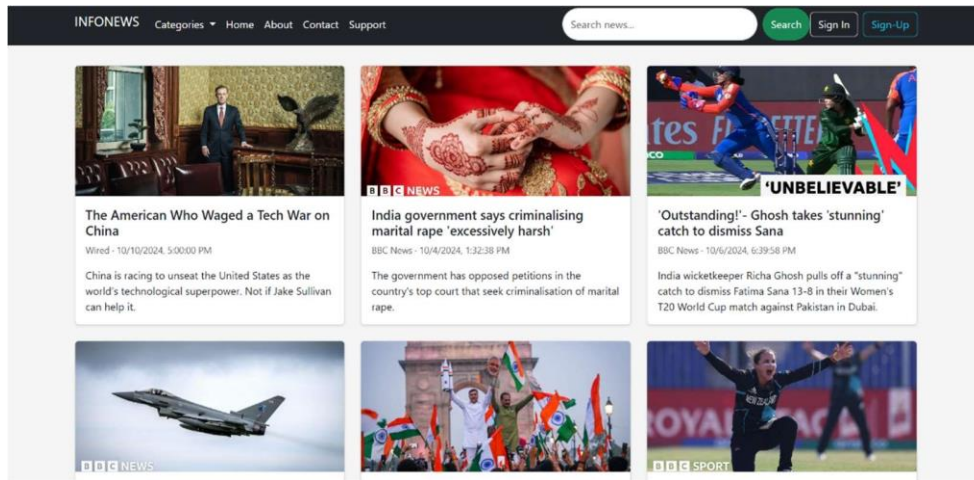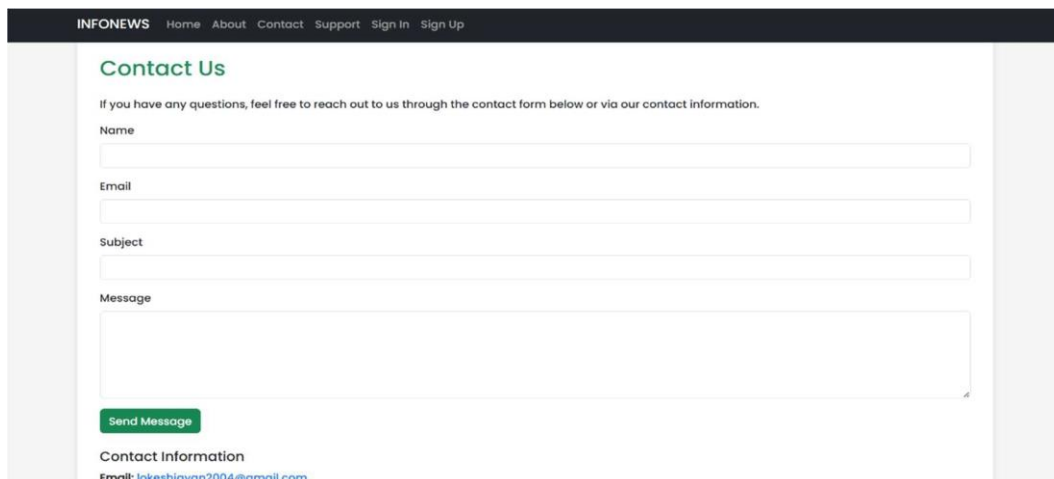
CHAPTER 7

SCREEN SHOTS
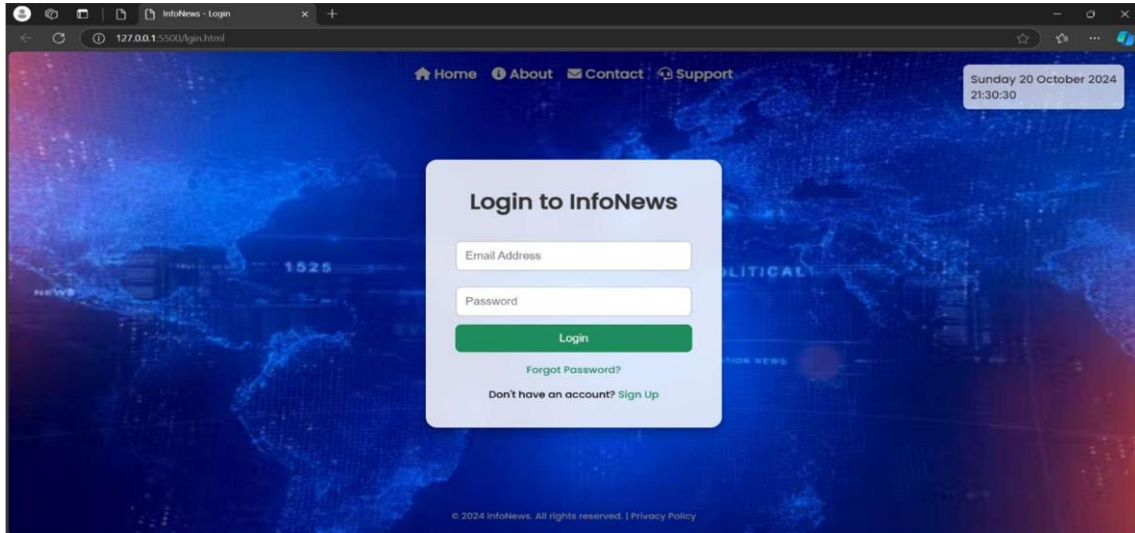
LOGIN PAGE

SIGNUP PAGE
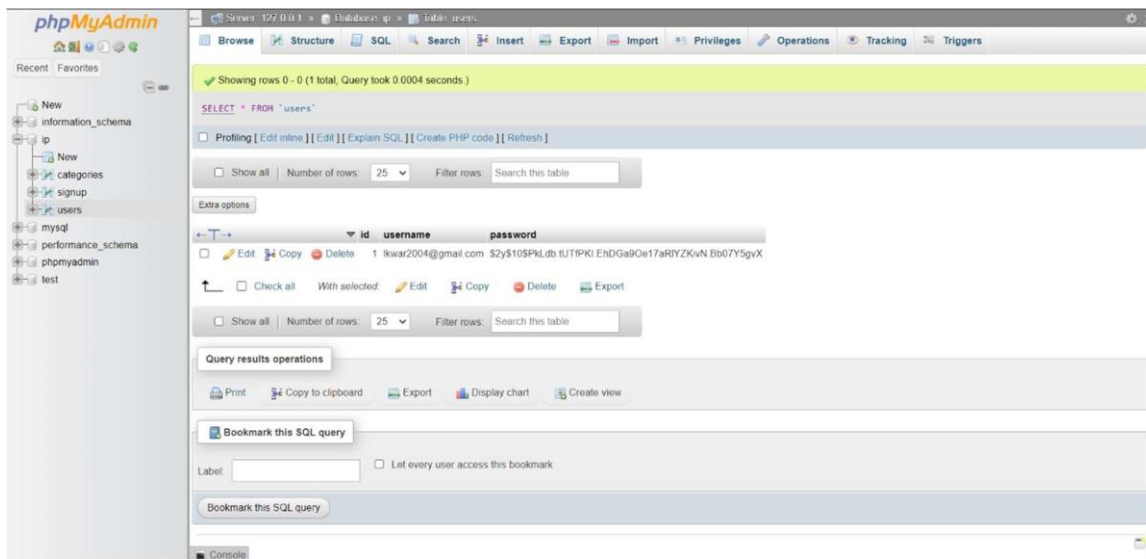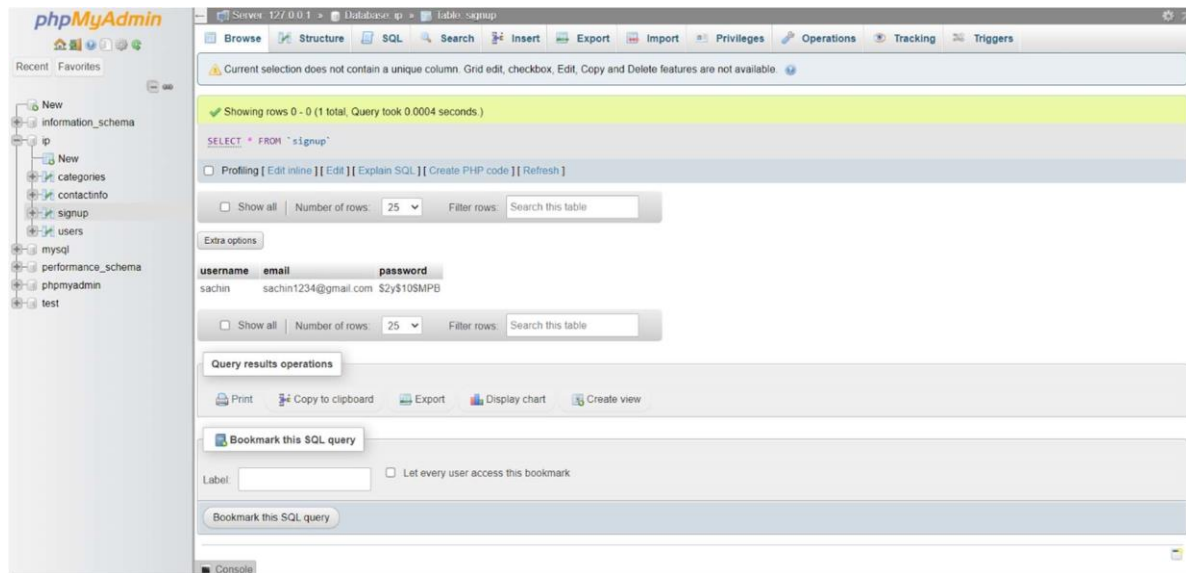
FRONT PAGE

HOME PAGE

CONTACT PAGE

User Login connectivity

Signup details connectivity

CHAPTER 8

CONCLUSION

INFONEWS is an innovative news aggregation platform dedicated to delivering reliable, timely, and comprehensive news across various categories like finance, sports, crypto, technology, and more. With a mission to provide users with a seamless and tailored news experience, INFONEWS aggregates stories from trusted sources, presenting a wide array of perspectives on key topics.

The platform emphasizes accuracy and relevance, ensuring that users access fact-checked, current content. Key features like personalized search and filter options, a clean and intuitive user interface, and support modules enhance user engagement and accessibility, making it easy for readers to explore the topics they care about.

As INFONEWS continues to expand, it strives to set a high standard in news aggregation, bridging the gap between readers and the information they need, all within a single, convenient platform. This commitment positions INFONEWS as a trusted and essential resource in today's fast-paced world, supporting informed decision-making and a deeper understanding of global and local events

Thus, INFONEWS aims to evolve continually, adapting to the needs of its users and its features, ensuring it remains a trusted source for insightful, reliable news in an ever-changing world.

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4. BBC NEWS- https://www.bbc.com/news

5.Font Awesome Icons – www.fontawesome.com