

A dark blue vertical bar runs down the left side of the page. A blue arrow points to the right from this bar, containing the date.

8/8/2021

Online News Portal

Several thin, curved lines in shades of blue and grey originate from the bottom left corner and sweep upwards and to the right.

Fahad Aziz kacchi

ROLL NO: 28 SEAT NO: 20673



M. No. : PU / PH / ASC / 088 / 1992

M.C.E. Society's

ABEDA INAMDAR SENIOR COLLEGE

of Arts, Science & Commerce, Pune

Affiliated to Savitribai Phule Pune University

(Accredited with 'A' grade by NAAC)

Prof. Dr. Shaila Bootwala (M.Com., M. Phil., Ph.D.)
Principal

Dr. P. A. Inamdar
President, M.C.E. Society

Ref. AISC /

Date :

DEPARTMENT OF COMPUTER SCIENCE

This is to certify that Mr./ Ms. Fahad Aziz Kacchi.

Student of M. Sc (Computer Science) sem -II .has satisfactorily

completed the project Online News Portal in Node JS

*Prescribed by the University of Pune as part of curriculum for Master of
Computer Science during the academic year 2020 -2021*

DATE:

PROJECT INCHARGE

HEAD OF DEPARTMENT

INTERNAL EXAMINER

IT EXPERT

EXTERNAL EXAMINER

ACKNOWLEDGMENT

Apart from the efforts taken by me, the success of any project depends largely on the encouragement and guidelines of many others. I take this opportunity to express my gratitude to the people who have been instrumental in the successful completion of this project.

I would like to thank Miss. Namita Mane and Miss Sana Shaikh for guidance, encouragement and valuable suggestion and for bearing with our incessant queries, however small or insignificant.

I would also like to thank my Team Member enabling to strive harder and push oneself to one's best and for have been such pillar of support and wonderful people to work with.

Last but not the least; I'm grateful to my college, especially the Head of Department, Mrs. Shakila Siddavantam and whole Computer Science Department.

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Abstract

This project is going to be developed with the main objective of E-NEWS is that to provide the all type of instant and important news related to business, world, World Sports, national, Education etc. Those people who don't have time to read the newspaper and always linked with internet can get more informative. Publish news about region, town, city, state, national and inter-national. End user can see news from anywhere at any time through web, tablets, etc. with registered login id & password. Professionally publish online news publication, corporate press releases, or manage other content without technical expertise

Online news portal allows users to read up to date news related to many fields like Entertainment, National, International, Business, Bollywood, Hollywood, Politics, Sports, Education etc. Without any payment. He/She can also provide feedback related to our any News. New News can be added or be post only by the admin or editor and have the Authorized delete any News.

This portal is open to public and end user or user can come here and browse the desired news. You don't have to wait for newspaper in morning. Any time any news related to different fields will be available. We have news panel where our reputed clients can check day wise uploads. We are uploading the news of all categories happen in the world and it will be maintained by using database. In which authorized user can search or view news.

Our project is an attempt has been made to develop a News or information based web site. We have develop this project that helps the people and make them aware so that they can know any news. To develop this project we have faced many problem but we hardly tried to develop this project. Our supervisor helped us by giving her valuable opinion, decision and time.

Introduction

Public News Portal is an Advanced and Informative System helping the users to know the news, articles or any interesting things happening around. This System helps the public to keep themselves up to date about the things happenings around their vicinity or locality or in their city. There are 4 part for this system to work; one for the admin, journalist, editor and another for the user. The user is allowed to view the news, comment his or her views on a particular news and to search news according to type and location, while admin and editor can add news related to any city and can also comment for the same. The role of the journalist is to gather news and forward it to the editor and the editor will approve the news under the pending news filter part. If the news is approved it gets posted and if the news is out dated it will be shown in all pending news list . The editor can add or remove the news. Admin will monitor if any abuse or irrelevant or fake news added by any Editor and will mail him/her or take necessary actions on it. The admin can even delete the user if he/she is posting abusive comments. The Front end used is Angular Material while backend used is node js. The admin can register editor as well as journalist into the system to use this portal and can update their details as well. The news is displayed according to dates. The editor/admin/journalist can add a title, subtitle, picture, date, type, location, editor name, journalist name and the news content. The admin/editor/journalist can use only 450 words to address the news.

Motivation:

The motivation for this project come from local newspaper, The news which are there in local newspaper are not available online. Local newspaper are decreasing day by day due to which there is no one to cover local news. What is at stake if we lose the thousands of local newspapers that have historically provided coverage of our cities and countryside? Numerous government and foundation studies have found that for a community to reach its full potential, it must be civically healthy and inclusive. Economists call public service journalism a “public good” because the information conveyed through news stories helps guide decision-making in our society. A 2011 report by the Federal Communications Commission found that local newspapers are the best medium to provide the sort of public service journalism that shines a light on the major issues confronting communities and gives residents the information they need to solve their problems. But, in many communities today, there is simply not enough digital or print revenue to pay for the public service journalism that local newspapers have historically provided. This System helps the local public to keep themselves up to date about the happenings around their vicinity or locality or in their city. There are 4 part for this system to work; one for the admin, journalist, editor and another for the user. The user is allowed to view the news only while admin and editor can add news related to any city.

Problem statement:

We lose the thousands of local newspapers that have historically provided coverage of our cities and countryside? Numerous government and foundation studies have found that for a community to reach its full potential, it must be civically healthy and inclusive. Economists call public service journalism a “public good” because the information conveyed through news stories helps guide decision-making in our society. A 2011 report by the Federal Communications Commission found that local newspapers are the best medium to provide the sort of public service journalism that shines a light on the major issues confronting communities and gives residents the information they need to solve their problems. But, in many communities today, there is simply not enough digital or print revenue to pay for the public service journalism that local newspapers have historically provided. Therefore, the fate of communities and the vitality of local news – whether delivered over the internet, the airwaves or in print are intrinsically linked.

There are no easy fixes. Despite this, for-profit and non-profit ventures, as well as legacy and digital news organizations, are beginning to develop viable economic and journalistic models. The opportunity and the challenge is finding a way to scale these efforts so the thousands of communities that have lost a newspaper have a viable alternative. We need to make sure that whatever replaces the 20th century version of local newspapers serves the same community-building functions. If we can figure out how to craft and implement sustainable news business models in our smallest, poorest markets, we can then empower journalistic entrepreneurs to revive and restore trust in media from the grassroots level up, in whatever form – print, broadcast or digital.

Therefore to fix this problem we had made this news portal where local newspaper and journalist can come together and grow as well as help the society to get local news easily.

Purpose/objective and goals -literature survey:

This portal is open to public and end user or customer can come here and browse the desired news. You don't have to wait for newspaper in morning. Any time any news related to different fields will be available. We are developing an news panel where our reputed users can check day wise uploads, done by authorized Editor. We are uploading the news of all categories happen in the world and it will be maintained by using database. In which authorized Editor would add news on the website

Project scope and limitations

- The system can be used by small communities or news base companies.
- Can also be used by reporters. Locals can have an idea about what is happening in their locality and can take necessary measures according to the situation. People can also be aware of any theft.
- There are many applications similar to this one currently having a great success in the market.
- In addition no news site has an option to comment on a particular news while our website does.
- There no paid subscription which lead us to zero income.

System analysis

Existing systems:

The existing system which works on very old manner, in existing system all the work is carried out on the paper, because it all carried out on paper it very tedious job to keep all the documents that keeps information about customers booking, payment information of chauffeurs, general information of chauffeurs, information about extra charges.

Because all work is done on paper it has an adverse effect on the environment causing natural disasters like flood, fire etc and in the existing system we have to prepare the reports manually which is very tedious.

Scope and limitations of existing systems:

Scope of existing systems:

- The user is updated with everything going around.
- The Editor is allowed to add minute to minute news.
- Easy to use.
- The news can be viewed only by registered users.
- The user can comment if the news is not relevant or outspoken.

Limitation of existing systems:

- It requires an active internet connection.
- The Admin/Editor/Journalist cannot describe the news in more than 450 words.
- Journalist can add only one picture per news and video for any news cannot be uploaded.

Project perspective, features:

Project perspective:

This portal is open to end user or customer can come here and browse the desired news. You don't have to wait for newspaper in morning. Any time any news related to different fields will be available. We are developing a news panel where our reputed users can check day wise uploads. We are uploading the news of all categories happening around and it will be maintained by using database. In which authorized user can read news on the website.

Features:

- Admin and editor can add new latest news
- Admin, editor, journalist and user can see the list of latest news.
- Admin will be able to delete the records of the news and can edit employee details also delete employees or mail them, Also the admin can delete users.

Stakeholders:

The stakeholder of this project are Sadaf Shaikh and Fahad Kacchi with equal contribution. Sadaf has done all the front-end work including management of the project, Fahad has done all the back-end works including documentation. I would really thank Miss. Namita Mane and Miss Sana Shaikh for guidance, encouragement and valuable suggestion and for bearing with our incessant queries, however small or insignificant. Last but not the least; I'm grateful to my college, especially the Head of Department, Mrs. Shakila Siddavaram.

Requirement analysis Functional requirements, security requirements etc:

Functional Requirements:

For documenting the functional requirements, the set of functionalities supported by the system are to be specified. A function can be specified by identifying the state at which the data is to be input to the system, its input data domain, the output data domain, and the type of processing to be carried on the input data to obtain the output data. Basically the management parts are the functional requirements which are uploading details, search topic, edit option and user registration.

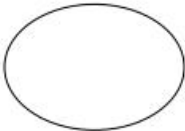



Non-functional Requirements:

- Performance Requirements: The system response time must be less than 30 seconds for the user interface. Or else the system will show TIMED OUT.
- Reliability Requirements: The system shall have a minimum uptime of 99 % excluding time pre-scheduled for maintenance and/or upgrades.
- Safety Requirements: All the system data must be backed up every day and the backup copies stored in another server at different location for disaster recovery.

System Design

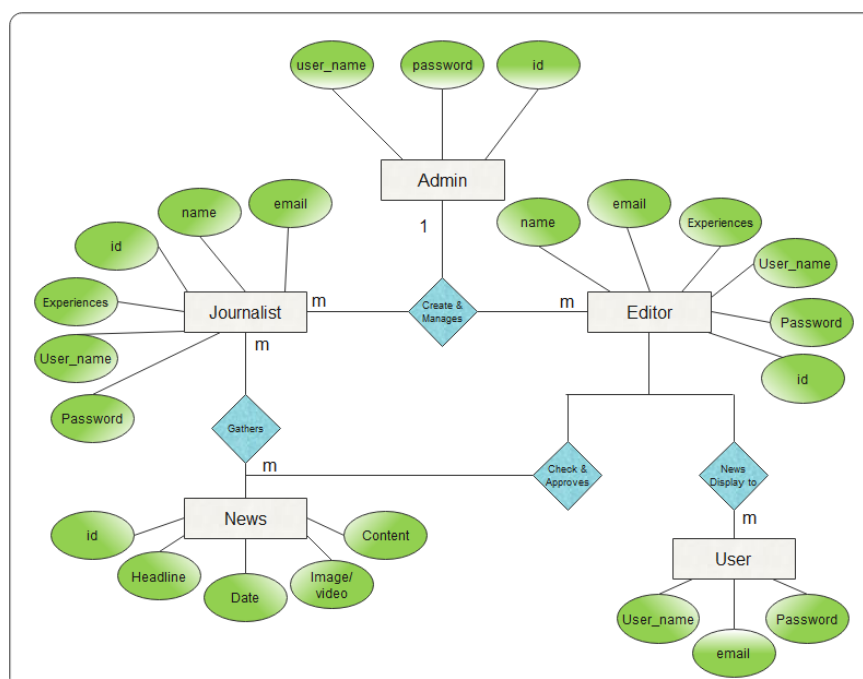
Design constraints:

Design phase deals with transforming the requirements, as described in the SRS document, into a form that is implemented using a programming language. The various designs of this system are shown as following:
graphical representation of flow of data throughout the information system. Data flow diagrams illustrate how data is processed by a system in terms of inputs and outputs.

<u>Name</u>	<u>Notation</u>	<u>Role</u>
Process		Transforms incoming data flow to output data flow
Data Store		Repositories of data in the system.
Dataflow		Dataflow are pipelines through which packets of information flow.
External Entity		External entities are objects outside the system, with which the system communicates

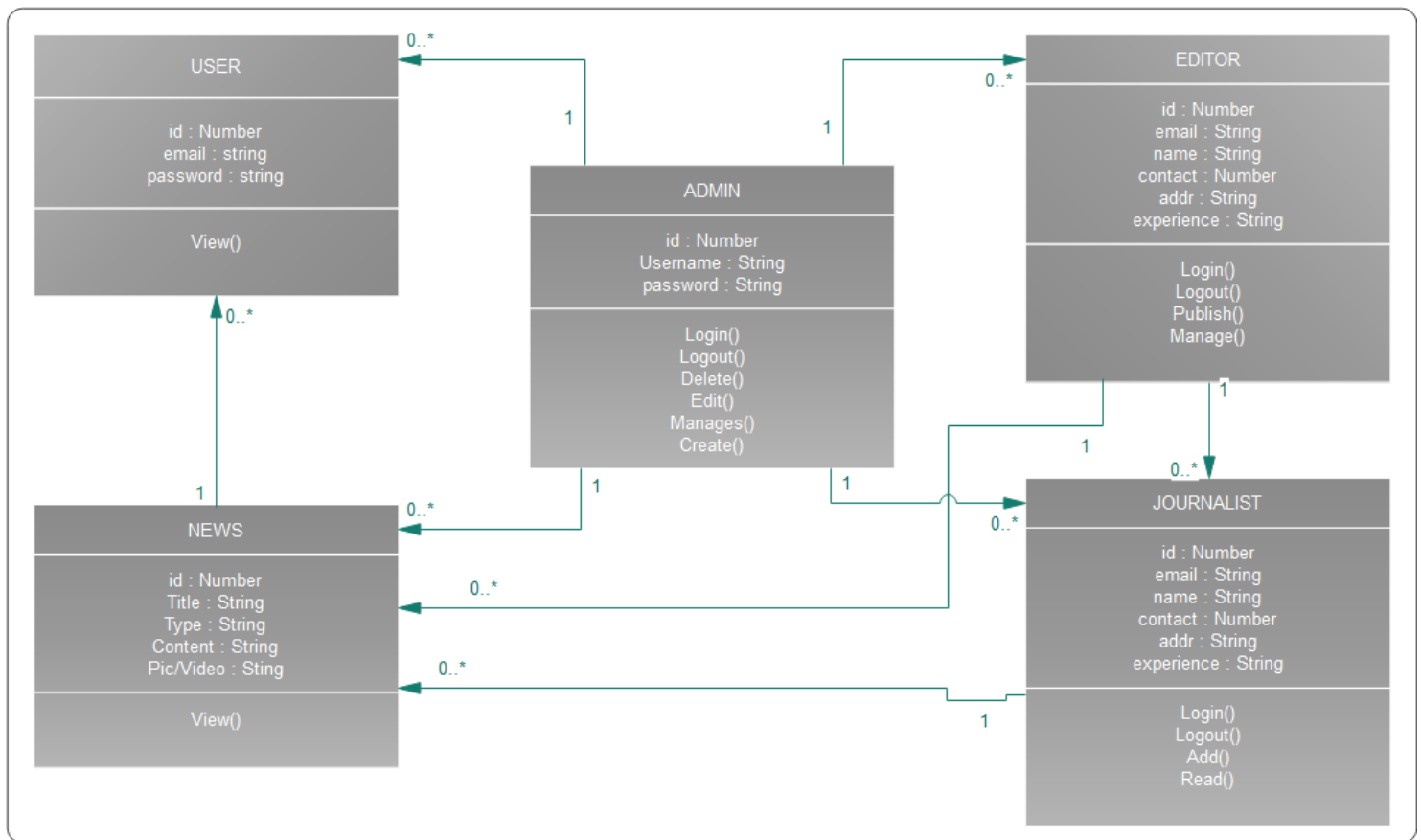
System Model:

ER DIAGRAM:

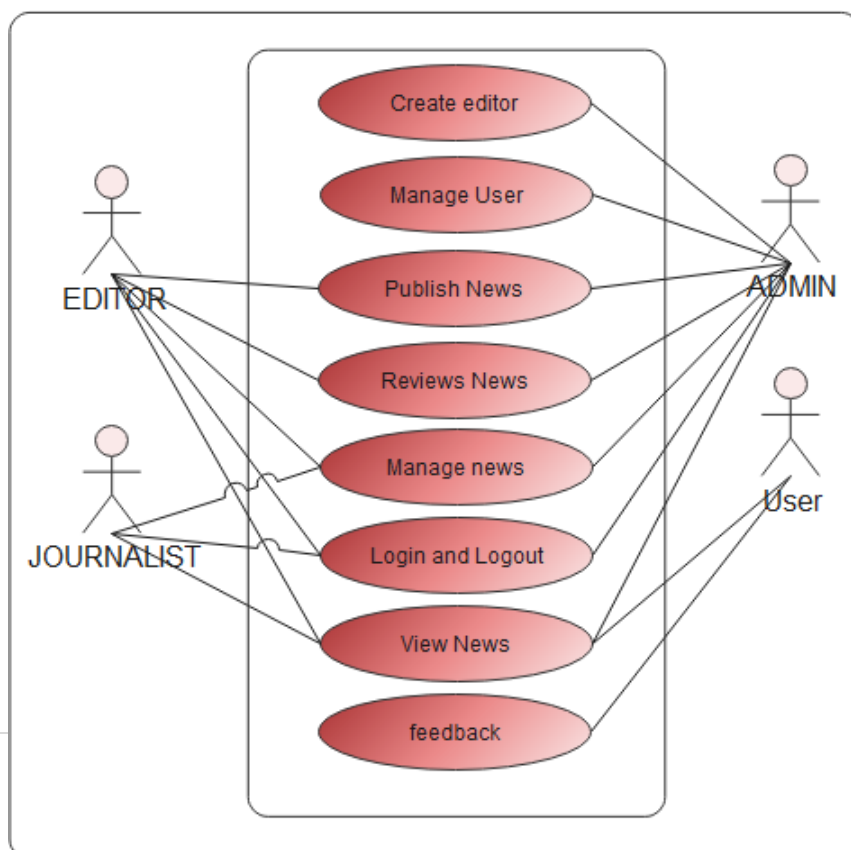


UML diagrams:

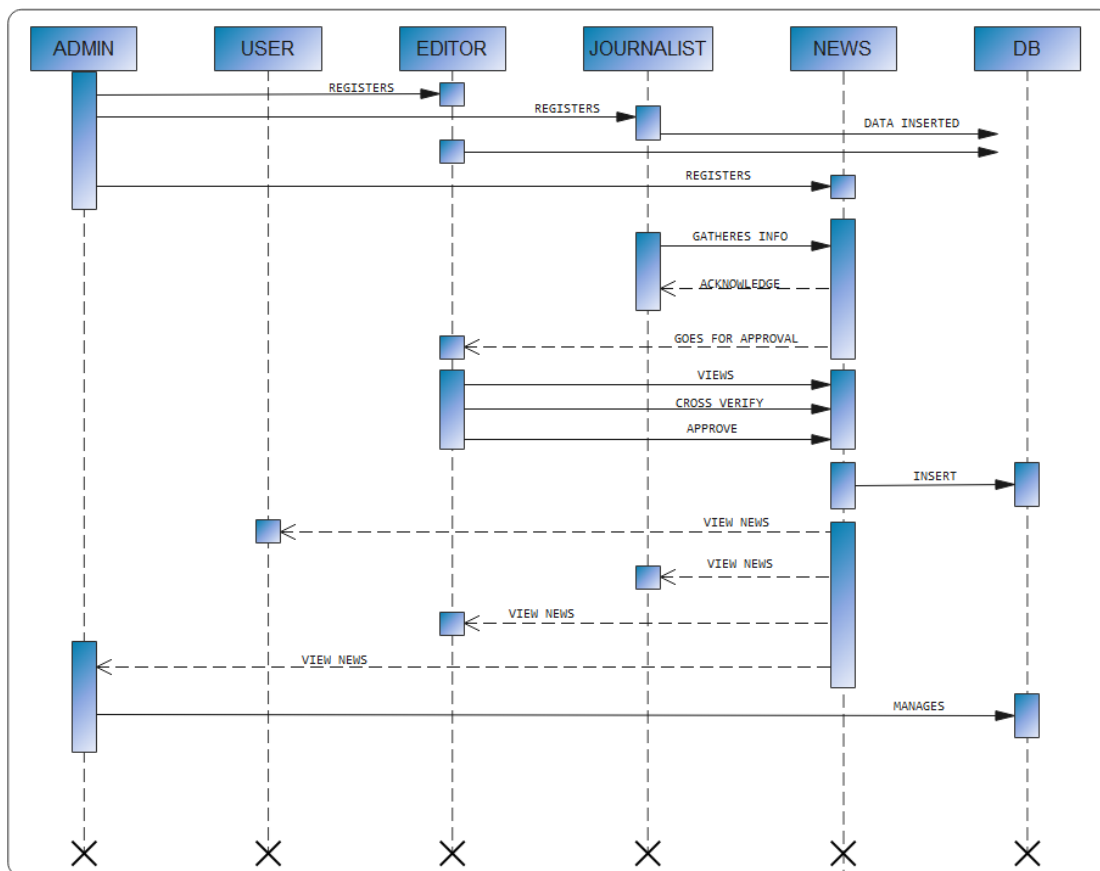
1. CLASS DIAGRAM:



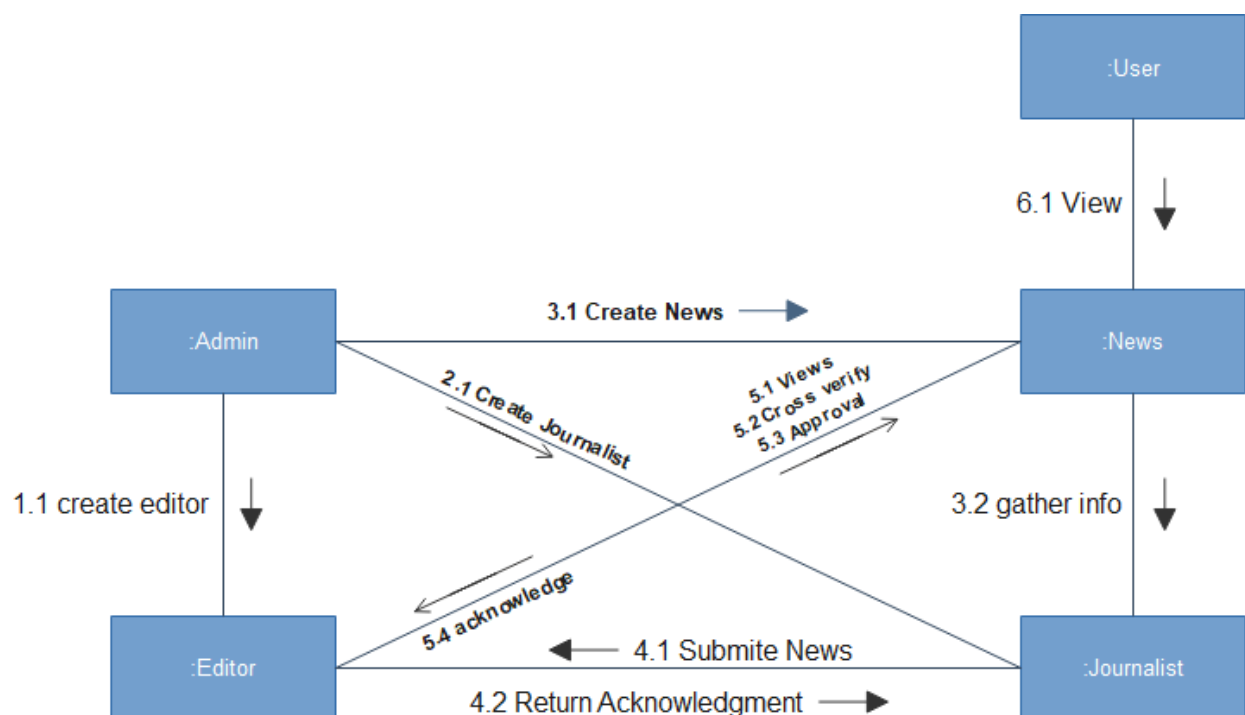
2. USE CASE DIAGRAM:



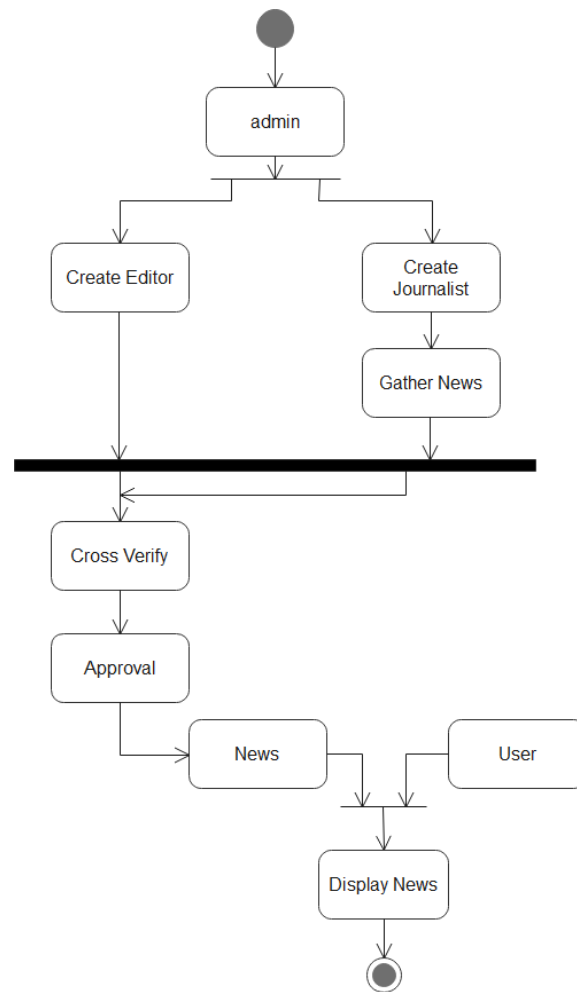
3. SEQUENCES DIAGRAM:



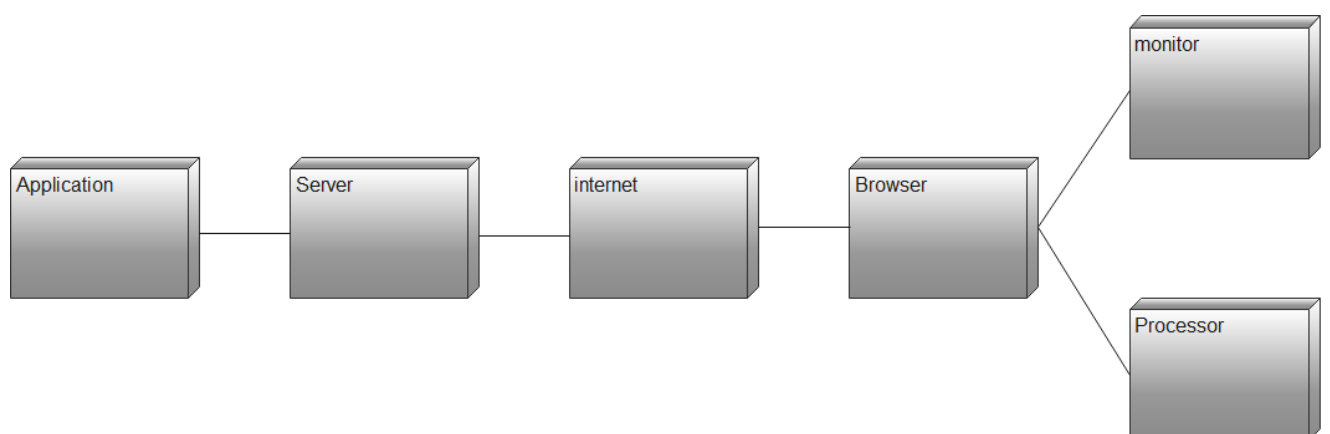
4. COLLABORATION DIAGRAM:



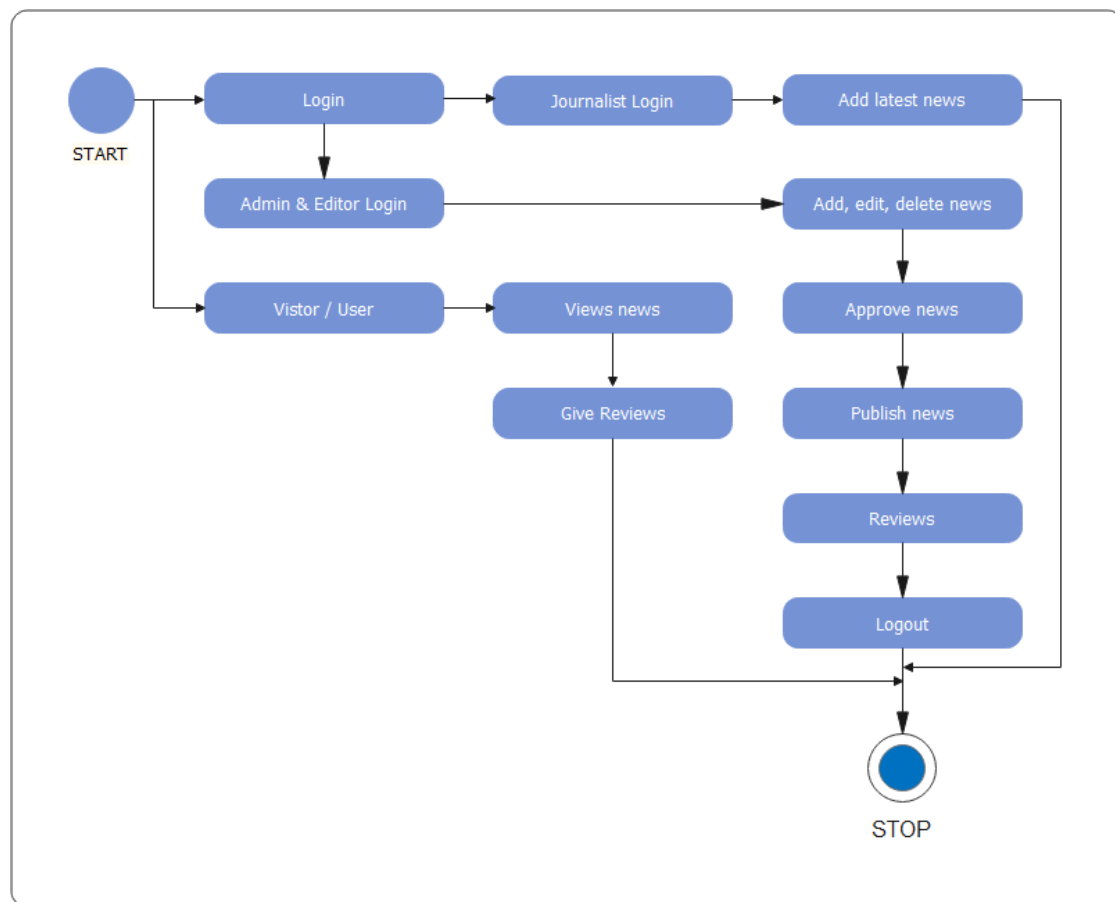
5. ACTIVITY DIAGRAM:



6. DEPLOYMENT DIAGRAM:



7. STATE CHART DIAGRAM:



Data Model:

Feedback:

Column Name	Data Type	Description
Id	Integer	Primary key
Date	Date	Date of feedback
user_email	String	User email
message	String	User feedback
news_id	Integer	Primary of news

Employees:

Column Name	Data Type	Description
id	Integer	Primary key
date	Date	Date of joining
name	String	Name of employee
role	String	Role of employee
email	String	Email of employee
mobile	Integer	Contact number of employee
address	String	Address of employee
high_Qualification	String	Highest qualification employee
experience	Integer	Experiences of employee
password	String	Password of employee

News event:

Column Name	Data Type	Description
id	Integer	Primary key
date	Date	Date of news
title	String	Headlines of news
sub_title	String	Title of news
description	String	New
new_type	String	Type of news
Image_url	Link	Path of image
location	String	Location of image
editor	String	Editor of news
journalist	String	Journalist of news
approve_date	String	Date of which news is approve
news_status	String	Status of news

User:

Column Name	Data Type	Description
id	Integer	Primary key
date	Date	Date of login
first_name	String	First name of user
last_name	String	last name of user
email	String	Email id of user
mobile	Integer	Contact number of user
password	String	Password of user

User interfaces:

News Express

Friday, 06 Aug, 2021

Home

Add News

Employees

Type


Users

Logout

Death surge looms over toll

The pandemic: Counting the Uncounted

Written by Sadaf | pune
Updated: 04/01/2008



TASHI TOBGYAL


How many people died of Covid during the brutal second wave in April and May? That question is key to not only understanding the scale of the unprecedented health tragedy but also to framing a policy prescription for any future re-surge. There's a practical imperative too — by August 14, the Centre needs to get back to the Supreme Court on how it plans to pay compensation to the next of kin of those who lost their lives to Covid-19. An investigation by The Indian Express team of reporters suggests that there is an undercount. But exactly how much may never be known — it can only be estimated and, that too, in at least a year given the way India counts its dead.

Post FeedBack

Tokyo 2020 Olympics: Lovlina Borgohain chases boxing history at home of sumo wrestling

Lovlina has assured herself of a bronze medal by making it to the semifinals in welterweight. But the 23-year-old has set her sights on gold.

Written by Ayesha | mumbai
Updated: 04/08/2021



www.indianexpress.com/tokyo2020olympics

Implementation details

Hardware Specifications:

At Developer End

- ☐ Processor: Intel Core i3(similar or Above)
- ☐ RAM: 2 GB or More
- ☐ Storage Capacity: 1 TB or More

At End User

- ☐ Processor: Intel i3 (similar or Above)
- ☐ RAM: 4 GB or More

Software Specifications:

At Developer End

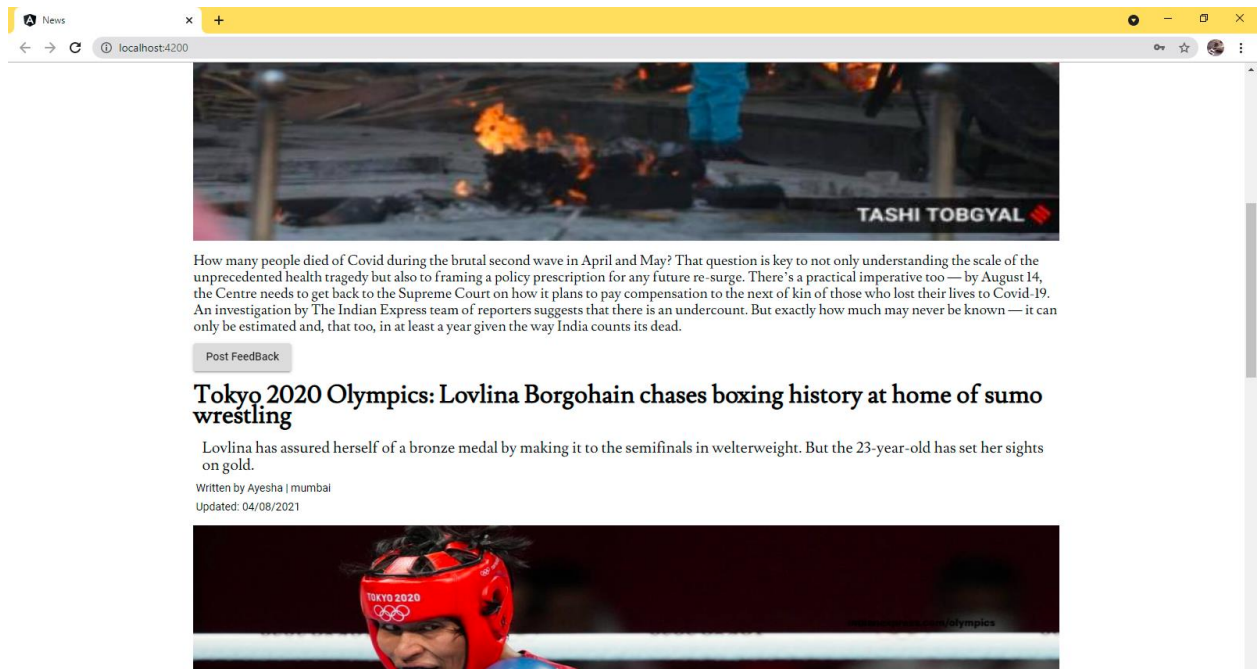
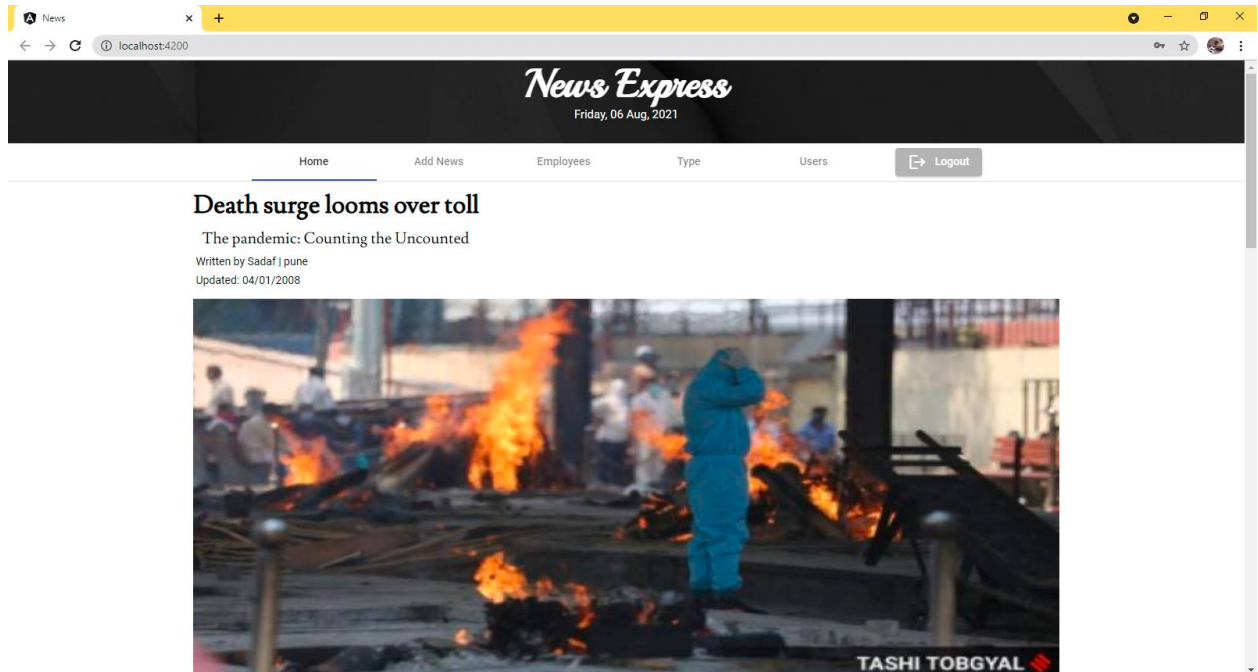
- ☐ Front-end: Angular Material
- ☐ Back-end: Node js.
- ☐ OS: Windows 10.
- ☐ Database: Mongo DB Compass

At End User

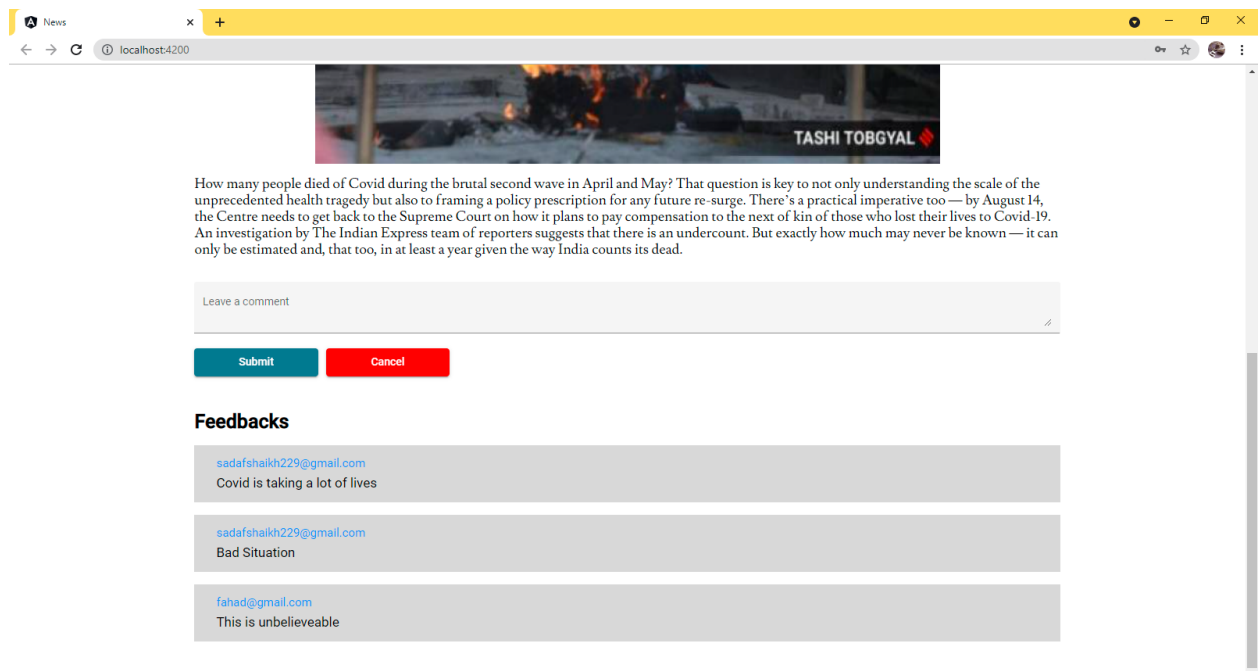
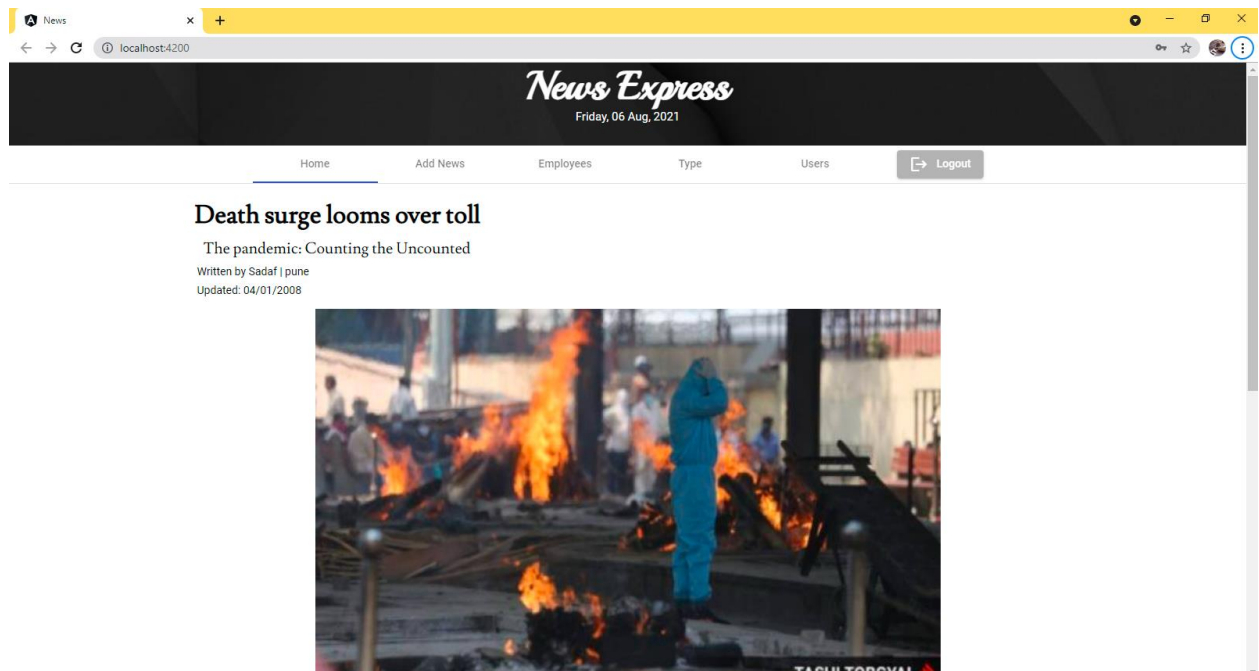
- ☐ Any Latest Web Browser.

Outputs and Reports

Home Page of Admin



Comment Page



Add News, News List and Pending News List

The screenshot shows the 'News Express' web application interface. The header includes the logo and the date 'Friday, 06 Aug, 2021'. The navigation bar has links for Home, Add News, Employees, Type, Users, and a Logout button. The main content area is titled 'Create Event' and contains a form with the following fields:

- Title (text input)
- Sub Title (text input)
- Approved Date (calendar icon)
- Type (text input)
- Image URL (text input)
- Location (text input)
- Editor Name (text input)
- Journalist Name (text input)
- Complete News (text area)

At the bottom of the form are 'Cancel' and 'Submit' buttons. Below the form is a section titled 'All Events' which displays a table of events.

ID	Headline	Type	Location	Editor	Journalist	Uploaded Date	Delete
610f86ed7980a22d28d26070	How PV Sindhu forgets her losses and moves on to the next medal	sports	satara	Uzma	Nida	08/08/2021	
610a1341bb7185279c62f7db	Death surge looms over toll	death	pune	Sadaf	Sami	04/01/2008	
610a1872bb7185279c62f7e0	Tokyo 2020 Olympics: Lovlina Borgohain chases boxing history at home of sumo wrestling	sports	mumbai	Ayesha	Fatima	04/08/2021	
610a3cc2bb7185279c62f7e6	How many died of Covid?	covid	pune	nida	ayasha	04/08/2021	

Today's pending news

The screenshot shows the 'Pending Events' section of the News Express web application. It includes a 'Filter your List' dropdown menu set to 'Today'. Below the filter is a table of pending events.

ID	Headline	Location	Journalist	Uploaded Date	Status	Actions	Delete
610f8a037980a22d28d26072	Despite Covid curbs, Lonavala and Khandala see heavy weekend rush of tourists	lonavla	Nida	08/08/2021	pending		

All pending news

ID	Headline	Type	Location	Editor	Journalist	Uploaded Date	Delete
610f86ed7980a22d28d26070	How PV Sindhu forgets her losses and moves on to the next medal	sports	satara	Uzma	Nida	08/08/2021	
610a1341bb7185279c62f7db	Death surge looms over toll	death	pune	Sadaf	Sami	04/01/2008	
610a1872bb7185279c62f7e0	Tokyo 2020 Olympics: Lovlina Borgohain chases boxing history at home of sumo wrestling	sports	mumbai	Ayesha	Fatima	04/08/2021	
610a3cc2bb7185279c62f7e6	How many died of Covid?	covid	pune	nida	ayesha	04/08/2021	

Pending Events
Filter your List

Select
All

ID	Headline	Location	Journalist	Uploaded Date	Status	Actions	Delete
610f89097980a22d28d26071	Weather Today Live Updates: Rain lashes parts of Delhi; 4 people killed in West Bengal floods	mumbai	Nida	07/08/2021	pending		
610f8a037980a22d28d26072	Despite Covid curbs, Lonavala and Khandala see heavy weekend rush of tourists	lonavla	Nida	08/08/2021	pending		
610cd9eaea070d48e8dd24ab	Tokyo Olympics 2021 India, Day 14 Live Updates: Bajrang Punia one win away from medal, India women lose hockey bronze	satara	Nida	07/08/2021	pending		

Employee List

News Express Friday, 06 Aug, 2021								
Home	Add News	Employees	Type	Users	Logout			

Employees Create Employee

User ID	Name	Role	Email	Experience	Edit	Delete	Mail
610a1106bb7185279c62f7da	Sadaf Shaikh	Admin	sadafshaikh229@gmail.com	1			
610a15e5bb7185279c62f7de	uzma	editor	uz.shaikh02@gmail.com	2			
610a1642bb7185279c62f7df	Nida	journalist	nidashaikh1509@gmail.com	3			

Create Employee Page

The screenshot shows a web browser window with the URL 'localhost:4200'. The page header features the 'News Express' logo and the date 'Friday, 06 Aug, 2021'. The navigation bar includes links for 'Home', 'Add News', 'Employees', 'Type', 'Users', and a 'Logout' button. The 'Employees' section is active, displaying a form titled 'Employees' with a 'Back' button. The form contains the following fields:

Name	Role
Email	Phone number *
Highest Qualification	Experience
Aadhar Number	Password
Address	

A 'Submit' button is located at the bottom of the form.

Send Mail

The screenshot shows the same web browser window as before, but with a 'Send Mail' modal open. The modal has a title 'Send Mail' and contains the following information:

Recievers Name: Nida
Recievers Email: nidashaikh1509@gmail.com

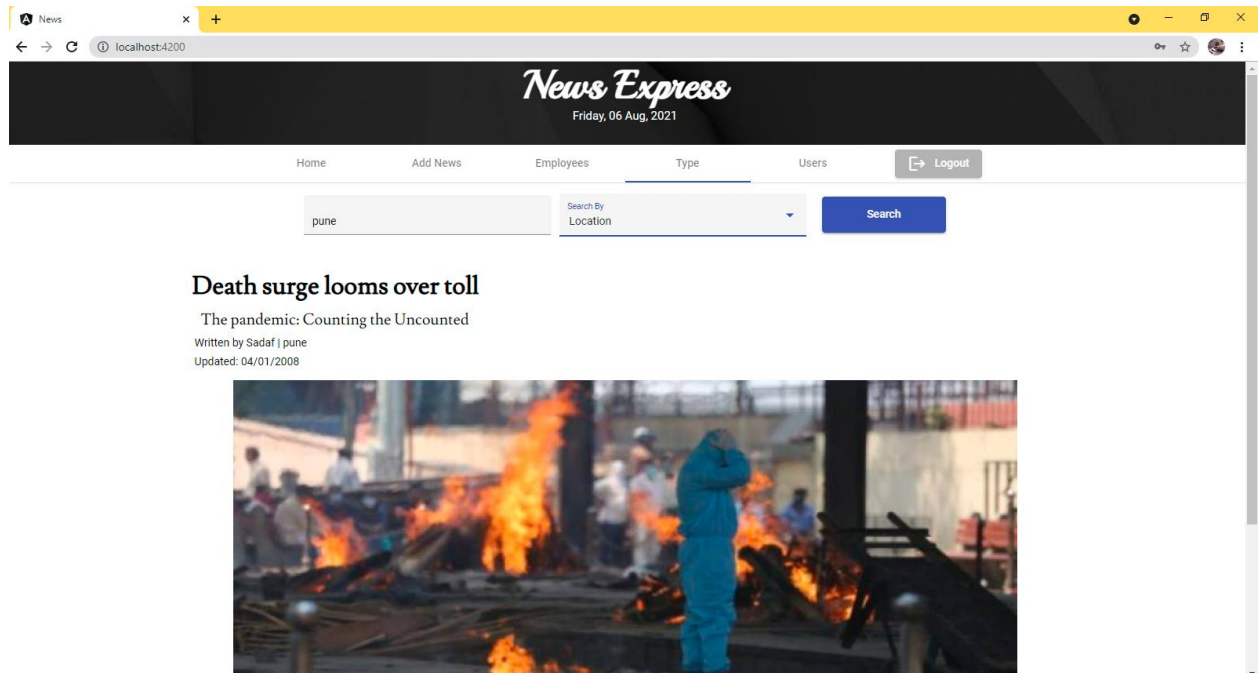
Enter your message

Buttons: Send, Close

The background shows the 'Employees' table with the following data:

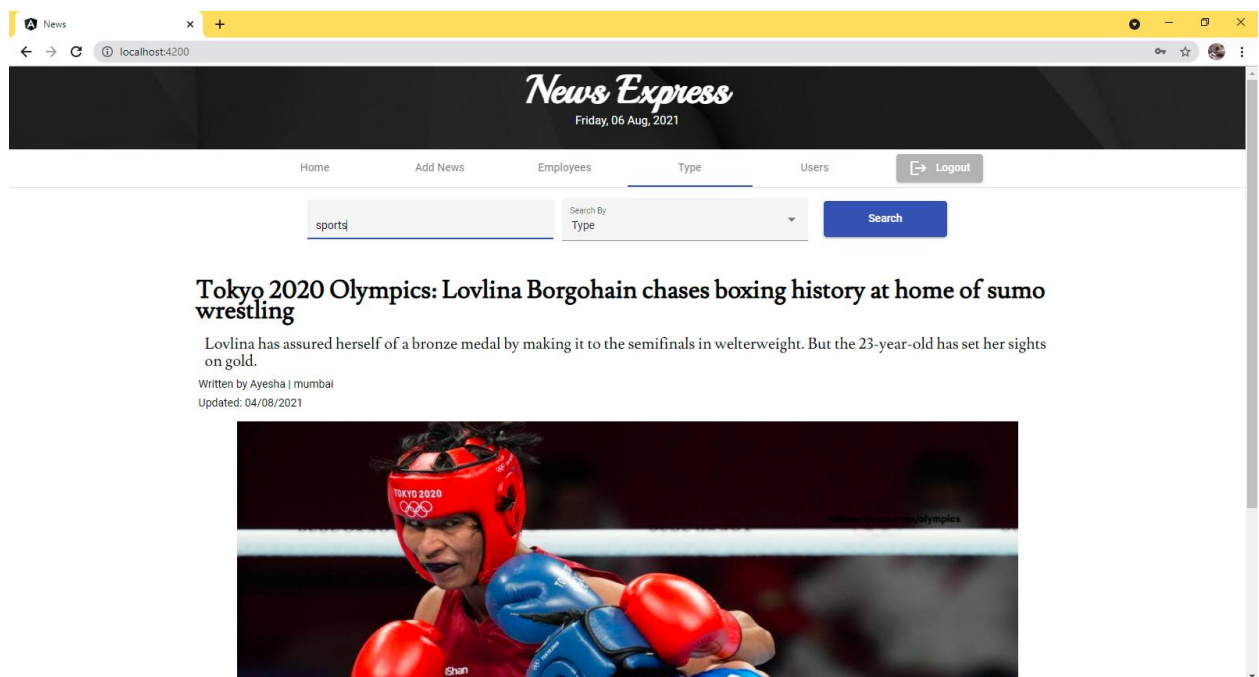
User ID	Name	Role	Email	Experience	Edit	Delete	Mail
610a1106bb7185279c62f7da	Sadaf Shaikh	Admin	sadafshaikh229@gmail.com	1			
610a15e5bb7185279c62f7de	uzma	editor	uz.shaikh02@gmail.com	2			
610a1642bb7185279c62f7df	Nida	journalist	nidashaikh1509@gmail.com	3			

Search By Location



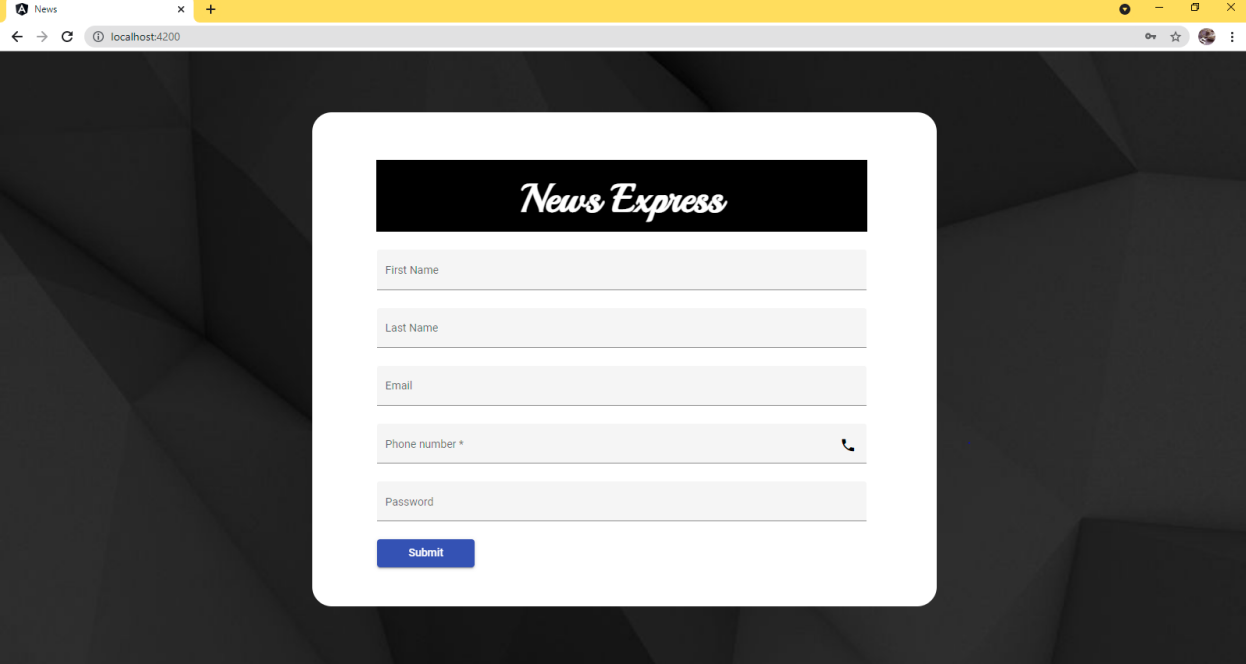
The screenshot shows a web browser window with the URL 'localhost:4200'. The page header features the 'News Express' logo and the date 'Friday, 06 Aug, 2021'. The navigation bar includes links for 'Home', 'Add News', 'Employees', 'Type', 'Users', and a 'Logout' button. Below the navigation bar, there is a search section with a text input field containing 'pune', a dropdown menu labeled 'Search By Location', and a 'Search' button. The search results display a news article titled 'Death surge looms over toll' with the subtitle 'The pandemic: Counting the Uncounted'. The article is attributed to 'Written by Sadaf | pune' and 'Updated: 04/01/2008'. The main image of the article shows a person in a blue protective suit standing near a large fire.

Search By Type



The screenshot shows a web browser window with the URL 'localhost:4200'. The page header features the 'News Express' logo and the date 'Friday, 06 Aug, 2021'. The navigation bar includes links for 'Home', 'Add News', 'Employees', 'Type', 'Users', and a 'Logout' button. Below the navigation bar, there is a search section with a text input field containing 'sports', a dropdown menu labeled 'Search By Type', and a 'Search' button. The search results display a news article titled 'Tokyo 2020 Olympics: Lovlina Borgohain chases boxing history at home of sumo wrestling'. The article is attributed to 'Written by Ayesha | mumbai' and 'Updated: 04/08/2021'. The main image of the article shows a boxer in a red headgear and blue gloves, with 'Tokyo 2020' and 'Ghan' visible on the gear.

User Signup Page



The screenshot shows a web browser window with a yellow header bar. The address bar displays 'localhost:4200'. The main content area has a dark background with a white modal box in the center. The modal box contains the 'News Express' logo at the top, followed by input fields for 'First Name', 'Last Name', 'Email', 'Phone number *', and 'Password'. A blue 'Submit' button is at the bottom of the modal.

News Express

First Name

Last Name

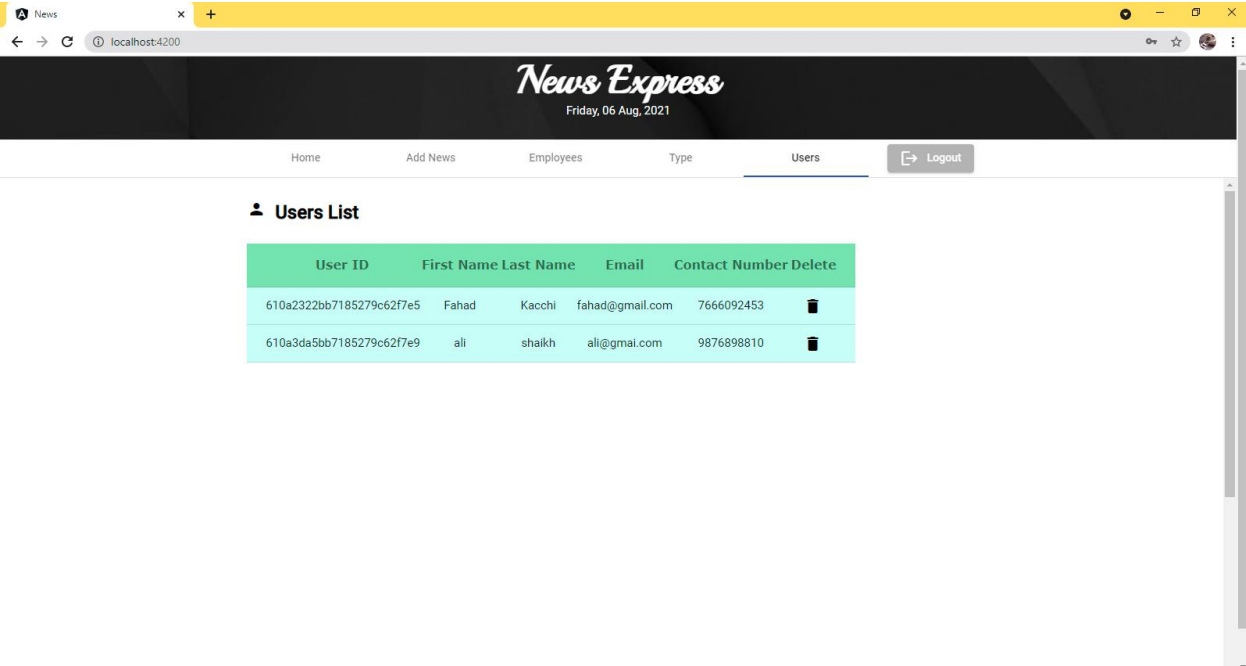
Email

Phone number *

Password

Submit

Employee List





The screenshot shows a web browser window with a yellow header bar. The address bar displays 'localhost:4200'. The main content area has a dark background with a white modal box in the center. The modal box contains the 'News Express' logo at the top, followed by input fields for 'First Name', 'Last Name', 'Email', 'Phone number *', and 'Password'. A blue 'Submit' button is at the bottom of the modal.

News Express

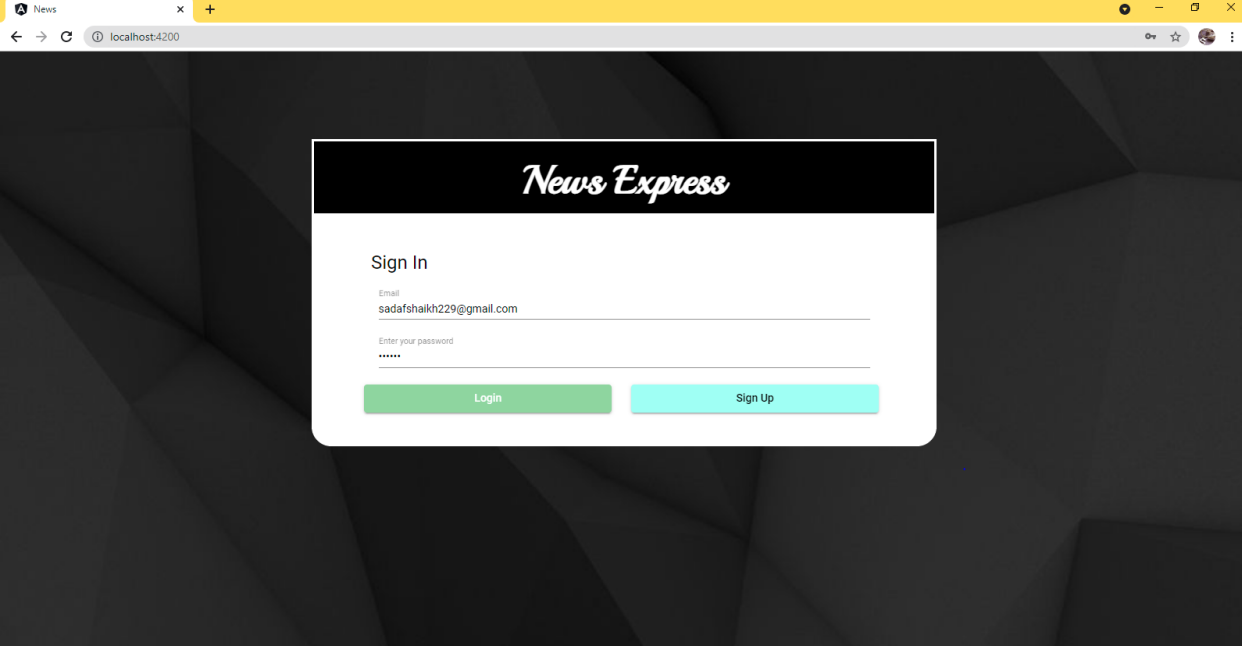
Friday, 06 Aug, 2021

Home Add News Employees Type Users Logout

Users List

User ID	First Name	Last Name	Email	Contact Number	Delete
610a2322bb7185279c62f7e5	Fahad	Kacchi	fahad@gmail.com	7666092453	
610a3da5bb7185279c62f7e9	ali	shaikh	ali@gmail.com	9876898810	

Sign In Page



News Express

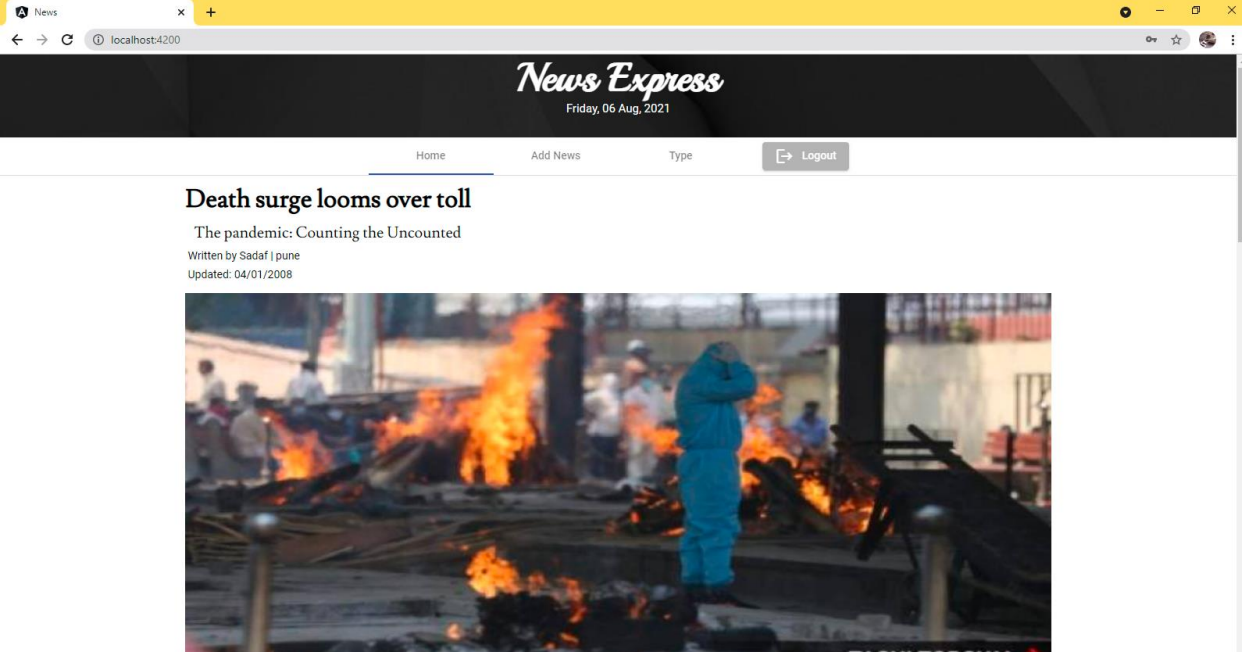
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Email
sadafshalkh229@gmail.com

Enter your password

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Editors Screen



News Express


Friday, 06 Aug, 2021

Home Add News Type Logout

Death surge looms over toll

The pandemic: Counting the Uncounted

Written by Sadaf | pune
Updated: 04/01/2008



TASHI TOBGYAL

News

localhost:4200

News Express
Friday, 06 Aug, 2021

HomeAdd NewsTypeLogout

Create Event

Title	Sub Title
Approved Date	Type
Image URL	Location
Editor Name	Journalist Name
Complete News	

Cancel
Submit

All Events

ID	Headline	Type	Location	Editor	Journalist	Uploaded Date	Delete
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News

localhost:4200

Complete News

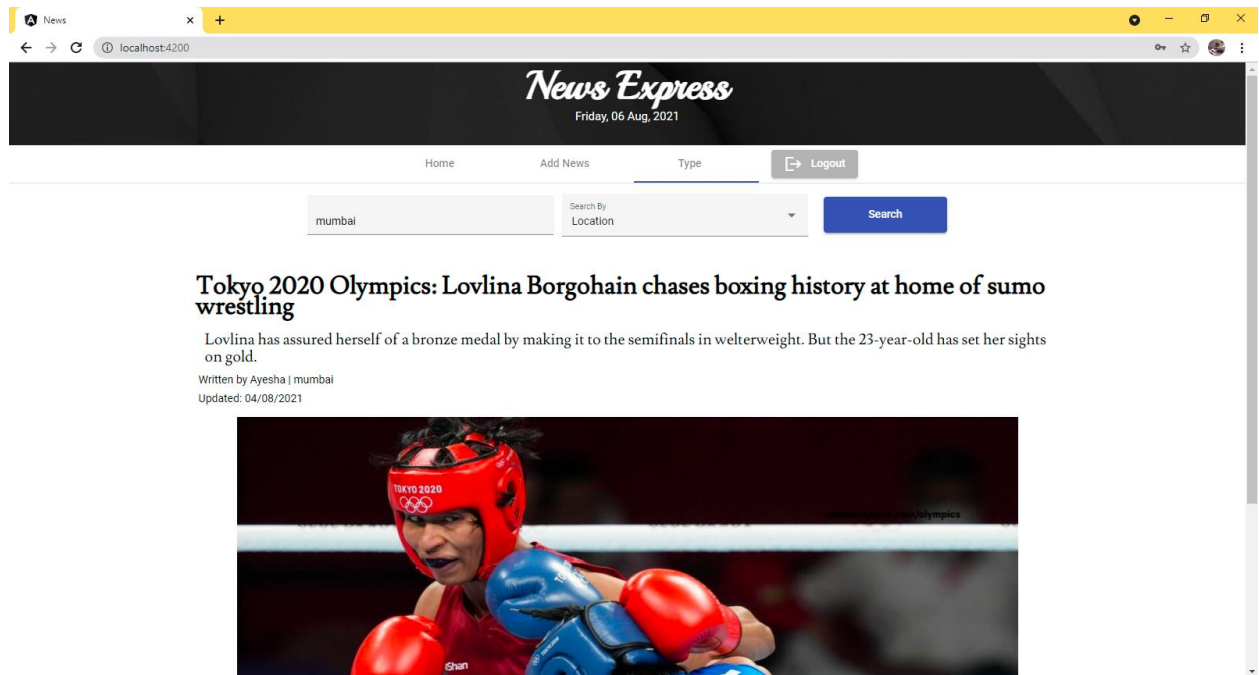
Cancel Submit

All Events

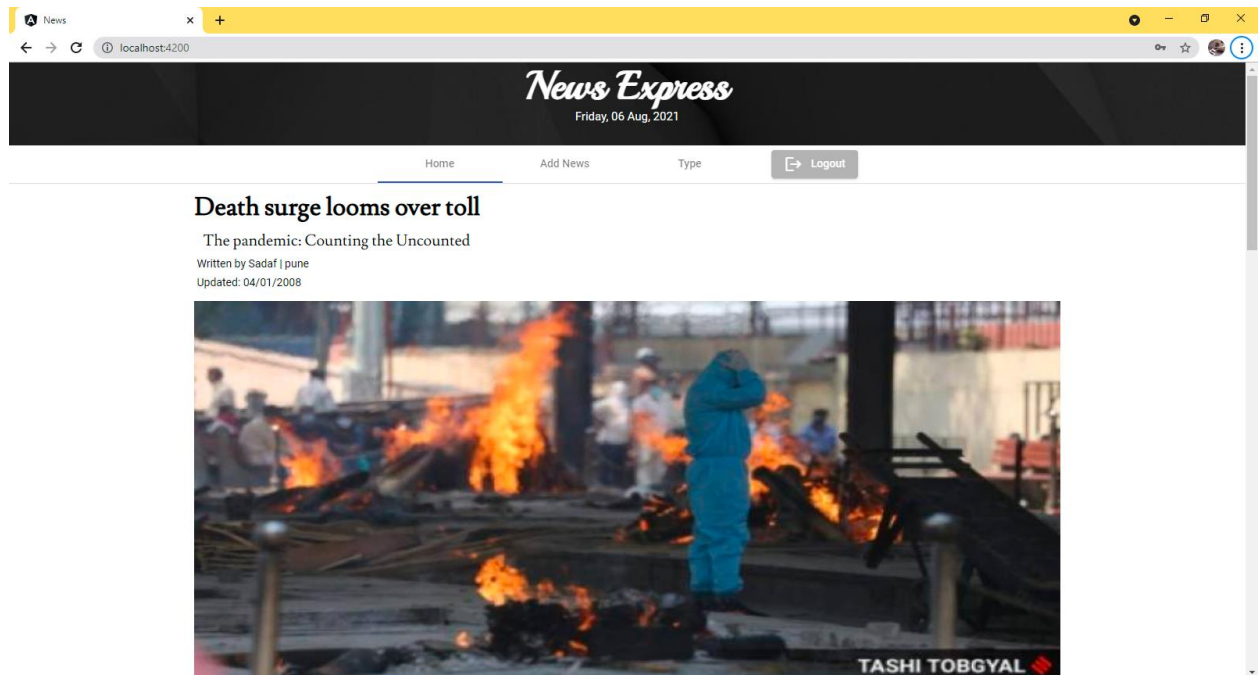
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610a1872bb7185279c62f7e0	Tokyo 2020 Olympics: Lovlina Borgohain chases boxing history at home of sumo wrestling	sports	mumbai	Ayesha	Fatima	04/08/2021	
610a3cc2bb7185279c62f7e6	How many died of Covid?	covid	pune	nida	ayesha	04/08/2021	

Pending Events

ID	Headline	Location	Journalist	Uploaded Date	Status	Actions	Delete
610cd9eaea070d48e8dd24ab	Tokyo Olympics 2021 India, Day 14 Live Updates: Bajrang Punia one win away from medal, India women lose hockey bronze	satara	Nida	07/08/2021	pending	✓	



Journalist Screen



News

localhost:4200

News Express

Friday, 06 Aug, 2021

Home

Add News

Type

Logout

Create Event

Title

Sub Title

Approved Date

Type

Image URL

Location

Editor Name

Journalist Name

Complete News

Cancel

Submit

News

localhost:4200

News Express

Friday, 06 Aug, 2021

Home

Add News

Type

Logout

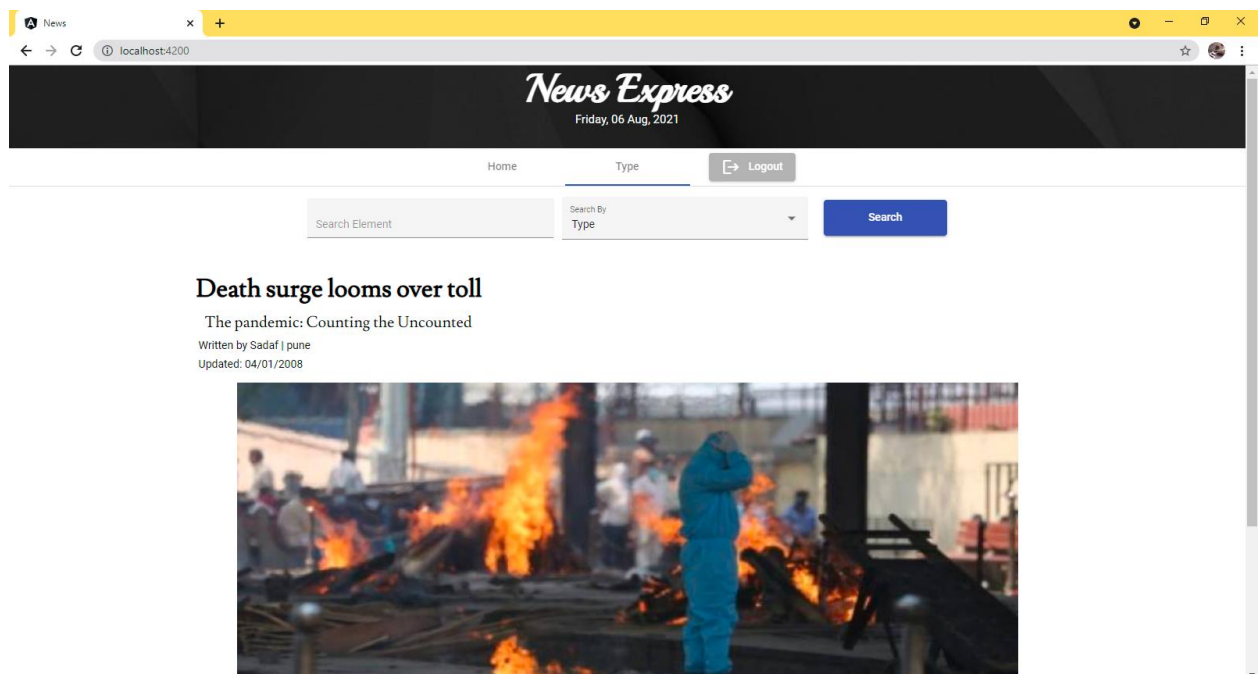
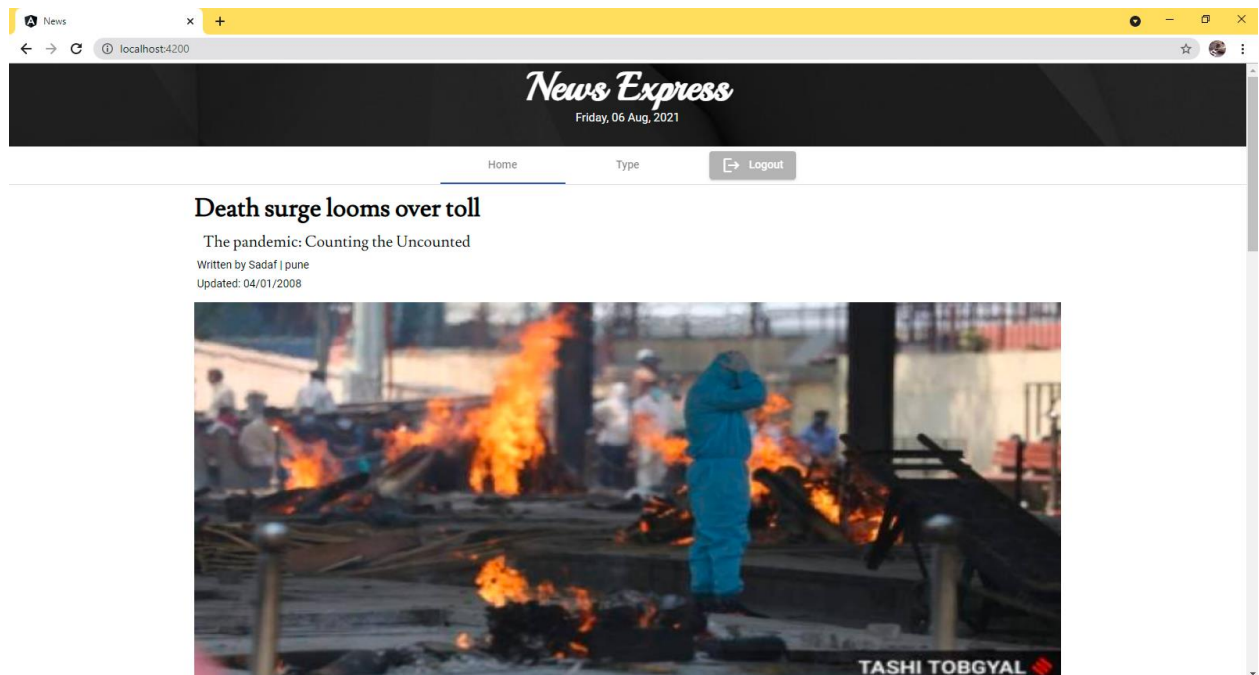
weather

Search By
Type

Search

News Not Found

User Screen



Testing

Introduction

The importance of software testing and its implication with respect to s/w quality can't be overemphasized. S/W testing is a critical element of s/w quality assurance and represents the ultimate review of specification, design and coding.

S/W testing is simply how easily a computer program can be tested. As per Glen Myers there are three objectives for testing which are as follows:

- Testing is a process of executing a program with the intent of finding an error.
- A good test case is one that has a high probability of finding as yet undiscovered error.
- A successful test is one that uncovers as yet undiscovered error.

Testing can't show the absence of errors, it can only show that s/w errors are present.

Therefore it is necessary to keep this in mind while conducting the testing part of s/w.

There are many testing principles as recommended by Davis, According to these principles, the testing phase of this project done. These are as follows:

- All tests should be traceable to customer requirements. The testing should be done in the front of some of users to show the functionality of the system.
- Test should be planned long before testing begins.
- Testing should begin "In the small" and progress towards testing "In the large".
- To the most effective an independent third party should conduct testing.

Falk, and Nguyen suggest the following attributes of a "good" test:

- A good test has a high probability of finding out the errors.
- A good test is not redundant.
- A good test should be neither too simple nor too complex

In addition, data collected as testing is conducted provide a good indication of software reliability and some indication of software quality as a whole.

Testing Methodologies

We tested our system according to methodologies and testing methodologies adopted are:

- > Unit Testing.
- > Sub-System testing.
- > System testing.
- > Acceptance testing

UNIT TESTING (WHITE BOX TESTING)

Each module of the system was tested separately to ensure its proper functioning.

Activities follows in the unit testing are:

- Ensure all loops are terminated properly in this system.
- Identification and removal of abnormal termination of all loops.
- Ensuring the all errors was trapped. We ensured that the system trapped all the errors by working on all the option we have in this system. For example, we make sure that the pages will give an error messages or will not accepts the invalid values.
- Check the values returned from the called program. We checked the values returned by filling every forms of every option. We also checked the database to make sure that corresponding fields have their respective or accepted values.
- Check if all hyperlinks are provided with correct links . We check the sequence of the working of the system by the clicking all the option one by one. Checks the forms by filling the possible values.

SUB SYSTEM TESTING:

A sub system testing is a collection of modules. All subsystems were tested to ensure dataflow correctness, functional validity and interface integrity. As soon as the modules were completed we tried to check it immediately to ensure that there is no error. For example the administrator can delete the inappropriate topics, comments posted by users, activating the posts and comments etc.

SYSTEM TESTING:

This testing was done once al the subsystems had been completely developed and tested independently. The system was tested to ensure proper interaction between al the subsystems. It ensures the actual working of the system. For example, only the registered user has permission to post a new topics and comments. Unregistered user can only view the posts and comments.

ACCEPTANCE TESTING (BLACK BOX TESTING)

This was the latest phase in the system testing process. The system was tested to check if confirmed to the customer's requirements. All the employee of Technical department tested the respective system according to his or her requirements.

GUI Testing:

GUI testing is a process to test application's user interface and to detect if application is functionally correct. GUI testing involves carrying set of tasks and comparing the result of same with the expected output and ability to repeat same set of tasks multiple times with different data input and same level of accuracy.

GUI Testing includes how the application handles keyboard and mouse events, how different GUI components like menu bars, toolbars, dialogs, buttons, edit fields, list controls, images etc. reacts to user input and whether or not it performs in the desired manner. Implementing GUI testing for your application early in the software development cycle speeds up development, improves quality and reduces risks towards the end of the cycle

Because many modern GUI have the same look and feel, a series of standard tests can be derived. Finite state modeling graph may be used to derive a series of tests that address specific data and program objects that are relevant to the GUI.

GUI testing is also known as Functional Testing. Functional testing is a testing process to derive a set of input conditions that will fully exercise all functional requirements for a program It emphasizes to find error in following categories:

1. Incorrect or missing functions.
2. Interface errors.
3. Error in data structure or external database access.
4. Performance errors.

Database Testing:

This will include the correctness of the data that will ensure the following features:

- Database schema reflects exactly as per the design.
- Security and Privacy features are protested properly.
- All the data in the database is correct.
- Check for duplications, naming conventions is done.
- DBMS performs all the functions of insertion, deletion and updating correctly.
- Check for table record, attributes, primary key, foreign key, referential integrity constraints.
- Observing the state of the database before and after testing.
- Using equivalence partitioning and boundary value analysis where the data needs to be specified in a specific range.

Conclusion and Recommendations

In our project work, an attempt has been made to develop a News or information based web site. We develop this project that helps the people and make them aware so that they can know any news. To establish this website we use various methodologies. To develop this project we have faced many problem but we hardly tried to develop this project. Our supervisor helped us by giving his valuable opinion, decision and time

This project was an excellent learning process which has helped us develop our skills to a great extent as it taught us the way to handle a enterprise resources and meet their needs by the way of actually searching for the required references material and then find the exact required solution through the vast reference material.

This project has helped us to learn the in-depth of angular material and node js. I hope this project to be the base of our future project and once again I would like to everyone involved with the creation of this project

Future Scope

Many newspapers have embraced the Internet and use their own websites to post news, but their online revenue is a fraction of what they get from print advertising and subscriptions

Newspapers will continue shutting down, and online content will play an increasingly significant role. Being able to assess whether a particular project has the potential to succeed is an important part of any web designer, developer or blogger's job, and also one of the most difficult.

No developed system can claim that the system is perfect and there is no flaw in the system. The same applies to Local news portal, this system also has areas which improved could make the system versatile.

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