

Project Report

DBMS

“News4You”

Made by: Apoorv Tomar

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Overview

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 - b) Relation Tables
 - c) Snapshot of Tuples in tables
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3. DML Statements-Snapshots of UI
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Description

News4You is a news aggregator website i.e. it collects news from various news aggregating platform (through their REST API.) and displays it on the website.

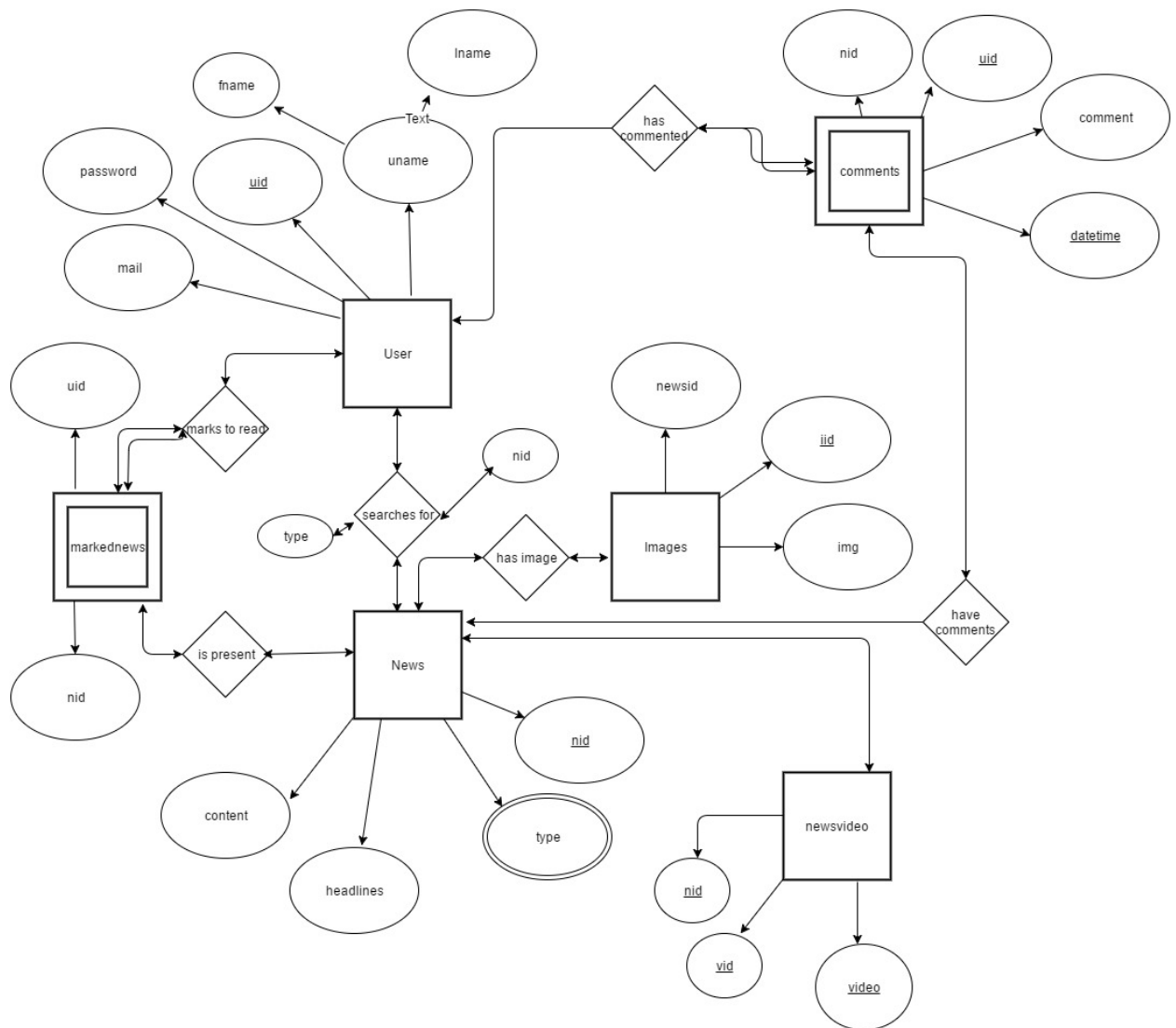
Features:

- 1) It provides its users a single platform which displays news from various Media sources in Real time.
- 2) It offers Diverse News content to its Users. Users can view World, Business, Sports, Technology And Entertainment news.
- 3) News may include articles, videos etc.
- 4) Users can also interact with other users by commenting on news posts. They can share their opinion, debate etc in the comment section of each news post. They can even comment as “Anonymous” to protect their privacy.
- 5) User can also mark news to read the post later.

Database Design

A) ER Diagram

Entity Relationship Diagram



B) Relation tables

Users

<u>Uid</u>	Uname	Fname	Lname	Password	Mail	Authkey	status
------------	-------	-------	-------	----------	------	---------	--------

news

<u>Nid</u>	date	Headlines	Content
------------	------	-----------	---------

comments

Nid	Uid	Datetime
-----	-----	----------

marked_news

Uid	nid
-----	-----

images

Newsid	<u>Iid</u>	image
--------	------------	-------

Newsvideo

Nid	Vid	Video
-----	-----	-------

Log

Timestamp	Action
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C) NewsAggregator DATABASE

The screenshot displays the phpMyAdmin web interface for a MySQL database named 'news_aggregator'. The left sidebar shows the database hierarchy, including 'dbms lab', 'information_schema', 'mysql', 'news_aggregator', 'performance_schema', 'phpmyadmin', 'stm', and 'test'. The 'news_aggregator' database is selected, and the 'Tables' tab is active, listing the following tables: 'comments', 'images', 'marked_news', 'news', 'newsvideo', 'rokrapoov', and 'users'. The main panel shows the 'Structure' tab for the 'news_aggregator' database, displaying a table list with columns: 'Table', 'Action', 'Rows', 'Type', 'Collation', 'Size', and 'Overhead'. The table list includes the following data:

Table	Action	Rows	Type	Collation	Size	Overhead
comments	Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	32 KiB	-
images	Browse Structure Search Insert Empty Drop	13	InnoDB	latin1_swedish_ci	112 KiB	-
marked_news	Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16 KiB	-
news	Browse Structure Search Insert Empty Drop	15	InnoDB	latin1_swedish_ci	96 KiB	-
newsvideo	Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	32 KiB	-
rokrapoov	Browse Structure Search Insert Empty Drop	~0	View	---	-	-
users	Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	48 KiB	-
7 table(s) Sum		~33	InnoDB	latin1_swedish_ci	336 KiB	0 B

Below the table list, there is a 'Check all' button and a 'With selected:' dropdown menu. At the bottom, there is a 'Print view' button and a 'Data dictionary' button. A 'Create table' button is also visible, with a form for 'Name:' and 'Number of columns:' (set to 4).

PRIMARY TABLES

+ Options

	uid	fname	lname	email	username	password	auth_key	active_status
<input type="checkbox"/> Edit Copy Delete	1	Apoorv	Tomar	apoorv.tomar95@gmail.com	rokrapoorv	97384261b8bbf966df16e5ad509922db	0	1
<input type="checkbox"/> Edit Copy Delete	2	Raj	Kumar	kmrrajji@gmail.com	Rajjo	32250170a0dca92d53ec9624f336ca24	0	1

Check all With selected: Edit Copy Delete Export

Users: It is the primary table which is used for storing credentials of users.

+ Options

	nid	type	date	content	headlines
<input type="checkbox"/> Edit Copy Delete	1	World	2016-10-23	ALEPPO: Heavy clashes erupted between regime and r...	Clashes, artillery fire hit Aleppo after truce exp...
<input type="checkbox"/> Edit Copy Delete	2	World	2016-10-23	QAYYARAH, IRAQ: Toxic fumes released when IS milit...	Fumes from IS-torched sulphur plant near Mosul kil...
<input type="checkbox"/> Edit Copy Delete	3	World	2016-10-23	CLEVELAND: Donald Trump says he will win the Novem...	Trump says he will win general elections
<input type="checkbox"/> Edit Copy Delete	4	Tech	2016-10-23	Although Samsung's Galaxy line-up of smartphones is...	SAMSUNG GALAXY J7 PRIME
<input type="checkbox"/> Edit Copy Delete	5	Tech	2016-10-23	In what has been termed one of the biggest data br...	Over 30 lakh debit cards hacked in India: 15 lates...
<input type="checkbox"/> Edit Copy Delete	6	Tech	2016-10-23	BENGALURU: In maker spaces across the country, peo...	Tinkering goes high tech
<input type="checkbox"/> Edit Copy Delete	7	Business	2016-10-23	NEW DELHI: Country's largest car maker Maruti Suzu...	Six Maruti models in top ten list in first half of...
<input type="checkbox"/> Edit Copy Delete	8	Business	2016-10-23	INDORE: Individuals and entities can pay taxes onl...	GST can be paid using debit, credit cards: Revenue...
<input type="checkbox"/> Edit Copy Delete	9	Business	2016-10-23	INDORE: Taking a jab at Indian industry, Union fin...	Private players must catch up with govt: FM to Ind...
<input type="checkbox"/> Edit Copy Delete	10	Sports	2016-10-23	MADRID: Lionel Messi's 94th-minute penalty moved B...	Messi penalty snatches thrilling Barcelona win
<input type="checkbox"/> Edit Copy Delete	11	Sports	2016-10-23	The Supreme Court on Friday directed the BCCI to f...	After 3 years, funds crunch starting to hurt RCA
<input type="checkbox"/> Edit Copy Delete	12	Sports	2016-10-23	While the business side of cricket normally plays ...	Indian cricket gets ready for its biggest pay pack...
<input type="checkbox"/> Edit Copy Delete	13	Entertainment	2016-10-23	MUMBAI: The Raj Thackeray+ -led Maharashtra Navnir...	"Ae Dil" out of "mushkil" after promising tributes...
<input type="checkbox"/> Edit Copy Delete	14	Entertainment	2016-10-23	Looks like Sonakshi Sinha is the new action girl o...	Sonakshi Sinha turns daredevil for 'Force 2'
<input type="checkbox"/> Edit Copy Delete	15	Entertainment	2016-10-23	Hrithik Roshan's upcoming film 'Kaabil', produced ...	Hrithik Roshan heightens the 'Kaabil' mystery

Check all With selected: Edit Copy Delete Export







News: It is used for storing the content, headlines and type of the latest news.

+ Options

nid	name	cmt	datetme
1	Rajjo	test	2016-11-01 14:54:48
1	Anonymous	test 2	2016-11-15 15:27:57








































Comments: This table is used for storing comments entered by users on a single news page.

+ Options

					username	nid	
<input type="checkbox"/>		Edit		Copy	 Delete	Rajjo	2
<input type="checkbox"/>		Edit		Copy	 Delete	rokrapoorv	1

Marked news: This table is used for storing marked news (to be read later) by the user.

SECONDARY TABLES

+ Options						
<div><div>↔ T ↔</div><div>▼</div></div>			iid	nid	img	
<input type="checkbox"/>		Edit  Copy  Delete	1	1	[BLOB - 2.9 KiB]	
<input type="checkbox"/>		Edit  Copy  Delete	2	2	[BLOB - 3 KiB]	
<input type="checkbox"/>		Edit  Copy  Delete	3	3	[BLOB - 5 KiB]	
<input type="checkbox"/>		Edit  Copy  Delete	4	4	[BLOB - 2.5 KiB]	
<input type="checkbox"/>		Edit  Copy  Delete	5	5	[BLOB - 3.6 KiB]	
<input type="checkbox"/>		Edit  Copy  Delete	7	7	[BLOB - 2 KiB]	
<input type="checkbox"/>		Edit  Copy  Delete	8	8	[BLOB - 4.8 KiB]	
<input type="checkbox"/>		Edit  Copy  Delete	9	9	[BLOB - 4.3 KiB]	
<input type="checkbox"/>		Edit  Copy  Delete	10	10	[BLOB - 4.8 KiB]	
<input type="checkbox"/>		Edit  Copy  Delete	11	11	[BLOB - 9.5 KiB]	
<input type="checkbox"/>		Edit  Copy  Delete	12	12	[BLOB - 13.5 KiB]	
<input type="checkbox"/>		Edit  Copy  Delete	14	14	[BLOB - 5.6 KiB]	
<input type="checkbox"/>		Edit  Copy  Delete	15	15	[BLOB - 4.6 KiB]	

Images: It is used for storing the JPEG images of the corresponding news.

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	vid	int(11)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values Add to central columns
2	nid	int(11)			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values Add to central columns
3	video	longblob			No	None		Change Drop Primary Unique Index Spatial Fulltext Distinct values Add to central columns

☐ Check all With selected: ☐ Browse ☐ Change ☐ Drop ☐ Primary ☐ Unique ☐ Index ☐ Add to central columns ☐ Remove from central columns

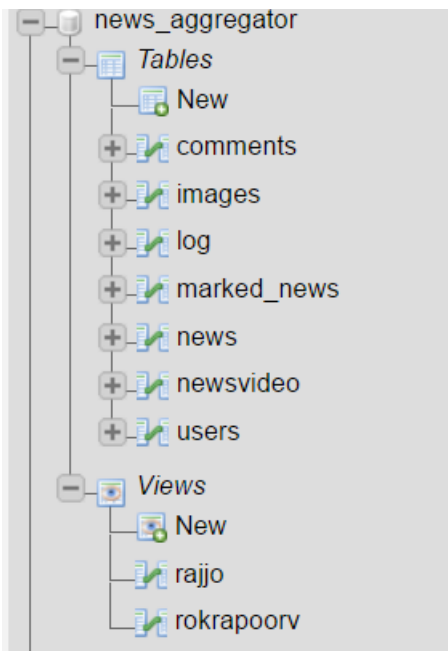
Print view Propose table structure Track table Move columns Improve table structure

Add column(s) after video

Newsvideo: It is used for storing news stream.

3)Views

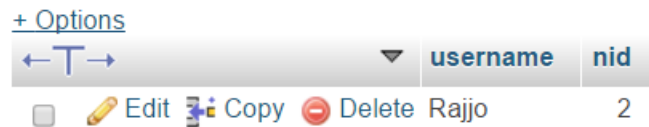
These are dynamically created views using PHP.



rokrapoorv

+ Options	
<input type="text" value="username"/>	<input type="text" value="nid"/>
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	rokrapoorv 1

rajjo



“username”:Stores current snapshot of table ‘Marked_news’.

D)CONSTRAINTS

Constraint name	ATTRIBUTES
PRIMARY	Uid,iid,nid,vid
UNIQUE	
NOT NULL	Fname,lname,uname,password,mail, nid,uid,iid,vid
FOREIGN KEY	Newsid
CHECK	cmt, (to check comment length less that 100)

->Indexing

For search operation

Server: 127.0.0.1 » Database: news_aggregator » Table: news

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

Show query box

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Your SQL query has been executed successfully

show index from news_aggregator.news

[Edit inline] [Edit]

+ Options

Table	Non_unique	Key_name	Seq_in_index	Column_name	Collation	Cardinality	Sub_part	Packed	Null	Index_type	Comment	Index_comment
news	0	PRIMARY	1	nid	A	15	NULL	NULL	NULL	BTREE		
news	1	type_index	1	type	A	15	NULL	NULL	NULL	BTREE		
news	1	ty	1	type	A	15	NULL	NULL	NULL	BTREE		
news	1	type	1	type	A	15	NULL	NULL	NULL	BTREE		

Query results operations

Print view Create view

- Indexing is done on nid in news table.
- It is done to SELECT news content from 'news' table.

->Triggers

Triggers are used to create log entries whenever INSERT command is executed on tables *users*, *comments* & *marked news*.

Log TABLE

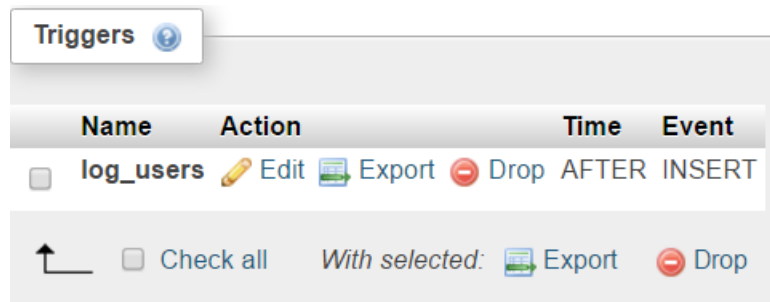
Whatever activities users are performing are logged into this table. This data can be analysed to find interests of users.

+ Options








timestamp	action
2016-11-01 14:54:48	comment
2016-11-16 12:23:29	markednews

Triggers defined








1) log_users



2) log_comments

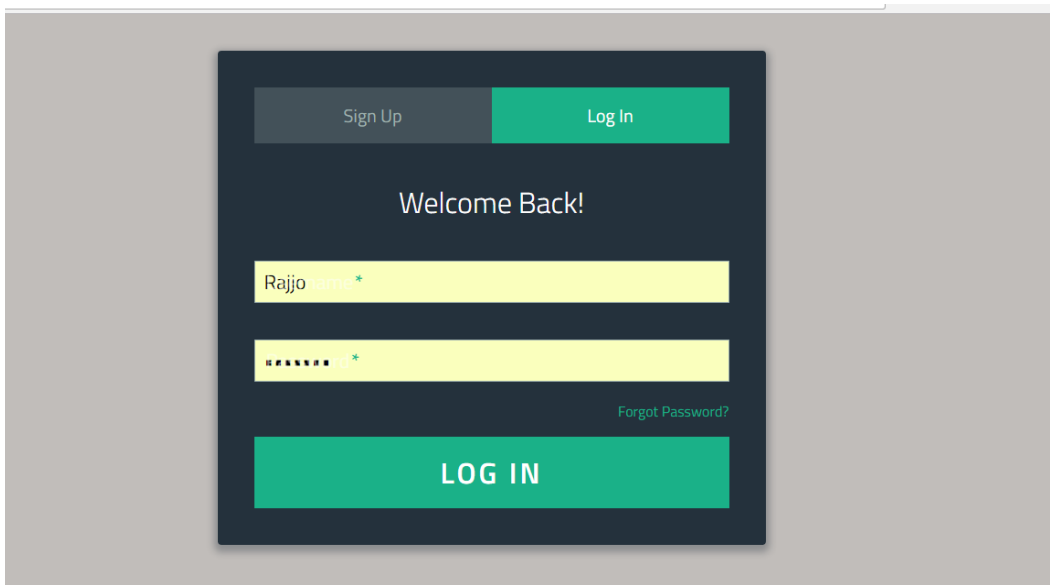
Triggers 				
	Name	Action	Time	Event
<input type="checkbox"/>	log_comments	 Edit  Export  Drop	AFTER	INSERT
	<input type="checkbox"/> Check all	With selected:  Export  Drop		

3) log_markednews

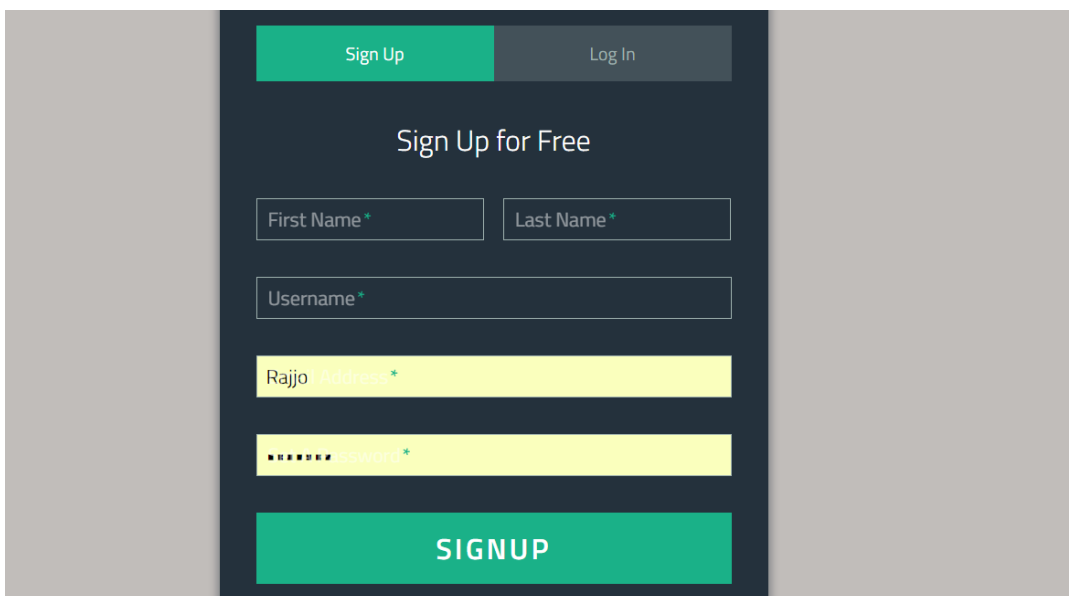
Triggers 				
	Name	Action	Time	Event
<input type="checkbox"/>	log_markednews	 Edit  Export  Drop	AFTER	INSERT
	<input type="checkbox"/> Check all	With selected:  Export  Drop		

DML QUERIES And SNAPSHOTS

1) Login/Signup page



A login page UI mockup with a dark blue background. At the top, there are two buttons: "Sign Up" (grey) and "Log In" (green). Below them is the text "Welcome Back!". There are two input fields: "Rajjo Name*" (yellow) and "Password*" (yellow with masked characters). A link "Forgot Password?" is located to the right of the password field. At the bottom is a large green button labeled "LOG IN".



A signup page UI mockup with a dark blue background. At the top, there are two buttons: "Sign Up" (green) and "Log In" (grey). Below them is the text "Sign Up for Free". There are four input fields: "First Name*" (grey), "Last Name*" (grey), "Username*" (grey), and "Rajjo Address*" (yellow). There is also a "Password*" field (yellow with masked characters). At the bottom is a large green button labeled "SIGNUP".

Queries:

SELECT username,email from users

To check whether entered username or emailid already exists in database.

INSERT into users(fname,lname,email,username,password,auth_key,active_status)

VALUES('fname','lname','email','username','password',00,1);

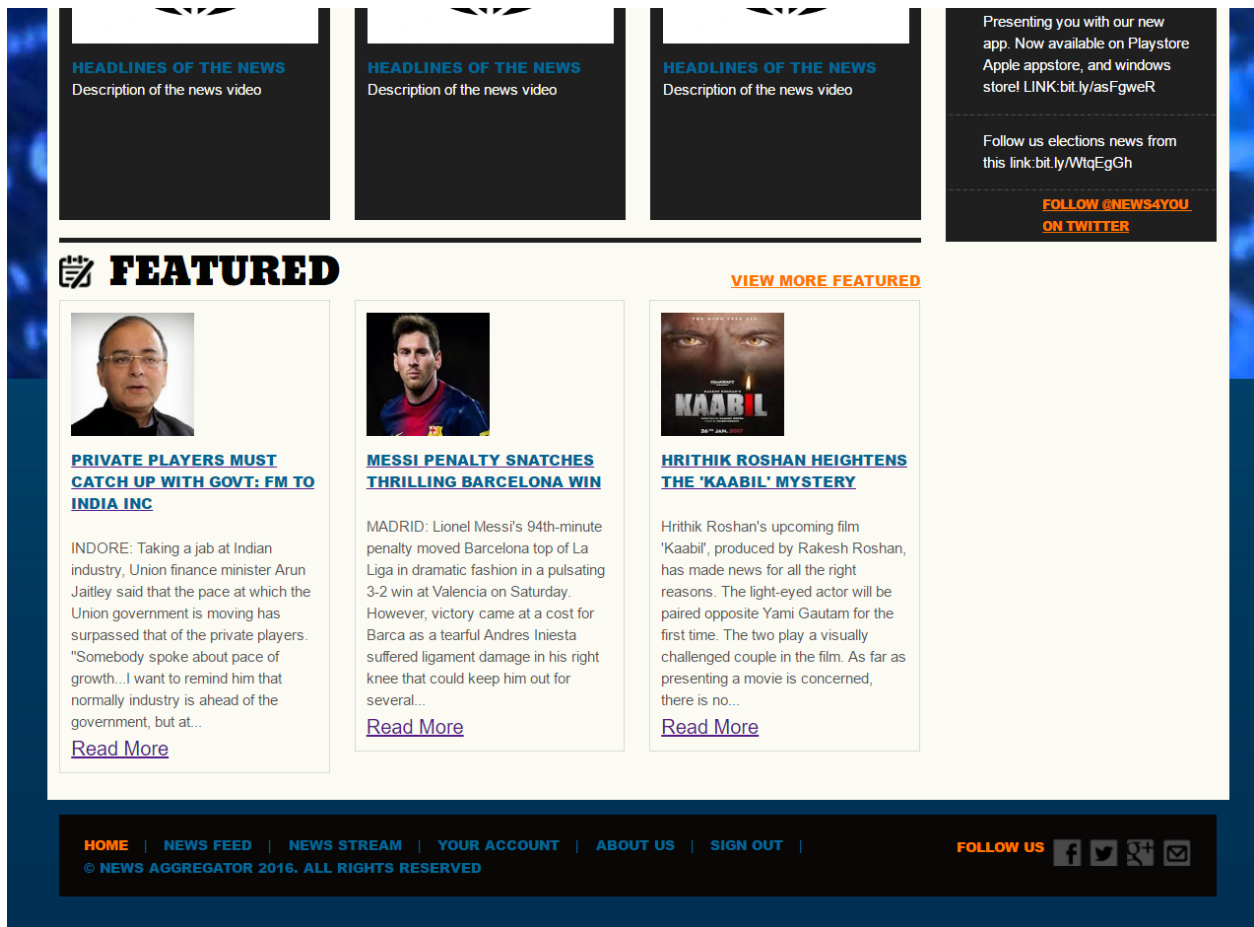
To insert credentials of new users in database.

SELECT * FROM users where password='\$password' AND username='\$username';

To check whether entered emailid and password are present in database.

2) Index page





Queries:

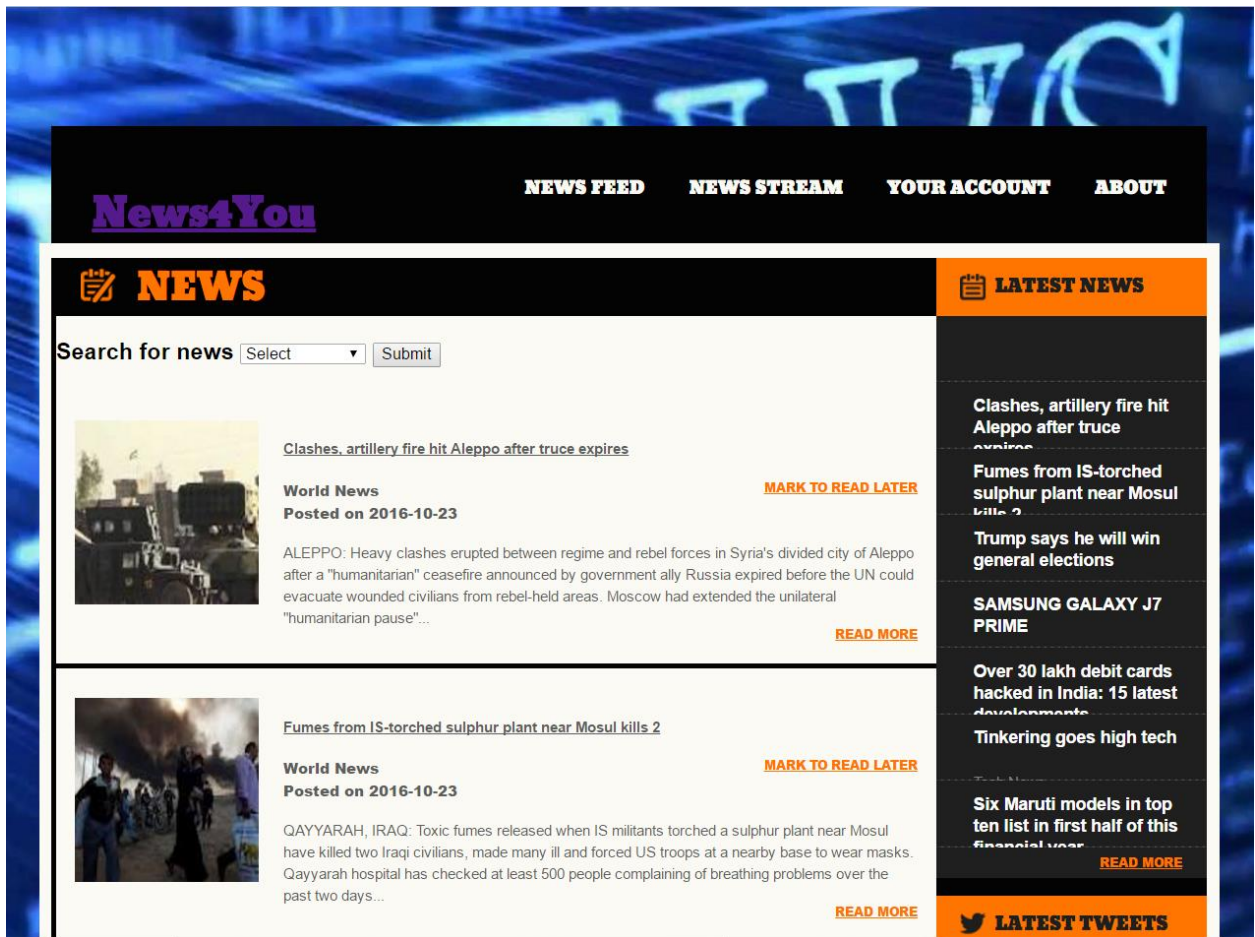
SELECT * FROM `news`

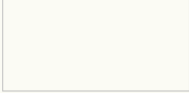
To display all news from database.

SELECT * FROM `news` order by date

To display news ordered by date in the side bar.

3) News page

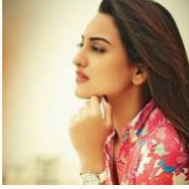




Posted on 2016-10-23

MUMBAI: The Raj Thackeray+ -led Maharashtra Navnirman Sena (MNS) backed down and called off its protest against Karan Johar's 'Ae Dil Hai Mushkil'+ , which stars Pakistani actor Fawad Khan, on Saturday following a truce brokered by CM Devendra Fadnavis. To pave the way for a "safe" release across...

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[Sonakshi Sinha turns daredevil for 'Force 2'](#)

Entertainment News
Posted on 2016-10-23

Looks like Sonakshi Sinha is the new action girl on the scene. The actress, who had trained in mixed martial arts for 'Akira', recently performed some risky stunts for her upcoming thriller, 'Force 2'. We hear the gal matched her leading man John Abraham in the maar-dhaad department by performing...

[READ MORE](#)



[Hrithik Roshan heightens the 'Kaabil' mystery](#)





Entertainment News
Posted on 2016-10-23

Hrithik Roshan's upcoming film 'Kaabil', produced by Rakesh Roshan, has made news for all the right reasons. The light-eyed actor will be paired opposite Yami Gautam for the first time. The two play a visually challenged couple in the film. As far as presenting a movie is concerned, there is no...

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Queries:

SELECT * FROM `news`

To display all news from database.

INSERT INTO marked_news(username,nid) VALUES('\$uname','\$n')

To record if user has marked any news displayed on the page.

SELECT * FROM news where type='\$type'

To display news of particular type.

4) News Stream



Queries:

SELECT * FROM `news` order by date

To display news ordered by date in the side bar.

NOTE: Storing videos in database is depreciated as it proves to be inefficient. So the video are stored in the HDD of servers ,and are referred through anchor link to front page.

5) YOUR ACCOUNT PAGE

News4You NEWS FEED NEWS STREAM YOUR ACCOUNT ABOUT

MANAGE YOUR ACCOUNT

UPDATE USER DETAILS

Email Id

- First name
- Last name
- Password
- Confirm password

Queries:

SELECT * FROM users where username='\$uname'

Displaying username currently logged in.

UPDATE `users` SET password='\$pass' where username='\$uname'

Updating new password.

Work Distribution

Both UI and backend was done by respective project member.

→ Apoorv Tomar

- Database Design
- Index page
- News feed
- News Single post

→ Raj Shekhar Kumar

- Database Design
- User login page
- Marked news
- Comments section

Future Scope

In future, More rich and diverse content can be aggregated from more reliable media sources.

Also, The APIs which will be used to collect news content comes at a price. (The price is based on news posts taken per month). So to compensate for the cost incurred in implementing the API, Digital marketing (advertisements) can be allowed on the website which can generate revenues.

Famous e-advertisements only advertise on website which have high internet traffic. So, by developing a better UI And UX we can attract more crowd. Following techniques can be used to optimize our website

1) PageRank

It can be used to rate news posts that are collected from the internet. Displaying and highlighting most trending news on the website will attract more internet traffic.

2) BigPipe

This technique is used by facebook (initially developed by facebook)to dynamically load only required content. It provides better UX as every post is loaded on single page. The user only has to scroll to view more content.

We believe that after including these features this project will be *production ready* and can be deployed for generating revenues.

*****END*****