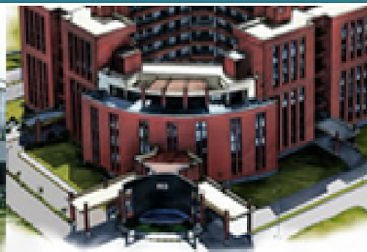
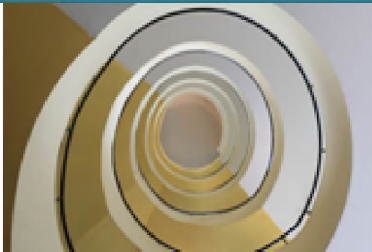


Department of Computer Science & Engineering

UE17CS355 - Web Tech II Laboratory

# Project Evaluation

Project Title : The Millennial Print  
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## Project Description

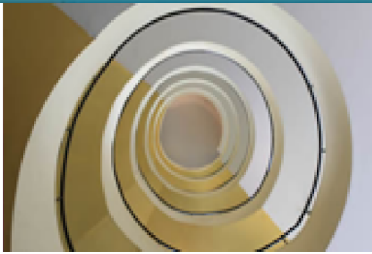
### The Millennial Print

A news/blog website where users can create their own news post / blogs(when they are logged in).

Other features of the website include:

- 1)Users can comment on other's post and other's comments. People have to be logged in to do these things.
- 2)Users can rate posts on a range of 1(bad)-5(very good).
- 3)Users can view RSS feeds of other news websites.
- 4)Users get recommendation based on their ratings history i.e users get post recommendations that have been liked by people with similar interest.
- 5)The project runs in a. Container and the website can be accessed by any device with internet and a browser.The project works like a real website as it is deployed online.
- 6)Users can also delete/edit their own comments/posts.
- 7)Has a good authentication feature that is fool-proof.





## Technologies Used

### 1)Database Management Systems

- a)MySQL
- b)MongoDB

### 2)Backend Framework

NodeJS

### 3)Front End Framework

JQuery  
AngularJS

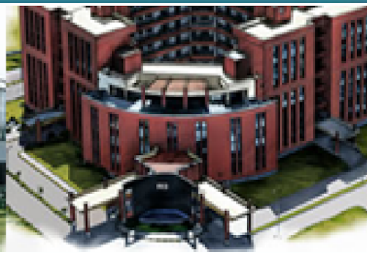
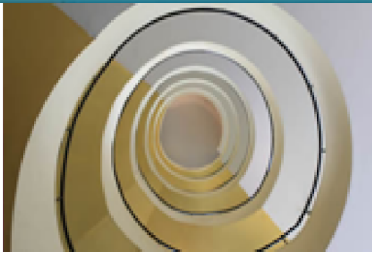
### 4)Other Technologies Used

HTML,CSS,BootStrap,Javascript,PHP

### 5)Container

GoormIDE for deploying the website.





## Techniques Implemented

AJAX Patterns used

1)Periodic Refresh

To refresh the posts list and the comments list

2)Multistage download

To give the illusion of the webpage loading faster.

Most users tend to leave the website if the page loads slower.

As the news website contains a lot of images , first the text is downloaded , then the images, and then the comments.

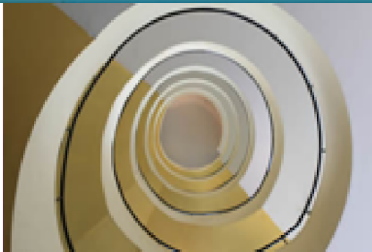
3)RSS feeds

To allow the users view the latest posts of other News websites.

4)REST API's







## Intelligent Functionality

### Collaborative Filtering

The intelligent functionality used in this website is collaborative filtering.

It generates recommendations to a user keeping track of their ratings and by tracking of the ratings provided by other users.

Collaborative filtering is implemented using a Node Package called likely.js.

The main data structure required is a matrix.

Hence, we need to maintain a column for each new post created and a row for each User created. Hence the size of the matrix is  $n \times m$  where

$n$  = number of users

$m$  = number of posts.

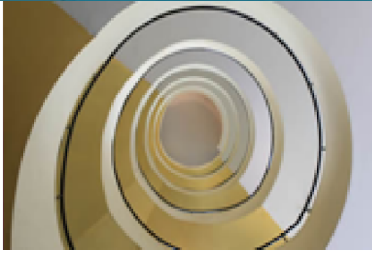
It looks for similarity using cosine similarity and gives recommendation of posts other users with similar taste have liked and the current user has not rated or viewed yet.

If the user has not rated any post, then the recommendation engine will not give any recommendations.

It is a sort of a give to get feature, i.e if the user wants recommendations, he has to have a history of rating the posts, hence he helps other users get Recommendations while the user himself/herself benefits from recommendations.

This helps the user save time by not having to browse through the posts as the recommendation engine performs the task for them.

This is one of the most popular intelligent functionalities used in many modern Websites to generate recommendations.



Thank You

