

A decorative graphic on the left side of the image consisting of two overlapping parallelograms. The front one is blue and the back one is a light green. They are positioned diagonally, with the blue one partially covering the green one.

Content Management Blog



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Team members:

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Jingyang Jiang

Yida Li



Introduction

Technology used: IntelliJ , VSC , NetBeans, Mysql, ClearDB, Spring Framework, Github repo, Heroku

User requirements: - Clients want to display their blog posts to everyone who comes to their site.

- Clients want to create and insert tags related to their blogs
- Clients want to editors to manage their blogs.
- Clients want to write posts in an editor like Word.
- Clients want exclusive rights to approve edited blogs.
- Users are only able to view the blogs

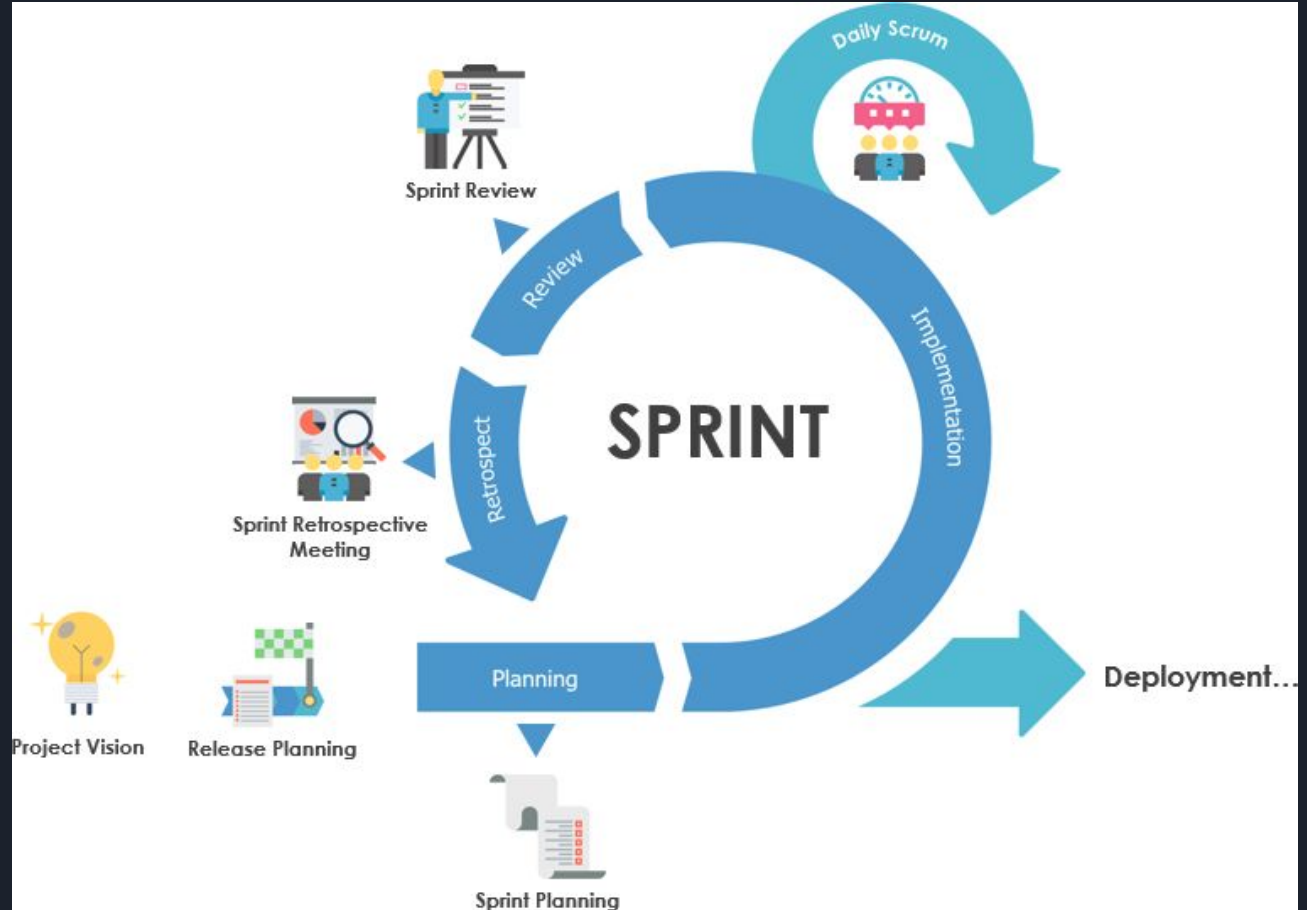
Specifications: Full-Stack Web-Application



Table of Content

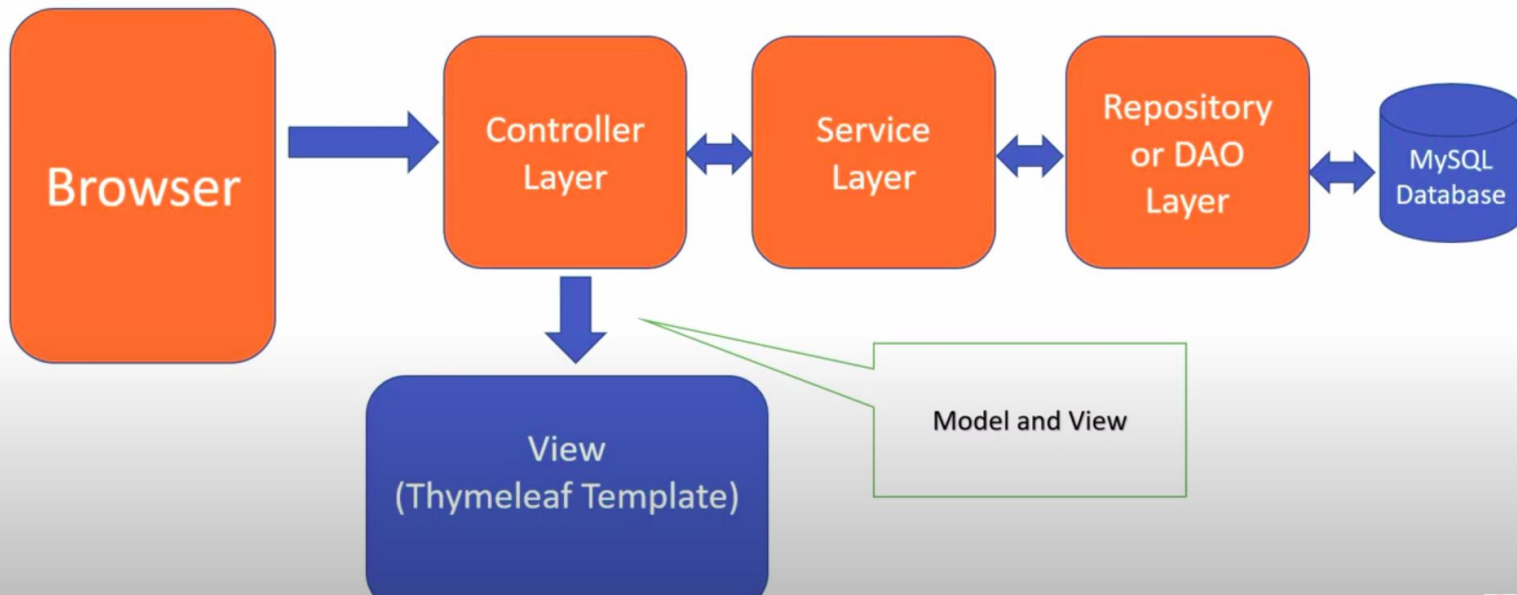
- SDLC
- Spring Framework MVC
- Security Layer
- UML/Flowchart
- Database
- Deployment
- What we've learned and Problems encountered
- Potential improvements

SDLC



MVC

Spring Boot MVC Project Structure



MVC

```
▼ src
  ▼ main
    ▼ java
      ▼ com.wiley.contentmanagement
        > config
        > controller
        > dao
        > model
        > service
        ContentmanagementApplication
      ▼ resources
        > templates
        application.properties
```

```
▼ controller
  ArticleController
  contentController
  loginController
  tagController

▼ dao
  ArticleDao
  ArticleDaoDB
  ArticleTagDao
  ArticleTagDaoDB
  TagDao
  TagDaoDB
  UserDao
  UserDaoDB

▼ model
  Article
  ArticleTag
  Tag
  User

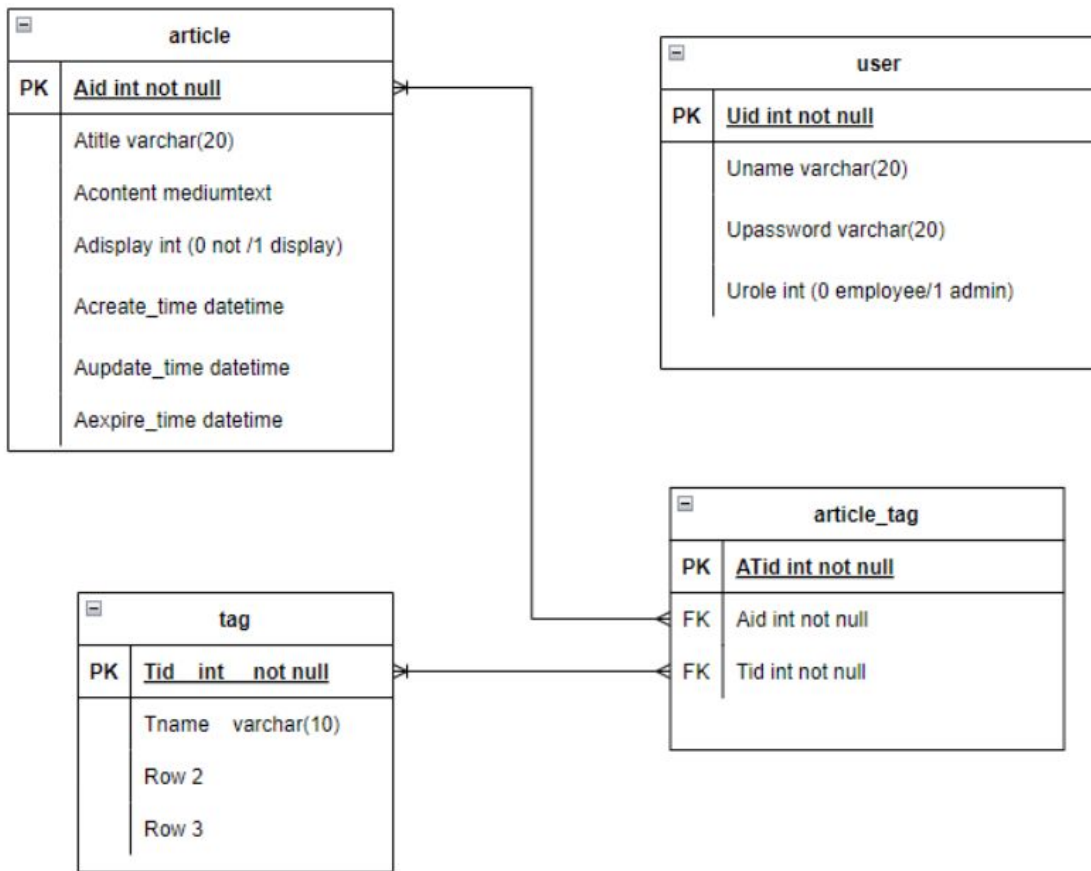
▼ service
  ArticleService
  ArticleServiceImpl
  ArticleTagService
  ArticleTagServiceImpl
  TagService
  TagServiceImpl
  UserService
  UserServiceImpl
  ContentmanagementApplication
```

Security

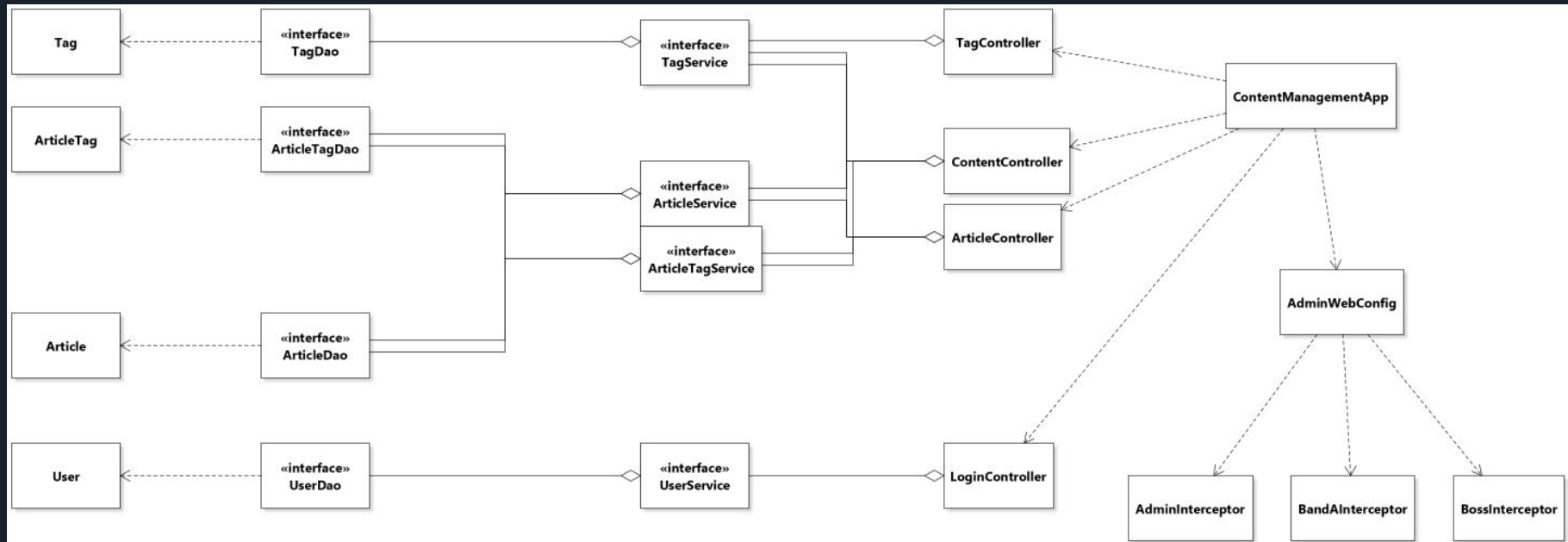
- ▼ config
 - ▼ error
 - myErrorPage
 - ▼ interceptor
 - AdminInterceptor
 - AdminWebConfig
 - BandAInterceptor
 - BossInterceptor

- ▼ src
 - ▼ main
 - > java
 - ▼ resources
 - ▼ templates
 - 404.html
 - 404.png
 - admin.jsp
 - blogDetail.html
 - editpage.html
 - editTag.html
 - index.html
 - login.html
 - manage.html
 - manageBoss.html
 - page.html
 - tag.html
 - application.properties

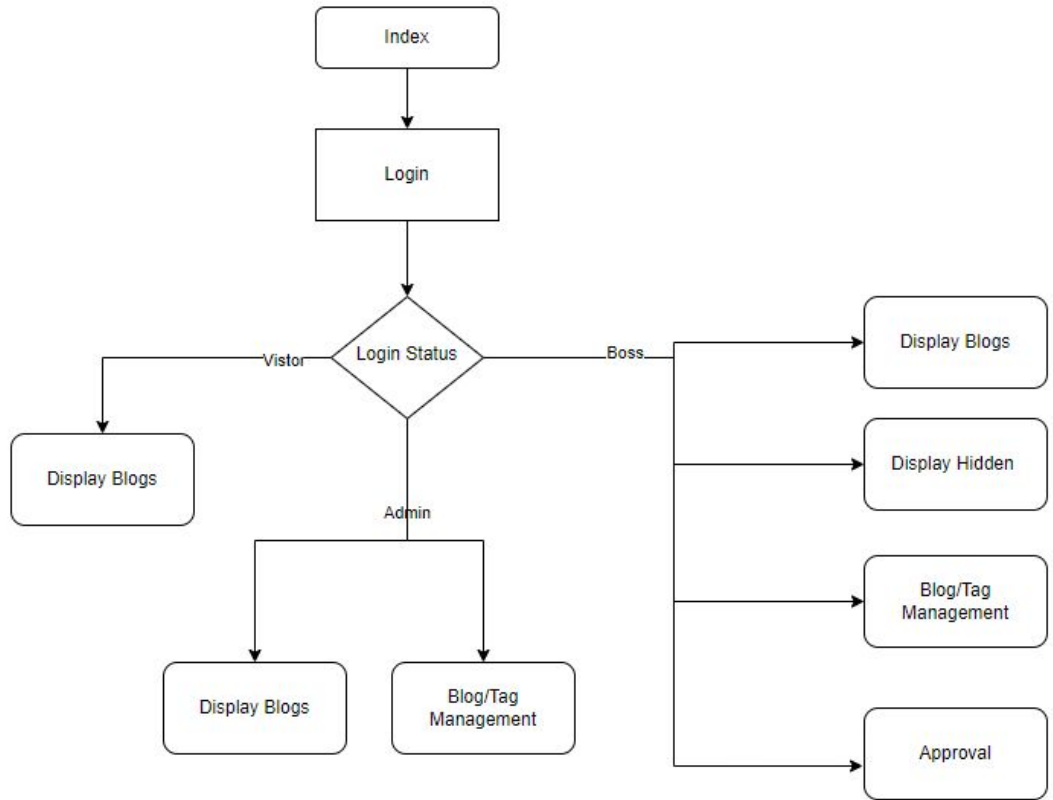
ERD Diagram



Flowchart



User Diagram



Local Database

```
nakamoto@satoshi:~$ sudo mysql -p
[sudo] password for nakamoto:
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 92
Server version: 8.0.29 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use contentmanagementsystem;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> show tables;
+-----+
| Tables_in_contentmanagementsystem |
+-----+
| article                           |
| articletag                       |
| tag                              |
| user                             |
+-----+
4 rows in set (0.00 sec)

mysql>
```

The screenshot shows the MySQL Workbench interface with the 'Schemas' tab selected. The left pane displays a tree view of the 'contentmanagementsystem' database, showing tables: article, articletag, tag, and user. The right pane shows the 'Columns' tab for the 'article' table, listing columns and their data types.

Table	Column	Type
article	aid	int
article	content	mediumtext
article	createTime	datetime
article	display	int
article	expireTime	datetime
article	title	varchar(20)
article	updateTime	datetime
articletag	aid	int
articletag	atid	int
articletag	tid	int
tag	name	varchar(20)
tag	tid	int
user	name	varchar(20)
user	password	varchar(20)
user	role	int
user	uid	int

Cloud Database

```
Running printenv on contentblog240... up, run.8117 (Free)
JAVA_HOME=/app/.jdk
JDBC_DATABASE_URL=jdbc:mysql://us-cdbr-east-06.cleardb.net/heroku_b4cb764f7ec7aa3?password=
JAVA_OPTS=-Xmx300m -Xss512k -XX:CICompilerCount=2 -Dfile.encoding=UTF-8
PWD=/app
PORT=22277
LINES=45
HOME=/app
SPRING_DATASOURCE_USERNAME=
COLUMNS=169
SPRING_DATASOURCE_URL=jdbc:mysql://us-cdbr-east-06.cleardb.net/heroku_b4cb764f7ec7aa3?password=
CLEARDB_DATABASE_URL=mysql://b543c41c690d1e:29a982ee@us-cdbr-east-06.cleardb.net/heroku_b4cb764f7ec7aa3?reconnect=true
TERM=xterm-256color
JDBC_DATABASE_PASSWORD=
JDBC_DATABASE_USERNAME=
SHLVL=0
LD_LIBRARY_PATH=/app/.jdk/jre/lib/amd64/server:
PS1=\[\033[01;34m\]\w\[\033[00m\] \[\033[01;32m\]$ \[\033[00m\]
SPRING_DATASOURCE_PASSWORD=29a982ee
PATH=/app/.heroku/bin:/app/.jdk/bin:/usr/local/bin:/usr/bin:/bin
DYNO=run.8117
_=/usr/bin/printenv
```

```
nakamoto@satoshi:~$ mysql -u -p -h us-cdbr-east-06.cleardb.net
mysql: [Warning] Using a password on the command line interface can be insecure.
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 141173965
Server version: 5.6.50-Log MySQL Community Server (GPL)
```

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

```
mysql> use heroku_b4cb764f7ec7aa3;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A
```

```
Database changed
mysql> show tables;
+-----+
| Tables_in_heroku_b4cb764f7ec7aa3 |
+-----+
| article                           |
| articletag                        |
| tag                               |
| user                             |
+-----+
4 rows in set (0.03 sec)
```

```
mysql> █
```

Deployment

 Personal >  contentblog240

☆ Open app More


[Overview](#) [Resources](#) [Deploy](#) [Metrics](#) [Activity](#) [Access](#) [Settings](#)

[Activity Feed](#) > [Build Log](#) ID a915316e-6ee3-4215-a2c4-4672ffe2d4d9

```
[INFO]
[INFO] --- maven-install-plugin:2.5.2:install (default-install) @ contentmanagement ---
[INFO] Installing /tmp/build_6bf95b8c/target/contentmanagement-0.0.1-SNAPSHOT.jar to /tmp/codon/tmp/cache/.m2/repository/com/wiley/contentmanagement/0.0.1-SNAPSHOT/contentmanagement-0.0.1-SNAPSHOT.jar
[INFO] Installing /tmp/build_6bf95b8c/pom.xml to /tmp/codon/tmp/cache/.m2/repository/com/wiley/contentmanagement/0.0.1-SNAPSHOT/contentmanagement-0.0.1-SNAPSHOT.pom
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 6.286 s
[INFO] Finished at: 2022-08-02T21:55:44Z
[INFO] -----
----> Discovering process types
Procfile declares types    -> (none)
Default types for buildpack -> web
----> Compressing...
Done: 73.3M
----> Launching...
Released v14
https://contentblog240.herokuapp.com/ deployed to Heroku
This app is using the Heroku-20 stack, however a newer stack is available.
To upgrade to Heroku-22, see:
https://devcenter.heroku.com/articles/upgrading-to-the-latest-stack
```

Build finished

View

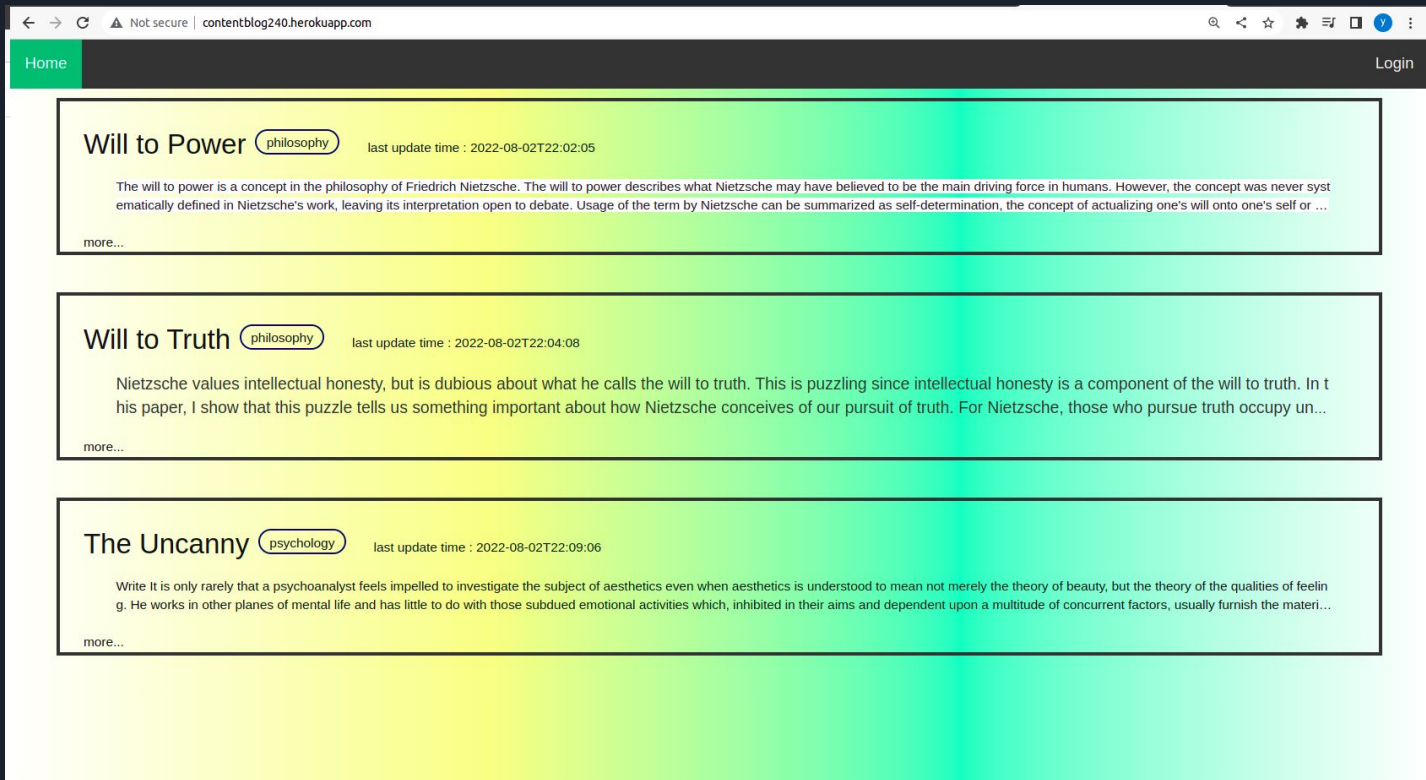


```


v src
  v main
    > java
    v resources
      v templates
        404.html
        404.png
        admin.jsp
        blogDetail.html
        editpage.html
        editTag.html
        index.html
        login.html
        manage.html
        manageBoss.html
        page.html
        tag.html
        application.properties

```

User View



Editor View



contentblog240.herokuapp.com/manage

Home Write Blog **Blog Management** Tags

Blog ID	Blog Title	Hashtags/Details	Date Posted	Update Blog	Delete Blog
1	Will to Power	philosophy	2022-07-25T16:55:27	Edit	Delete
24	Will to Truth	philosophy	2022-08-02T22:04:05	Edit	Delete
34	The Uncanny	psychology	2022-08-02T22:09	Edit	Delete

Client View

← → ↺

contentblog240.herokuapp.com/manageBoss

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Home

Write Blog

Blog Management

Tags

Approval

Blog ID	Blog Title	TinyMCE	Hashtags/Details	Date Posted	Expire Time	Approve Blog	Delete Blog
44	Dream Analysis	<p><p>Write yoJung was the eminent adept&nbsp;of Freud&nbsp;&nbsp;&nbsp;&nbsp;a while, a tireless fighter for the Freudian cause, that is, the universal promotion of psychoanalysis. He was influenced by Freud's approach of the delicate problem of dream interpretation. Later on, Jung develops his own theory which includes several revolutionary features:&nbsp;It is known that Freud interprets dreams on the object level; &nbsp;that is, according to the relationship between the dreamer and the persons or situations in his real of fantasy life. Jung introduces the subject level;&nbsp;What is this level? The fact that the dream reveals, in a symbolic way, some features of dreamer's psychic life or of his internal psychic transformations. This way the dream becomes an indicator of those changes that sometimes point to the&nbsp;development of the individual process.</p><p style="font-family: Arial;" align="LEFT"><span style="color: #000000; font-family: Times New Roman,Times,Times</p>	psychology	2022-08-02T22:11:37	<div>Approve</div>	<div>Delete</div>	



What we've learned

- Teamwork
- Communication
- Equity
- Sharing Responsibilities



Problems Encountered

- Time constraint
- Trouble Uploading pictures
- Limited Resources
- Limited Knowledge



Potential enhancements

- A comment section for the users to leave feedbacks
- A list of emojis for the users to stamp onto each article
- A premium membership fee of 5\$ for access to admin role
- A new section to posts pictures attached to the blogs



Thank you

Any Questions or Feedbacks?