

Modern Application Development - II

Project Report:

This project uses

1. vue2.js frontend
2. python-flask backend
3. Sqlite database
4. Redis for caching
5. Celery for batch jobs

This project has the following functionality

- It is a multi-user app
- Used for uploading blogs with images
- User can post multiple times
- Each post will have ID,Caption/Description,ImageURL,Timestamp
- A user can follow other users using the app
- Each user will have id, username, Password, followers, posts
- User Signup and Login
- User's Profile
- Create a new blog
- Ability to follow others
- Ability to unfollow others
- User Triggered Async Job - Export as CSV
- an export CSV format for blogs
- Have a dashboard where the user can export
- Trigger a batch job, send an alert once done
- caching where required to increase the performance
- cache expiry
- API Performance
- Well designed PDF reports (User can choose between HTML and PDF reports)
- Single Responsive UI for both Mobile and Desktop
- Unified UI that works across devices

To start backend server:

Navigate to MAD2 folder in the terminal then use these commands

1. `$python -m venv .env`
2. `$ source .env/bin/activate`
3. `$ pip install -r requirements`
4. `$ cd Application/Backend`
5. `$ python3 appnew.py`

To start Frontend server:

1. Navigate to MAD2 folder in the terminal then use these commands
2. `$ cd Application/Backend/Frontend`
3. `$ npm install`
4. Compiles and hot-reloads for development: `$ npm run serve`
5. Compiles and minifies for production: `$ npm run build`
6. Lints and fixes files: `$ npm run lint`

The structure of the application is as follows:

```
|MAD2
|
|---- .env
|
|----Application
|      |
|      |----- Backend
|      |
|      |----- Frontend
|      |
|      |----requirements.txt
|      |
|      |----Mad2ProjectReport.pdf
|      |
|      |----mad2screencast.mp4
|
|      |----appnew.py
|      |----static
|      |----instance
|      |      |----database.db
|      |----requirements.txt
|      |
|      |----welcome-email.html
|      |----manual.pdf
|      |----dump.rdb
|
|      |-----READ.md
|      |----babel.config.js
|      |----js.config.json
|      |
|      |----package-lock.json
|      |----package.json
|      |----public
|      |      |----favicon.ico
|      |      |----index.html
|      |----vue.config.js
|      |----src
|      |      |----App.vue
|      |      |----assets
|      |      |      |----logo.png
|      |      |----upload
|      |      |----components
|      |      |      |----HelloWorld.vue
|      |      |----main.js
|      |      |----router
|      |      |      |----index.js
|      |      |----store
|      |      |      |----index.js
|      |      |----views
|      |      |      |----AboutView.vue
|      |      |      |----AccountList
|      |      |      |----ExportCSV.vue
|      |      |      |----HomeView.vue
|      |      |      |----LoginForm.vue
|      |      |      |----Logout.vue
|      |      |      |----MyFeed.vue
|      |      |      |----MyPosts.vue
|      |      |      |----ProfileView.vue
|      |      |      |----SignUp.vue
|      |      |      |----UploadPost.vue
```