# Frontend & Backend

[Medium.com](http://medium.com)

Level 1

* Show all posts
* Filter by - author, date
* Sort by - number of likes, number of comments
* Add new post
  + Title
  + Topic
  + Featured Image
  + Text
  + Date-time when it was published
  + Author
* Edit Post
* Delete post
* Search post, author, or topic

Level 2:

* User Registration
* User Login
* Profile
* My Posts (with stats mentioned below)
  + Number of likes
  + Number of comments
  + Views
* Follow other authors
* Other Author's profile view

Level 3:

* Top posts - What is the best way to figure out the best posts? What should it be based on?
* Recommended posts - same question as before
* More posts by a similar author
* Topic List page

Level 4:

* Pay to view content
  + 1 post per day free
  + 3 posts per day - $3
  + 5 posts per day - $5
  + 10 posts per day - $10
* How do you pay back the creators of content based on the revenue that you make? How do you decide an algorithm for that?

Level 5:

* Reading time (figure out) for each article and show below each.
* Drafts
* Revision history
* Save for later
* Lists
  + Create
  + View
  + Share

Note regarding submission of assignment:

* You will be divided into pairs of 2 where 1 from the frontend track and one from the backend track
* Create a video explaining the following things:
  + DB Schema
  + Detailed Application Walkthrough
  + Parts of the code you want to highlight (which you are proud of)
  + For Backend - Go through all the API lists quickly from Postman in the video
  + For Frontend - Go through the component structure quickly in the video
* Docs/files to submit:
  + DB Schema (Excel or Google Sheets)
  + GIthub repos for frontend and backend
* Other important things:
  + Web applications should be responsive
  + Design is important and will be considered as a part of the evaluation
  + Can use any UI library
  + Any other js or rails library can be used to quicken up the process of development
* Deadlines
  + The deadline for the assignment is Saturday - 05/08/2023 at 6 am.
* Add seed content to the database

# Python - Data Science & Machine Learning

You have to complete total 4 exercises as a part of your final assignment:

* Out of those, two are mentioned below:
  + <https://code.datasciencedojo.com/datasciencedojo/datasets/tree/master/Default%20of%20Credit%20Card%20Clients>
  + <https://code.datasciencedojo.com/datasciencedojo/datasets/tree/master/Online%20News%20Popularity>
* Next 2, you have to pick any problem and the corresponding dataset that you are interested in (one has to be regression and the other classification problem).

You have to create a video with the following things:

* Explain what was the problem statement (for the given problem statement as well as the problem statement you chose)
* Explain all the data-cleaning/data pre-processing/analysis that you performed
* What were the unique insights you found in the data set?
* Based on that which machine learning algorithm you picked to solve that problem?
* What were the specific challenges you faced?
* How did you tune the machine learning algorithm?

Submit one repo containing all the ipython notebooks/ python files.