

- The webpage is based on node.js on the backend and HTML5 on the front end.
- The code must be written in a basic and simple style that can be modifiable with ease later.
- On the homepage
  - the problem categories are shown like "Fluid properties", "Fluid statics", ...
  - If one of the problem is clicked, it leads to a next page called "Problem List".
- On the "Problem List" page
  - a list of problems in the categories are shown with information like area, difficulty, the first line of the problem, a serial.
  - when one of the problems is selected, it leads a page called "Problem"
- On the "Problem" page
  - a whole problem is shown. This can include jpg and/or pdf file and a link to a page that explains the concepts.
  - The page also contains a button that leads to a page called "Level 1 answer" that presents the solution of a first level. The button must be activated when a time is passed after the page is entered.
- On the "Level 1 answer" page
  - This page can include jpg and/or pdf file file and a link to a page that explains the concepts.
  - The page also contains a button that leads to a page called "Level 2 answer" that presents the solution of a first level. The button must be activated when a time is passed after the page is entered.
- Likewise, the answer pages can go down to a maximum 5 levels with the same format.

- To be implemented further

- 1) Problems and concept pages are stored in DB. The problems in the home page are from DB and connections to the concept pages are to be selected and edited.
- 2) Problem DB consists of a) problem title b) short problem information (serial number, category1,2,3, difficulty) c) problem contents in pdf or jpg, and d) answers( level1~5)
- 3) User administration functions required
  - a) page for signing up: id, name, passwd, e-mail, some notice
  - b) setting the user level that sets user period, access level, access to answer level, access to problem level,
  - c) way to store feedbacks from user ( user info, problem serial, problem serial, good/difficult/soso, comment, answer level )
- 4) When the answer level goes up, the minimum time can be set with a comment "The answer of the next level will be shown in 20 min."