Webster Problem Statements

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Rules & Suggestions:

- 1. You can use any language of your choice, you are not bounded to use php only.
- 2. Use of cms (like joomla, wordpress, etc.) is not allowed.
- 3. Use of templates is not allowed.
- 4. Use of plugins is encouraged.
- 5. Please try to use APIs as much as possible.
- 6. You can make project in teams (of max 3 members), no branch restriction.
- 7. Partial projects will also be considered for evaluation, but please try to complete the project as much as possible.
- 8. Team members can be from the different year (Except first year).
- 9. The judging criteria will be:
- Maximum focus on backend design
- Code organisation
- Database organisation
- Scalability of the project
- Mobile Browser Compatibility
- Documentation (proper comments)
- 10. Simplicity and elegance are encouraged for the front-end design.
- 11. The use of libraries such as Bootstrap and jQuery are encouraged.

The use of GitHub is also encouraged.

12. If the project work is found to be plagiarised, then it would lead to immediate disqualification.

MNNIT Notice board

Implement a notice board for MNNIT Allahabad where all the official notices regarding different departments , dean , student welfare , TPO etc can be displayed .

Basic Features:

- 1. Admin can add ,activates and deactivates any users .
- 2. Authentication
- 3. Dashboard for users and admin.
- 4. Admin can add new notice and manage old notices.

- 1. Secured way to avoid fake notices.
- 2. Notifications (via email and on portal too).
- 3. Extra marks for Impressive Frontend.

MNNIT Stack Overflow

There are lot of queries regarding coding, web, Machine learning, Android and all. There are already existing platforms for asking such questions and getting answers and these platforms have awesome features too. But here you have chance to customize it for MNNITians where only they will be asking and answering questions.

Basic Features:

- 1. Login/Signup facility for users.
- 2. User can ask(post) questions.
- 3. Users can answer any questions.
- 4. User profile showing all the questions/answers asked/given by him/her.

- 1. Login/SignUp using Facebook , Github and Gmail (Use API provided by Facebook/GitHub and Gmail).
- 2. Implement search feature based on Question title/answer_content or user(who asked/answered).
- 3. Ranking users.
- 4. Upvoting answers.(only a person with a rank > fixed rank can upvote answers)

Project Allotment Portal for MNNIT

Design and implement website for automating the process for assignment of mentor and formation of groups during project allotment.

Basic features:

- 1. Should have a administrator login who would enter the information about professors and number of groups to be assigned to each of them.
- 2. Choosing group leaders according to cpi and notifying them.
- 3. Checking the availability of students.
- 4. Group leaders should be able send request to free students.
- 5. Students should be notified about the requests and may choose from the available choices.
- 6. Filling of preferences of professors.
- 7. Designing a effective algorithm for the assigning mentor.

- 1. Group members can chat with the each other for choice filling of professors.
- 2. Notification center for displaying all the notifications regarding project allotment.
- 3. Students should be able to search professors using their AOI(area of interest).

Attendance Manager

This is a portal that will be highly useful for the students and teachers who need to keep a minimum necessary attendance. This portal will help the students to keep a track of their present attendance per subject and teachers in their taught subjects.

Basic Features:

- 1. Login for teachers and students.
- 2. Basic dashboard for students and teachers.
- 3. Teachers are able to enter the attendance of each student manually.
- 4. Students will be able to view their current percentage of attendance in their subjects.
- 5. Creation of reports on requests of teachers.
- 6. Admin login to manage data so that teachers, subjects and students are mapped properly.

- 1. Teacher should be able to enter the records in the form of spreadsheets.
- 2. Sending mails to the student when his/her attendance reaches threshold.
- 3. Automatically notify the student the number of classes that further need to be attended to reach threshold.
- 4. Graph representation of the attendance levels in each of the subject on dashboard of student.
- 5. Also handle situations when classes are cancelled.

Online Music Listening & Sharing Portal

Wouldn't it be convenient if we can listen to all our favourite songs anytime and anywhere on any device? Yeah, you have to create such kind of website wherein users can upload their songs on their account and can listen them anywhere.

Moreover, they can listen to others' uploaded songs also and can add them into their own account. So, show your development skills to create such platform for all the users .

Basic Features:

- 1. User Login/Signup facility.
- 2. Allow users to add songs to their account either through uploading or by selecting songs from another user's account.
- 3. Allows users to rename songs of their account.
- 4. Allow user to create/modify albums to categorize these songs (Each song should be a part of exactly 1 album).
- 5. Allow users to search the songs and albums already present in another user's account.
- 6. Allow users to search other user and see their collection.
- 7. Implement playlist feature comprising of songs present in user's own account.
- 8. Allow users to search their own playlists, albums and songs.
- 9. Playing any song (present on the server) online.
- 10. Downloading any song present in the account.
- 11 . Requesting other users to upload any song.

- 1. Facebook login and sharing of currently listening song.
- 2. Resuming the song from the point it was last paused.
- 3. Recommend songs according to their current collection.
- 4. Make sure that only one copy of the song exists on the server even if uploaded with different name
- 5. Implement queue for the songs which allows user to add/remove song from queue.
- 6. Allow users to mark any particular song/album as private, so that no one else can see it or add it to their own account.

Writo Scripto

Writo Scripto is a game which functioned similar to https://zty.pe/. In this game letters come from upper side , type them as fast as possible... If more than a count falls down then game will get over .

Basic Features:

- 1. Basic game functionality.
- 2. Impressive UI and sound effects.

- 1. Implement case sensitiveness (If word is "Webster" and user type "webster" then it should not matched).
- 2. Allow user to choose their set of words.
- 3. Implement Leaderboard and show graphical comparison between top users .
- 4. Make it responsive so that game can be played from any platform.

MNNIT e-Kart

Every year we see so many notices regarding buying/selling cycles, books, coolers and others things. It often happens that buyers/sellers don't get any proper centralized communication medium to complete this process. So to make it all easy and convenient you need to develop a portal which should have following features:

Basic Features:

- 1. Robust Login/Signup facility for users.
- 2. Creation of an advertisement for product having all necessary details.
- 3. Display of advertisements tag wise.
- 4. Centralized search option for all kind of products.
- 5. Should have an interactive user interface.

- 1. Integration of text-chat between seller and buyer.
- 2. Notification of recent views by buyers to seller of that product .
- 3. Integration of payment gateway using UPIs etc.

Markdown Previewer

Markdown is a lightweight markup language with plain text formatting syntax. Markdown is often used to format readme files, for writing messages in online discussion forums, and to simply create rich text using a plain text editor.

Now, this is your chance to create a WebApp that displays the html for the markdown entered in real time. Your app should function similar to <u>StackEdit</u>. Give it your own personal style.

Basic Features:

- When I enter markdown into the editor, the text is rendered as HTML in the preview as I type (HINT: You don't need to parse Markdown yourself you can import the ShowDown library for this: ShowdownJS).
- 2. Must have a preview mode which displays the HTML in browser and a button to toggle the preview so that the code behind the HTML is visible.
- 3. Must allow export of markdown(MD) as HTML.
- 4. It should display character count and word count so far.
- 5. When I click a link rendered by my markdown previewer, the link should be opened up in a new tab.

- 1. **Scroll Sync** both preview and editor should scroll simultaneously.
- 2. Must allow export of markdown(MD) as PDF. (HINT: You are allowed to use library for this but you need to find this one yourself)
- 3. Use HTML5 Storage to autosave the markdown present in the editor every 10 minutes.
- 4. Buttons that modify selected text in the editor such that preview displays edited text as **bold**, *italic*, underline, strikethrough etc.
- 5. Ability to undo (Ctrl + Z) and redo (Ctrl + Shift + Z).
- 6. Ability to view the preview in full screen mode.
- 7. Since the project is frontend based, there is no need for any backend code, however there will be extra points based on UI/UX (animations, responsiveness, shortcuts etc).

OPEN PROBLEM

Didn't get excited by any of the above statements or have any other cool idea with you? No problem. You are free to choose any other idea and build a website regarding the same. You can add as many features as you want. It's all on you.

Excited??? But there's a catch . © ;-) You have to follow a theme. The theme for this problem is **GAMING**.

Just make to sure contact any of us before actually getting your hands dirty!



ALL THE BEST ☺☺!!!