

Summer Task

Hello Team,

We hope that you have settled well in your homes and the summer heat is treating you well. In any case, the time has come for you to transform yourselves into active, aware and contributing members of this organization. Through this summer task, we sincerely hope and believe that you will be able to tap into your inner potential and secure your places as a part of this team, for the subsequent year and years to come!

We launched our new website from the session of 2015-16, which you have already come across as a reader. The stature of MM as a media body reached new heights with the release of Monday Morning's own Android app during NITRUTSAV-2017 and again with the release of new and lucid version in NITRUTSAV-2019. While the website requires regular updates, this year we are keen to add new feathers to the website as well as the App. So, gear up for what is going to be one of the most memorable journeys of your life.

Please read the following instructions carefully!

You are supposed to complete the following task of your respective teams on or before the deadline.

Code Submission Guidelines

- Version Control System, **Git** is to be used for managing different versions of code and online repository **GitHub** for sharing it.
- Make a repo on GitHub and name it as MM.SummerTask.2019 and mail the link of your repo to tech.mondaymorning@gmail.com. This should be done by 12th May 2019.
- App-tasks are supposed to be committed and pushed to GitHub **every Monday and Thursday night before 23:59**, starting from 13th May 2019. The repository on GitHub should also contain the latest APK of the app also with every push and a screenshot of all completed feature.
- Every feature and module of the task would be graded and the final score would be decided by taking the sum of all individual contributions

How do I learn to do all those stuff?

You are expected to learn on your own using resources on the Internet. Make sure you have a decent internet connection at your home. However, you can contact Monday Morning technical team members, coordinators or mentors, anytime for pointers on how to start or how to achieve a certain task.

Resources for learning Git and GitHub :

You have to read the resources given on the following websites in the same order as given below:

1. <https://try.github.io/levels/1/challenges/1>
2. <http://readwrite.com/2013/09/30/understanding-github-a-journey-for-beginners-part-1/>
3. <http://rogerdudler.github.io/git-guide/> (For quick summary and revision)

You can quickly revise the git commands by reading the *Git Cheat-sheet* attached to this mail.

In these days of learning, you have to understand the concept of version control. You need to know how commands to *clone*, *commit*, *pull* and *push* works. You can further learn about Branching, Merging and Rebasing too if you feel comfortable.

Before starting your first task, you must make sure that you are able to maintain an online repository on GitHub and keep it synchronised with the local repository.

Always remember this task is for your learning and getting acquainted with the technologies that are being currently used by Monday Morning. Any new feature or technology use is always welcomed but you need to have basic knowledge of mentioned.

Task: News Website

Make a news website with the following features. You can work on the features in any order. However, note that some features cannot be implemented before another is implemented.

- A **homepage** which lists all the recent articles.
 - An **editor's pick** section on homepage (*Popular posts are decided on the basis of no. of views of the articles*)
- An **article page** which will display the content of an article; this page should show the corresponding article when a link is clicked on the homepage.
 - *Commenting feature which will allow subscribers/admins to comment on the articles (and if you want, you can implement reply feature as well)*
- An **Admin Panel** with following features
 - Admin login page
 - Add new article page
 - Edit article page
 - Delete article page
 - *Comment Approval/Deletion page (Comments made by admins are automatically approved)*
 - *A page for adding poll questions (and options)*
 - *A page to add users (subscribers/authors/admins)*
- **Ask a question and Forum**(Check Monday morning website for more). For ask a question try to reduce redundancy so that same question couldn't be asked again but gets referred to the previous answer.
- A **registration page (or modal)** for the subscribers (*Subscribers should not be allowed to log in to the Admin Panel*)
- A **poll system** which will show question and options. The vote should be casted immediately as the user clicks vote button after selecting an option. (*The page*

should not reload for submitting the vote. Use AJAX for this. After submission, you may show the opinion percentage for each option).

- A **search box** on the Navbar of the website to search the articles
- Make RESTful **APIs** for the different modules of the website. Use appropriate REST URL format for accessing the APIs (Use routing feature of CodeIgniter for this). The API should return the response in **JSON** format.

Following are few of the **Monday Morning Website APIs**, see their formats and make your API in similar fashion

- mondaymorning.nitrkl.ac.in/api/post/get/featured
- mondaymorning.nitrkl.ac.in/api/post/get/thisweek
- [mondaymorning.nitrkl.ac.in/api/post/get/tab/\(tab_name\)/\[\(offset\)/\[\(limit\)\]\]](http://mondaymorning.nitrkl.ac.in/api/post/get/tab/(tab_name)/[(offset)/[(limit)]])
E.g.
 - mondaymorning.nitrkl.ac.in/api/post/get/tab/departments
 - mondaymorning.nitrkl.ac.in/api/post/get/tab/departments/2
 - mondaymorning.nitrkl.ac.in/api/post/get/tab/departments/1/2
- [mondaymorning.nitrkl.ac.in/api/post/get/category/\(category_name\)/\[\(offset\)/\[\(limit\)\]\]](http://mondaymorning.nitrkl.ac.in/api/post/get/category/(category_name)/[(offset)/[(limit)]])
E.g.
 - mondaymorning.nitrkl.ac.in/api/post/get/category/cse
 - mondaymorning.nitrkl.ac.in/api/post/get/category/cse/2
 - mondaymorning.nitrkl.ac.in/api/post/get/category/cse/1/2
- [mondaymorning.nitrkl.ac.in/api/post/get/\(post_id\)](http://mondaymorning.nitrkl.ac.in/api/post/get/(post_id)) < This fetches individual article
- mondaymorning.nitrkl.ac.in/api/post/get/multiple < This fetches multiple articles using POST parameter: `post_ids`
- mondaymorning.nitrkl.ac.in/api/poll/get/latest
- mondaymorning.nitrkl.ac.in/api/poll/submit < This submits poll using POST parameters: `poll_id`, `answer_id`
- mondaymorning.nitrkl.ac.in/api/user/signin < This signs in user using POST parameters: `username`, `password`
- [mondaymorning.nitrkl.ac.in/api/comment/get/\(post_id\)](http://mondaymorning.nitrkl.ac.in/api/comment/get/(post_id)) < This fetches comments of particular article

- mondaymorning.nitrkl.ac.in/api/comment/submit < This submits comment using POST parameters: `post_id`, `user_id`, `comment`, `comment_parent`.
- [mondaymorning.nitrkl.ac.in/api/search/\(search_word\)](http://mondaymorning.nitrkl.ac.in/api/search/(search_word))
- [mondaymorning.nitrkl.ac.in/api/search/\(search_word\)/\[\(offset\)/\(limit\)\]](http://mondaymorning.nitrkl.ac.in/api/search/(search_word)/[(offset)/(limit)])
- <http://mondaymorning.nitrkl.ac.in/api/post/get/editorspick>

Technologies

You will develop the website using the following technologies.

- **Bootstrap 3 (or above)** for the front-end design
- **jQuery** for interactivity (Try to learn **AJAX** using jQuery)
- **CodeIgniter 3.0** PHP framework for back-end development
- **JSON** for the response of the APIs

Tutorial links

These are some links which will help you to learn and work with them.

- **Bootstrap** (https://www.w3schools.com/bootstrap/bootstrap_get_started.asp)
- **jQuery**
 - <https://youtu.be/a59kOE2Ma1Q> (try to finish full tutorial)
 - <https://www.w3schools.com/jquery/default.asp>
- **CodeIgniter 3.0**
 - <https://www.w3schools.com/jquery/default.asp>
 - <https://youtu.be/gDHeKJef8kk>
 - <https://youtu.be/I752ofYu7ag> (There is 4 part of this tutorial so follow all of them.)
 - <https://www.codexworld.com/codeigniter/>
- **API tutorials**
 - <https://youtu.be/MbkMrnisyo4> (try to follow all lectures (*lecture-3 most important*))
- **JSON**

- <https://youtu.be/wbB3lVyUvAM> (There are 8 part of this tutorial so follow all of them)

Check-Points

Your task is divided into the following phases:

- **PHASE 1 (4 days)**

Layouts of the web pages you will develop made using wireframing software like **Gliffy Diagram**.

- **PHASE 2 (12 days)**

Web Pages design made in Bootstrap

- **PHASE 3 (28 days)**

Fully fledged website (Back-end code added) developed using CodeIgniter 3.0

(The modules/features whose points are mentioned in italics are **NOT required** to be implemented in **this phase**)

- **PHASE 4 (8 days)**

Implement the API system

- **PHASE 5 (16 days)**

Implement the modules/features whose points are mentioned in italics. **Make APIs for these modules as well**

Feel free to contact any of the Coordinators if you have any query or confusion. Wish you a fun and productive summer.

Cheers