

DTL Web Developer Project Assessment

Overview

You will have 7 days to create a web-based application as described below.

Requirements

There are two different roles: admin user and normal user.

- Authentication

- A simple authentication and authorization with username and password is required (You don't have to do a backend process)

- Normal user actions

- Managing leave requests.
 - Creating a leave request where people will fill these fields:
 - Start date (date)
 - End date (date)
 - Note (text)
 - Take a half day at the beginning of leave (boolean): users can choose to only take leave starting from the afternoon of the start date.
 - Take a half day at the end of leave (boolean): users can choose to start going back to work from the afternoon of the end date.
 - Canceling a leave request.
 - Viewing the list of leave requests.
- Seeing their own leaving statistics.
 - Leave left: Number of days left of annual leave.

- Admin user actions

- Managing public holidays.
 - An editable list of public holidays of a specific year.
- Rejecting or approving a request.
 - Every leave request needs admin's approval.
 - When a user cancels their approved leave request in mid of the period it needs to be approved by an administrator.

- Viewing all people's leave requests and statistics.
- Other requirements
 - Annual leave of absence is always 15 days.
 - Leave request states.
 - Created (when users create a leave request)
 - Created ---> Approved
 - Created ---> Rejected
 - Created ---> Canceled (user can do this)
 - Approved ---> Canceling (user can do this)
 - Canceling ---> Canceled
 - If a user cancels their approved leave requests at a time after the start date, the cancellation needs to be approved by the admin.
 - When admin go approving or rejecting a request they should see a short statistic of the issuer's annual leave. The requests exceeds capacity will be highlighted.
 - For inputting public holidays on admin side you can personally choose it, it can be simple as a list of dates or more figurative with a selectable calendar.
 - If an employee takes leave on a weekend (Saturday or Sunday) or a public holiday, that day will not be counted in annual leave.
- Some points need to be noticed
 - Functionality: All functions should fully be implemented and work seamlessly.
 - User friendly: Layouts should be clear, rational and probably used widely. You don't have to do much work with css but everybody doesn't like ugly things.
 - Documentation: You should document in code where you think it will be hard to understand for others. A detailed description about how to run your website is strictly required.
 - User guide: You should have a simple description of main features.
 - Code delivery: The source code should be on github, bitbucket or gitlab.
- Examples

Assume that the year of 2020 has 366 days, the first day of the year is a Wednesday. There are 5 public holidays in the year, they are:

New Year's Day	1 Jan 2020	Wednesday
Good Friday	10 Apr 2020	Friday
Labour Day	1 May 2020	Friday
Vesak Day	7 May 2020	Thursday

Hari Raya Puasa	24 May 2020*	Sunday
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Here is an example of the list of leave requests:

User	Start date	End date	Take a half at start date	Take a half day at end date	Taken days
Foo	6 April	12 April	Yes	No	3.5
Foo	1 May	10 May	No	No	4
Foo	1 June	8 June	Yes	Yes	5

Foo has taken 12.5 annual leave so he or she will have 2.5 annual leave left.

Extended features

If you still have time you can try to add the following features or solve the following problems.

- A calendar where you can show up public holidays and a list of people who are off on a day.
- Each year could have a different number of days of annual leave, e.g: Admin can set 15 annual leave for the year 2019 while 17 for the year 2020.
- There could be more than one type of leave, e.g: Users can create a medical leave or an annual leave.

If you have done any of the features above you should mention it when sending the project to us.