Task Management System

This website is a task management and project planning system that allows you to plan and manage team daily tasks.

Entities

Users Model:

- Permitted users can CRUD on the user model.
- Can import users from CSV file (showing the progress of processing) using:
 - o Queue
 - o Job
 - o Batch

Roles:

1. Product Owner

- Can do CRUD on users.
- Can do CRUD on boards.
- Can do CRUD on tasks.
- Can do CRUD on labels.
- Can update the status of tasks from any status to another in a team board.
- Can assign tasks.
- Can view task logs (task status changes done by users).

2. Developer

- Can see all the tasks assigned to him/her.
- Can only move their tasks
 - from to-do to in-progress and vice versa
 - From in-progress to testing and vice versa.

3. Tester

- Can see all the tasks assigned to him/her.
- Can only move the task
 - from <u>dev-review</u> to <u>testing</u> and vice versa
 - from testing to done and vice versa.

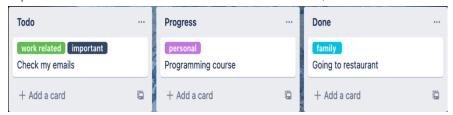
Some terms and definitions:

- o **Board:** is where your tasks are.
- o **Task:** is the work or duty you want to do.
- Status: are the states in which the tasks are going through.
 - To-do
 - Not assigned to any one
 - In-Progress
 - Can be assigned to developers only
 - Can be manipulated by Product Owner and developers only
 - Dev-Review
 - Can be assigned to developers only
 - Can be manipulated by Product Owner and developers only
 - Testing
 - Can be assigned to Product Owner and testers only

- Done
 - Can be assigned to Product Owner only
- Close
 - Can be done by Product Owner only

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- Label: are the tags or the texts that are associated with tasks. Example: important, personal, family. etc.
- The picture below shows a board that includes statuses, tasks and labels:



Report:

• Show the list of users that completed the largest number of tasks in order.

User Name	Num of Completed Task

• Show the list of users and number of their tasks that exceeds the due date like below:

User Name	Num of Due Tasks

Program features

- The program should allow the user to log into his account.
- The program should allow permitted users to create boards, statuses, tasks and labels.
 each board can have one or more statuses, the tasks will move from one status to another.
- A task will have
 - o Title
 - o Description
 - Created at
 - o Image
 - o due date
 - current status
 - Log of all activities on the task showing the following:
 - Change detail.
 - Change datetime.
 - Changed by user.
- Each task can have one or more labels associated with.

- Each task should have one assignee at the same time.
- The program should allow the user to search through his/her tasks.
- The program should show alerts for due date tasks for the assigned user and the Product owner.
- The program should allow users to see the saved activities for a specific task.

Required

- You are only in charge of implementing the backend of this project. (APIs).
- The project should be implemented using
 - o Laravel PHP framework
 - o MySQL as DBMS.
 - o Queue, Job and batching
- Using postman: structure all your APIs in postman and export the collection and include it in the root of your project while pushing to GitHub.
- Fork the below GitHub repo and create your project on it:

Github Repo - Task Management App

Nice to have

- Unit/Feature testing.
- Deploying your code on a free hosting service.
- Dockerize your app.
- Redis for caching.

What's important for us?

- Your coding style.
- OOP.
- Good database design.
- API structure.