Tech using NodeJS, Express, MongoDB, Nodemon and Agenda lib

Also can use other libraries too, above mentioned are mandatory libs which need to be used for this task.

Task:

Sending email at schedule time. (user should be able to schedule the sending email with API at specified time. Like it should be any time or recurring event. For example: Every Friday, 1st monday of every month, or accordingly. It should be able to fulfil all the criteria. Could achieve this using agenda lib)

Create an Rest APIs where you have to schedule tasks that could occur periodically or recurring

- Daily, Weeky, Monthly, Custom

The API should schedule the tasks to run at specified time via api only.

For example: API has to include task name, schedule time and all the other details related to the schedule. This api would work like dynamic scheduling, Where scheduling by APIs, using Agenda lib.

APIs Including:

- Get all Schedule
- Creating Schedule
- Updating Schedule
- Deleting Schedule

-IMPORTANT-

[Must check - If you restart the server, it should resume all the previous scheduled jobs with the respected scheduled time and process accordingly.

Steps to check - Must check - If you restart the server, it should resume all the previous scheduled jobs with the respected scheduled time and process accordingly.]

- It should work accurately, with all dynamically scheduling using APIs and agenda lib.
- It should not fail, (if fail it should retry accordingly)
- When the server restart the job has to start working back again (It should work all time, example: when server gets restart, then back again once the server is up. It should start processing the tasks as per the respected scheduled time again.)

 [Basically When server restart, it should resume all operations as per the scheduled time which all the tasks is already present in the mongo-db of agenda]
- It should not trigger any message before scheduled events.
- Points to take care of proper project structure with agenda configured properly covering all the points stated above and others points which ever finds while developing would be huge PLUS.

-Things to submit-

- Clean code in zip with explanations & covering all the points stated above.
- Documentation of API (postman collection will work)
- Covering all the indices of use cases, It should be working functionally in all the test case scenarios.