https://randomuser.me/
Use this api to fetch the 5000 result in one request and no more
than 5 requests per second
Add sleep of 30 seconds after 5 request

Bonus — Maintain an internal queue to auto-schedule this task in
background , with batch processing of 300 request in each batch with
the rate of 5 request per second

These number should be kept in DB config and can be tweaked as per
the requirement
 — sleep time
 — request per batch
 — no of request per second
 — batch sleep
 — api details and parameters if any

Use Nodejs, Typescript, MongoDB, mongoose

Write an get user api on top of this data with pagination
Query params for api?limit, page, sort, search (all are optional and
api should support default value)
Search should take a json with dynamic object and user can search by
{name, email, age, gender, dob, country etc ...}

Expected response — IPagination
{
  total: number,
  limit:number,
  page:number,
  sortBy:string
  Items []
}

Write unit test cases for service functions alone

interface IItems {
  id: string;
  gender: string;
  name: string;
  address: IAddress;
  email: string;
  age: string;
  picture: string;
  createdAt: Date;
}

interface IAddress {
  city: string;
  state: string;
  country: string;
  street: string;
}

```
interface IPagination {
  total: number;
  limit: number;
  page: number;
  sortBy: string;
  items: IItems;
}
```

Note: Follow best coding practices and create an approach first to create this task before jumping into writing code