Coding Challenge JCWD-2302

- **Study Case**

  "Anda merupakan seorang backend web developer yang ditugaskan untuk membuat sebuah project aplikasi booking tiket bus/travel, dimana setiap armada bus/travel memiliki jumlah seat dan rute yang berbeda-beda."

- **Specification**

  Register
  1. **Username must be unique**
  2. **Email must be valid**
  3. **Password must be contains number and alphabet with minimum 6 character and maximum 10 character**
  4. **Use uid as unique identifier**
  5. **Hashing users password**

  Method   : **POST**
  Path   : **/users/register**
  Request   :

  ```
  {
      username   : 'masdefry,
      email      : 'masdefry@gmail.com',
      password   : 'pwd123jcwd',
      role       : 'user'
  }
  ```

  Response   :

  ```
  {
      isError    : false,
      message    : "Register Success",
      data       : null
  }
  ```

Login

1. **User can login with username or email and password**
2. **Create feature keep login**
3. **Token has expiry date**

Method   : **GET**
Path   : **/users/login?username=masdefry&password=pwd123jcwd**
Response   :

```
{
    isError    : false,
    message    : "Login Success",
    data       : {
        token: "argGhT357A***"
    }
}
```

Search Bus or Travel

1. User can search bus/travel by rute only or rute and date

Method   : *GET*
Path   : */bus/search? date=2023-01-10&from=Tangerang%Selatan&*
               to=Bandung
Response   :

```
[
    {
        id              : 1,
        bus             : "Daytrans",
        from            : "Tangerang Selatan",
        to              : "Bandung",
        price           : "145000",
        totalSeat       : 18
        seatAvailable   : 15
    },
    {
        id              : 2,
        bus             : "Holiday Trans",
        from            : "Tangerang Selatan",
        to              : "Bandung",
        price           : "155000",
        totalSeat       : 18
        seatAvailable   : 18
    },
    ... ... ...

]
```

Bus/Travel Details

Method   : *GET*
Path   : ***/bus/details/1***
Response   :

```
[
    {
        id              : 1,
        bus             : "Daytrans",
        from            : "Tangerang Selatan",
        to              : "Bandung",
        price           : "145000",
        totalSeat       : 18,
        seatAvailable   : 15,
        seatBooked      : "1A, 3B, 3C"

    }
]
```

Books Seat

1. **User can book more than 1 seat (maximum 3 seat only)**
2. **When transaction created, they have default status "Waiting for Payment"**
3. **Change transaction status to be "Expired" when user does not immediately make a payment (Expired transaction is 1 hours)**

Method   : **Post**
Path   : **/bus/book**
Request   :

```
Headers    : {
      auth                    : "argGhT357A***""""
}

Body       : {
      travel_name             : "Daytrans",
      total_seat              : 2,
      seat_number             : "4A, 4B",
      total_price             : 290000
}
```

Response   :

```
{
      id                      : 1,
      travel_name             : "Daytrans",
      total_seat              : 2,
      seat_number             : "4A, 4B",
      total_price             : 290000,
      expired_date            : "2023-01-16 22:00:00",
      status                  : "Waiting for Payment"
}
```

Payment

1. User can upload payment proof
2. Change transaction status to be "Paid" if payment proof upload success
3. Send Invoice Transaction to users email