

Create NodeJS application (Server and Client) that would utilize WebSocket transport and use json as a contract based approach.

Server should handle 3 methods: Subscribe, Unsubscribe, CountSubscribers.

Common message pattern should looks like this:

```
{
  "type": Subscribe | Unscubscribe | CountSubscribers
}
```

In case of Subscribe was requested server should answer with status message Subscribed and timestamp when it took place after await for 4 seconds.

```
{
  "type": Subscribe,
  "status": "Subscribed",
  "updatedAt": ***
}
```

In case of Unsubscribe was requested server should answer with status message Unsubscribed and timestamp when it took place after await for 8 seconds.

```
{
  "type": Unscubscribe,
  "status": "Unsubscribed",
  "updatedAt": ***
}
```

Both methods should act with idempotence (should acknowledge current state and return same response for first and all next calls).

In case of CountSubscribers was requested server should answer with number of current subscriptions and timestamp when it was counted.

```
{
  "type": CountSubscribers,
  "count": ***
  "updatedAt": ***
}
```

On any other requests, server should return error message:

```
{
  "type": Error,
  "error": "Requested method not implemented",
  "updatedAt": ***
}
```

And in case of request was made with non-than json payload server should return this error message:

```
{
  "type": Error,
  "error": "Bad formatted payload, non JSON",
  "updatedAt": ***
}
```

```
}
```

In addition to this methods, server should produce heartbeat events every second:

```
{
```

```
  "type": Heatbeat,
```

```
  "updatedAt": ***
```

```
}
```

Client part should be written in the same NodeJS application, different module.

Both: a server and a client should be tested via integration tests.