

# Group 26

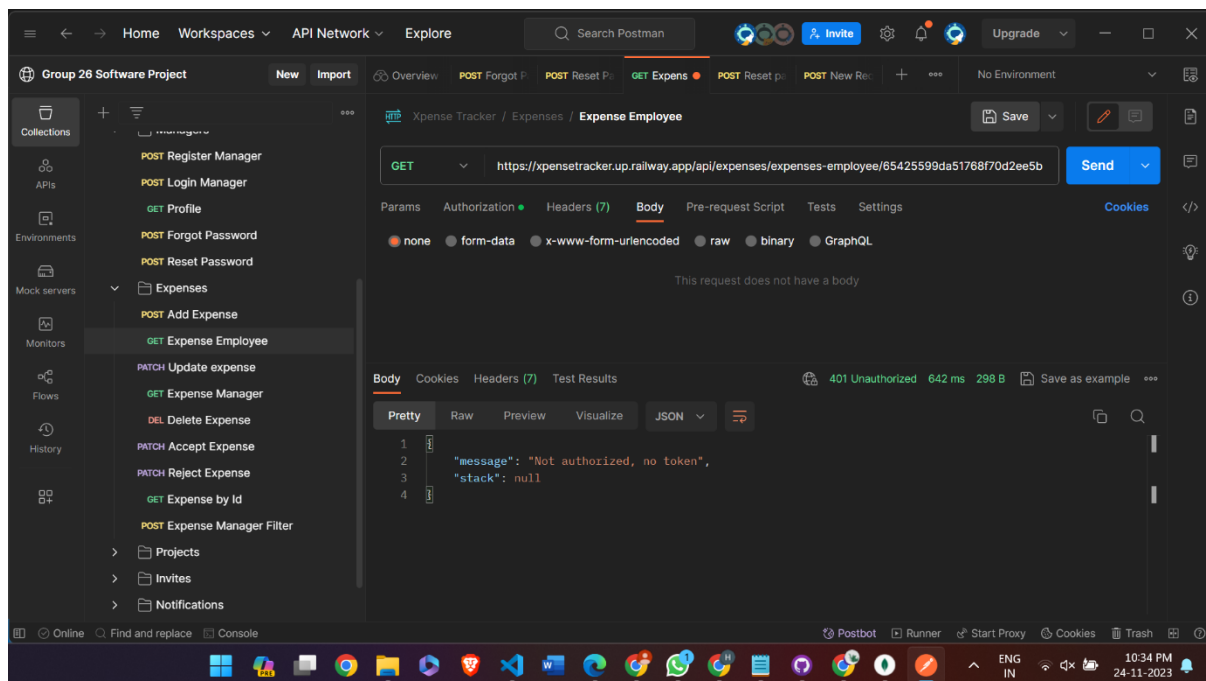
## Xpense Tracker

### Non Functional Testing

#### Privacy:

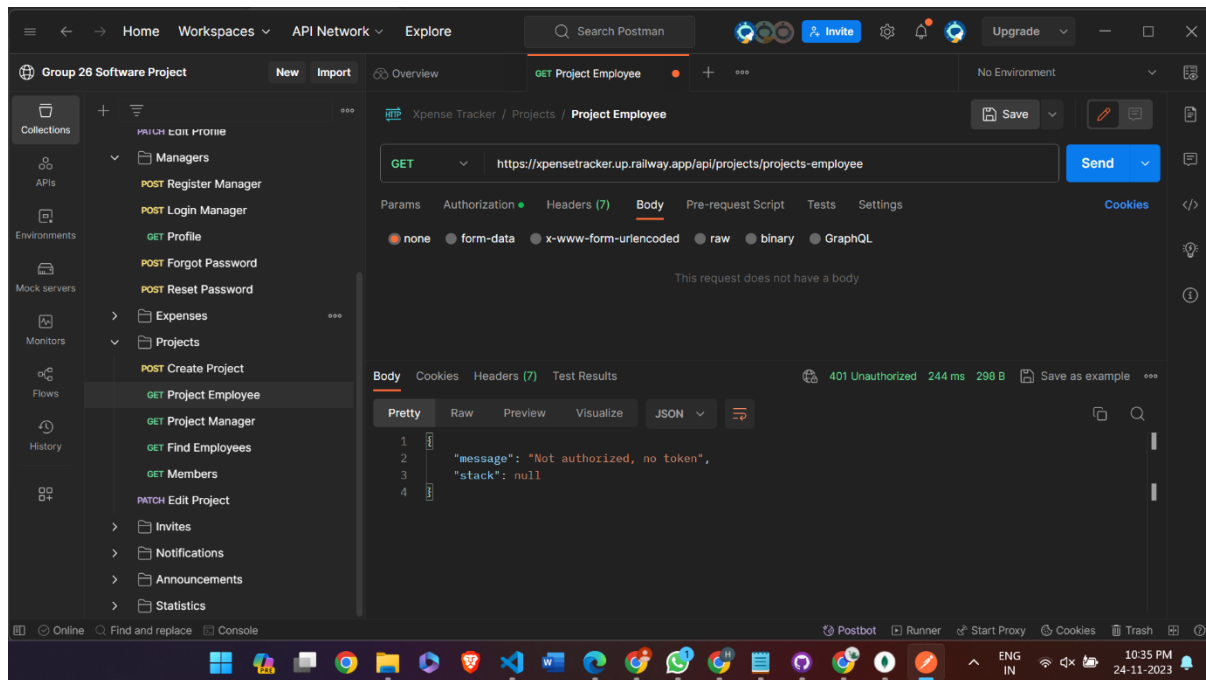
#### 1. Employee Expense Privacy

Access to employee expenses is restricted solely to the employee and the project manager. This measure ensures exclusive control and privacy, thereby safeguarding the autonomy of the employee.



## 2. Project Privacy

Access to view project is restricted solely for authorized users. This measure ensures exclusive control and privacy of the project related details.



- Similarly, privacy is constrained according to individual roles and work parameters in project invitations, project notifications, and associated dashboards and statistics.

## Security:

- Passwords are encrypted using Node.js bcrypt module
- JWT system is used for authentication, JWT token will be stored for 30 days. After that user will be required to log in again.
- All editable resources are protected by access middle wares to prevent unauthorized modifications or unauthorized access from unauthorized users.

List of tests performed (19/19)

- ✓ Checking for website accessibility...
- ✓ Checking for missing HTTP header - Content Security Policy...
- ✓ Checking for missing HTTP header - X-Frame-Options...
- ✓ Checking for missing HTTP header - Referrer...
- ✓ Checking for missing HTTP header - X-Content-Type-Options...
- ✓ Checking for website technologies...
- ✓ Checking for vulnerabilities of server-side software...
- ✓ Checking for client access policies...
- ✓ Checking for robots.txt file...
- ✓ Checking for absence of the security.txt file...
- ✓ Checking for use of untrusted certificates...
- ✓ Checking for enabled HTTP debug methods...
- ✓ Checking for secure communication...
- ✓ Checking for directory listing...
- ✓ Checking for missing HTTP header - Strict-Transport-Security...
- ✓ Checking for domain too loose set for cookies...
- ✓ Checking for HttpOnly flag of cookie...
- ✓ Checking for Secure flag of cookie...
- ✓ Checking for unsafe HTTP header Content Security Policy...

Scan parameters

Target: https://xpensetracker.vercel.app/  
Scan type: Light  
Authentication: False

Scan stats

Unique Injection Points Detected: 1  
URLs spidered: 1  
Total number of HTTP requests: 11  
Average time until a response was received: 16ms

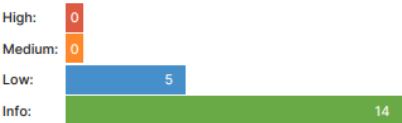
✓ https://xpensetracker.vercel.app/

Summary

Overall risk level:

Low

Risk ratings:



Scan information:

Start time: Nov 24, 2023 / 18:01:48  
Finish time: Nov 24, 2023 / 18:02:04  
Scan duration: 16 sec  
Tests performed: 19/19  
Scan status: Finished

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🚩 Website is accessible.

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🚩 Nothing was found for vulnerabilities of server-side software.

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🚩 Nothing was found for client access policies.

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🚩 Nothing was found for robots.txt file.

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🚩 Nothing was found for absence of the security.txt file.

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🚩 Nothing was found for use of untrusted certificates.

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🚩 Nothing was found for enabled HTTP debug methods.

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🚩 Nothing was found for secure communication.

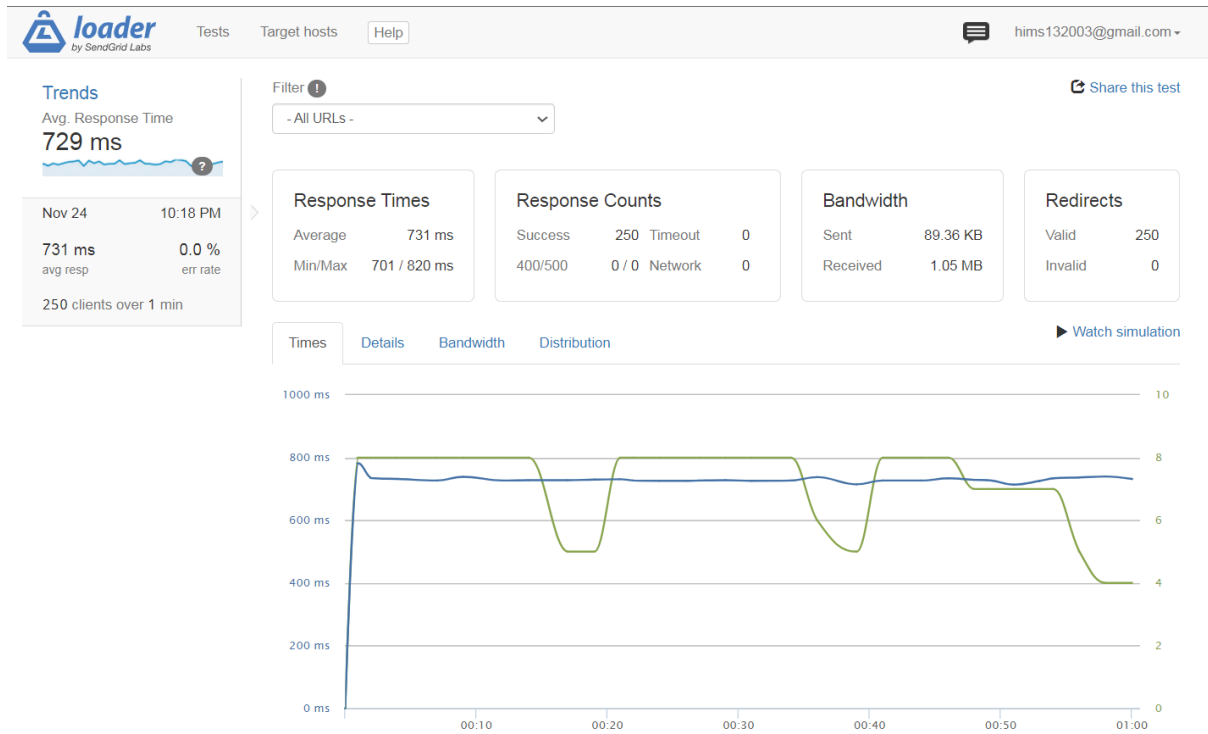
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🚩 Nothing was found for directory listing.

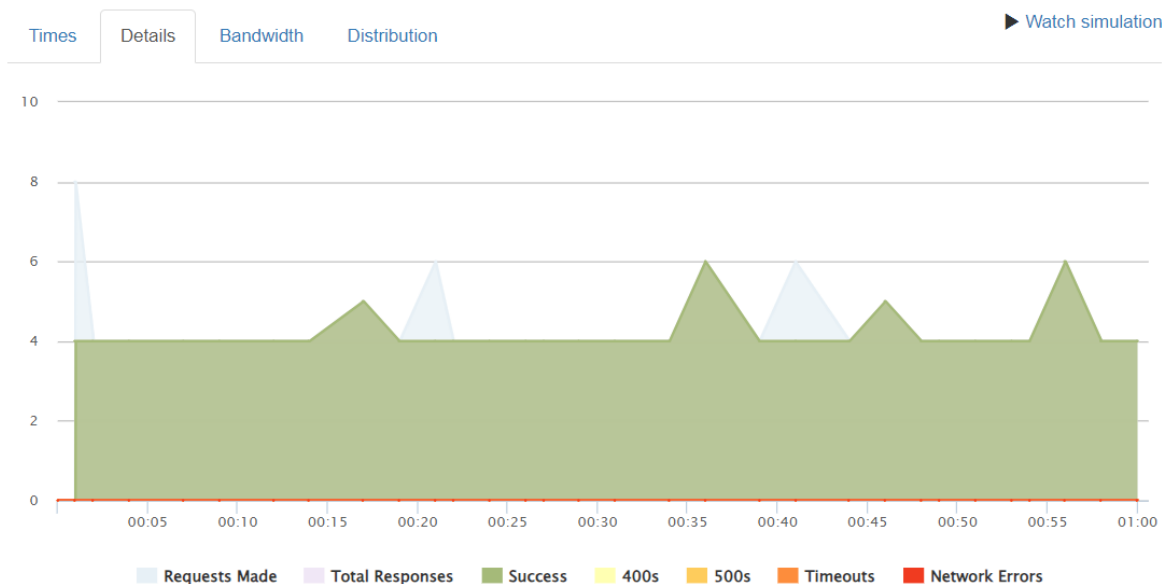
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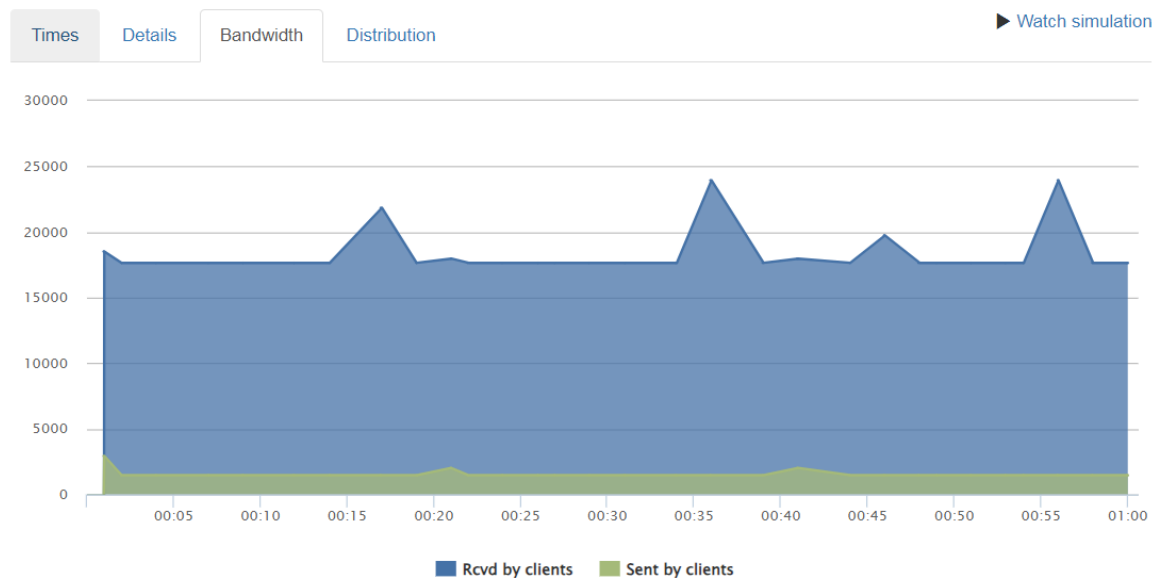
# Scalability:

Tested 250 clients per minute on a URL using <http://loader.io/> on <https://xpensetracker.up.railway.app/api/announcements/get-announcements/65425599da51768f70d2ee5b/> URL end-point



This site uses a CDN for delivering its files. A Content Delivery Network (CDN) distributes a website's files throughout the world, reducing request latency.





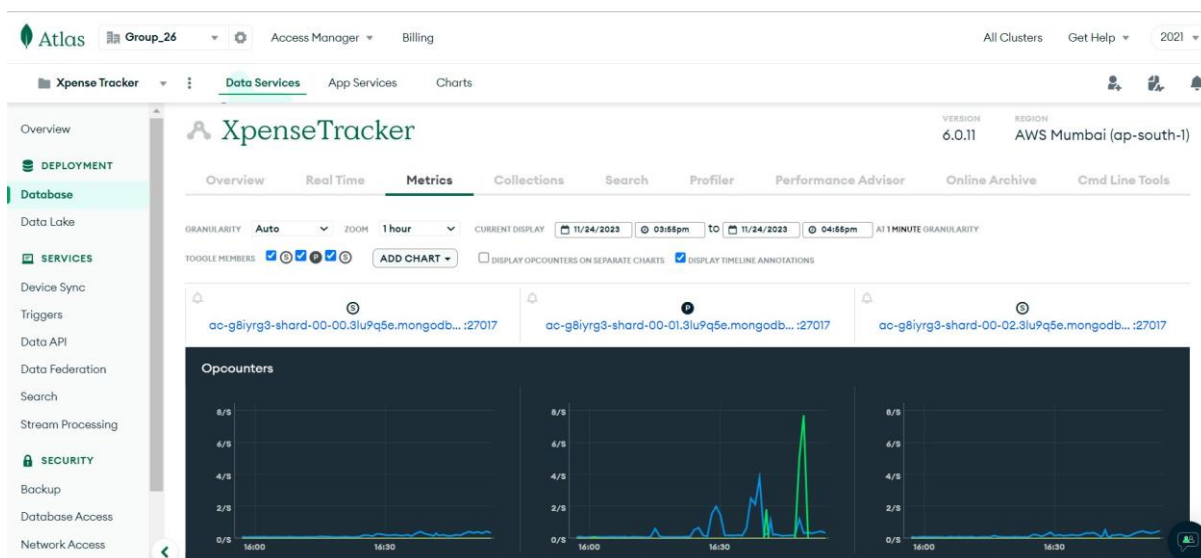
## Maintainability:

- Our repository is meticulously organized and consistently maintained to uphold high standards. The Frontend is built in adherence to React best practices, ensuring a meticulously structured and efficient codebase. Simultaneously, the Backend showcases a well-conceived architecture that strategically partitions functionalities into independent modules such as middleware, controllers, routes, and models.
- This structured approach not only enhances the development process but also simplifies debugging. The presence of distinct modules allows for a more precise debugging experience, enabling the targeted identification and resolution of issues. Furthermore, this architectural framework facilitates the seamless integration of new components, making the process of extending functionalities or introducing new features more straightforward.
- The clear separation of concerns and modular design not only contributes to a streamlined development workflow but also enables the application to evolve with agility. This design philosophy minimizes disruptions to the existing codebase, fostering a smooth and efficient evolution of the application.

# Reliability:

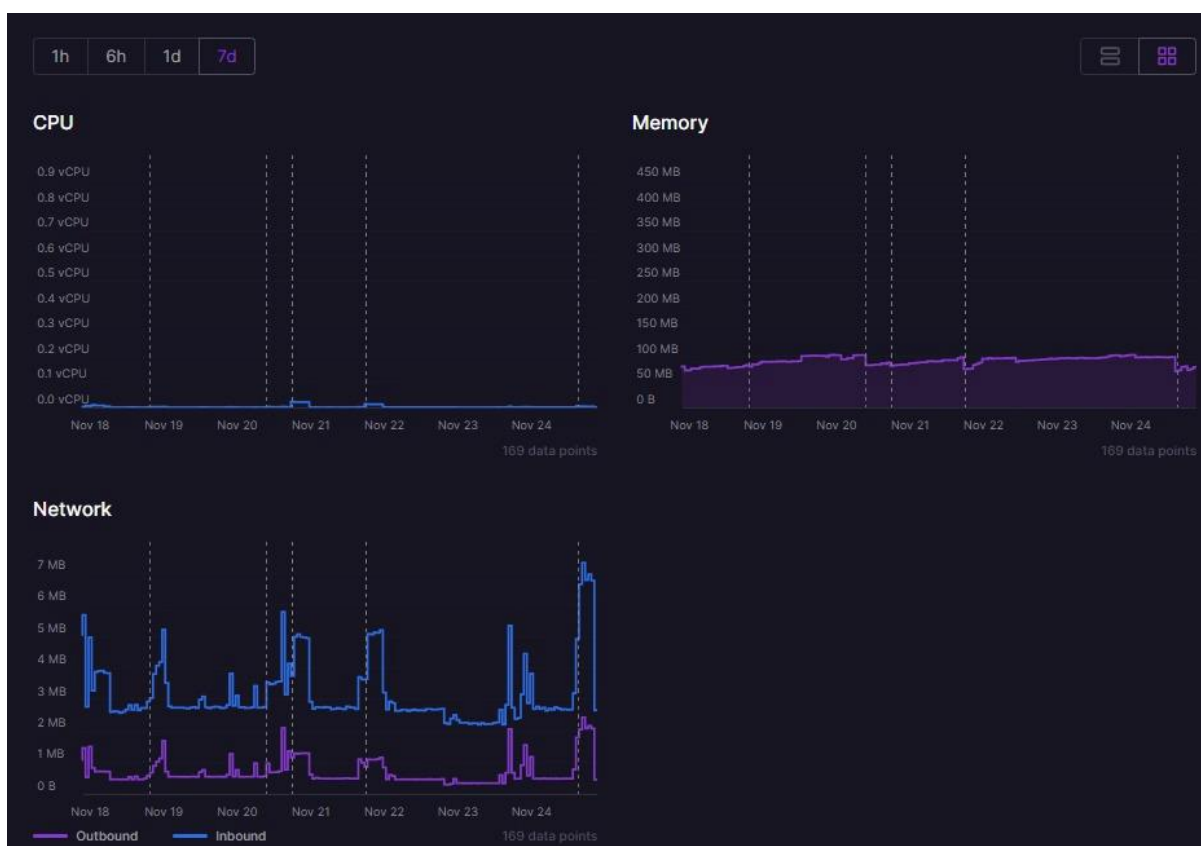
## Database Reliability:

Our MongoDB Atlas server has replicated our database in 3 instances to reduce downtime.



## Backend Server Reliability:

Our backend server has the capability to auto-restart upon crashing. This contributes significantly to system reliability and continuity. Furthermore it is capable of handling multiple requests at once in a non-blocking way.



# Ease of Use:

Tested with: [WebPageTest - Website Performance and Optimization Test](#)

## Performance Report:



## Web Vitals Report:

