Assignment for Internship position at "Mobilicis India Private Limited"

- Node.js & Next.js assignement

For any queries related to below assignments, reach out to contactus@oruphones.com Or call us at 8247490377 / 9649876112

Assignment Title:

Secure Account Dashboard with Real-Time Monitoring

Description:

Your task is to create a secure account dashboard where users can log in, log out, and view their login history. Additionally, the system should support real-time monitoring of user activities, two-factor authentication (2FA) for enhanced security, and options for users to manage their devices and access.

Requirements:

1. User Authentication and Authorization:

    - Implement user authentication and authorization.
    - Users should be able to log in and log out securely.
    - Implement two-factor authentication (2FA) for additional security.

2. User Account Dashboard:

    - Allow users to view their login/logout activities, including device information and timestamps.
    - Implement real-time updates using Socket.IO/Ws for user login/logout activities.

3. Admin Dashboard (Optional But **Recommended**):

    - Create an admin dashboard to monitor user activities.
    - Admins should be able to view user login/logout activities and manage user accounts.

4. Device Management:

    - Provide users with the ability to revoke access from specific devices.

You Can Use Your Own Security Mechanism But Ensure that all data and management components are backed by persistent storage solutions such as Redis or Mongo or Any DB Of Your Choice

Optional Features: (Note that Adding these optional features will greatly enhance your assignment, showcasing your ability to implement advanced functionalities and demonstrating your understanding)

-   Implement rate limiting and IP blocking for failed login attempts.
-   Add email notifications for certain events (e.g., successful login from a new device).
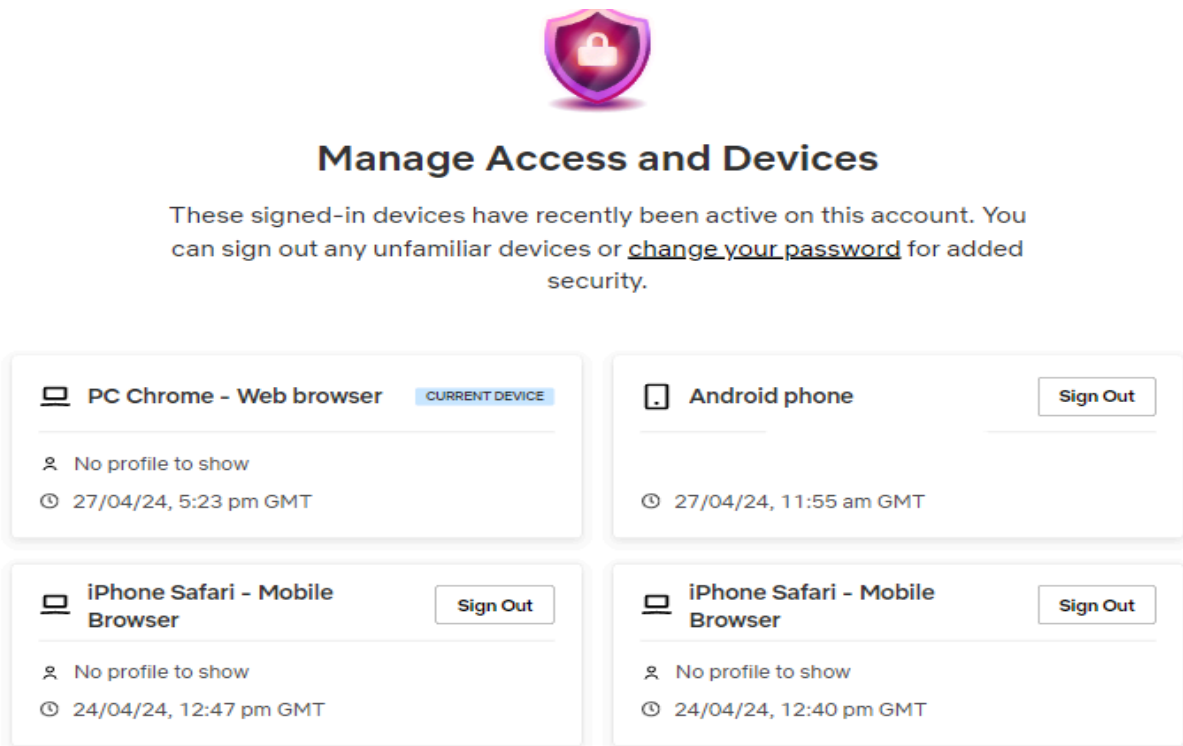-   Write comprehensive unit and integration tests for backend APIs.

Deployment is Required

What We Can Judge:

- Architecture, Security Practices, Real-Time Updates, Scalability, Best Practices, Use of WebSockets, etc…
- We also evaluate your UI building skills, considering responsiveness and other factors, although it's not weighted heavily.

References :

- You have the freedom to design your own interfaces for the login, logout, and account dashboards.
- You can refer to the screenshot below for the device management dashboard for a user. Here, users can log out any device they choose and check in real-time whether a device is currently logged in or not.

Manage Access and Devices

These signed-in devices have recently been active on this account. You can sign out any unfamiliar devices or change your password for added security.

🖥 PC Chrome – Web browser CURRENT DEVICE	🔲 Android phone Sign Out
👤 No profile to show	
🕐 27/04/24, 5:23 pm GMT	🕐 27/04/24, 11:55 am GMT

🖥 iPhone Safari – Mobile Browser Sign Out	🖥 iPhone Safari – Mobile Browser Sign Out
👤 No profile to show	👤 No profile to show
🕐 24/04/24, 12:47 pm GMT	🕐 24/04/24, 12:40 pm GMT

Do's And Dont's :

- Create two components: one for the client-side using Next.js and another for the server-side using Node.js, adhering to your preferred folder structure.
- Ensure all code is written in TypeScript as it is a requirement. We Dont Check Assignments Which are written in JS
- Avoid using Next.js for the backend or serverless functions because we need standalone backend, as well as avoid Vite or CRA for frontend development.
- Deploy these components separately using your preferred services (like vercel for frontend and onrender for backend), or you can make your self deployment solution in any cloud platform (GCP,AWS, etc).
- Please Add A ReadMe File Explaining Your Architecture
- We only accept completed assignments that fulfill the required components, excluding optional features.
- Dont send any html pages in the response to the assignment

Deliverables:

a) Deliver/share us the Source code Url (either on bitbucket or GitHub), Working/Deployed URL either at internshala submission portal or contactus@oruphones.com

b) Please create a project "readme txt file" explaining source code & API's, Architecture.

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