

Thank you for your interest in our internship. As the next step, please complete the following assignment:

Title: Round-Robin Coupon Distribution with Abuse Prevention

Objective: Develop a live web application that distributes coupons to guest users in a round-robin manner, incorporating mechanisms to prevent users from exploiting page refreshes to claim multiple coupons within a restricted time frame.

Requirements:

1. **Coupon Distribution:**

- Maintain a list of available coupons.
- Assign coupons sequentially to users to ensure even distribution.

2. **Guest Access:**

- Allow users to access the system without requiring login or account creation.

3. **Abuse Prevention:**

- **IP Tracking:** Record each user's IP address upon claiming a coupon, restricting subsequent claims from the same IP within a specified time frame (e.g., one hour).
- **Cookie Tracking:** Use cookies to monitor coupon claims from the same browser session.

4. **User Feedback:**

- Provide clear messages indicating successful coupon claims or inform users of the time remaining before they can claim another.

5. **Deployment:**

- Deploy the application to a live web server, ensuring it is accessible via a public URL.

6. **Documentation:**

- Provide setup instructions and a brief explanation of the implemented abuse prevention strategies.

Evaluation Criteria:

- **Functionality:** The application distributes coupons evenly and enforces claim restrictions effectively.
- **Security:** Effectiveness of abuse prevention mechanisms against common evasion tactics.

- **User Experience:** Clarity of user feedback and overall usability.
- **Code Quality:** Adherence to best practices, readability, and maintainability.
- **Documentation:** Clarity and completeness of setup instructions and explanations.

Submission:

- Provide the live URL of the deployed application.
- Include any necessary credentials or instructions to test the application.

This assignment will assess your ability to implement fair resource distribution and enforce usage restrictions in a real-world, guest-accessible environment.

Best regards,

Sreenivas