**Round-Robin couponn Distribution**

//usng java and spring,sql

org.springframework.boot.SpringApplication; import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication public class Application { public static void main(String[] args) { SpringApplication.run(Application.class, args);

}

}

//here imprt persistnce

javax.persistence.\*;

@Entity public class Coupon { @Id @GeneratedValue(strategy = GenerationType.IDENTITY) private Long id;

private String code; private boolean claimed;

// here we cn writw getters nd settrss

}

//we cn write coupn repos

org.springframework.data.jpa.repository.JpaRepository; public interface CouponRepository extends JpaRepository<Coupon, Long> { Coupon findFirstByClaimedFalse();

}

// here service import statemnt

org.springframework.stereotype.Service; import org.springframework.beans.factory.annotation.Autowired;

@Service public class CouponService { @Autowired private CouponRepository repository;

public Coupon getNextCoupon() { Coupon coupon = repository.findFirstByClaimedFalse(); if (coupon != null) { coupon.setClaimed(true); repository.save(coupon); } return coupon; }

}

/\* Coupon Controller \*/ import org.springframework.web.bind.annotation.\*; import org.springframework.beans.factory.annotation.Autowired;

@RestController @RequestMapping("/api/coupons") public class CouponController { @Autowired private CouponService service; @GetMapping("/claim") public String claimCoupon() { Coupon coupon = service.getNextCoupon(); return (coupon != null) ? "Coupon claimed: " + coupon.getCode() : "No coupons available."; }

}

// react js codde

// App.js import React, { useState } from 'react';

const App = () => { const [message, setMessage] = useState('');

const claimCoupon = async () => { const response = await fetch('/api/coupons/claim'); const text = await response.text(); setMessage(text); };

return ( <div style={{ padding: '20px' }}> <button onClick={claimCoupon}>Claim Coupon</button> <p>{message}</p>

</div>

); };

export default App;

// Hibernate implimenton spring.datasource.url=jdbc:mysql://localhost:3306/couponsdb spring.datasource.username=root spring.datasource.password=password spring.jpa.hibernate.ddl-auto=update