Mall Store Employee - name: string # storeID: int - name : string location: string # name: string stores: vector<Store*> role : string # category: string employees: vector<Employee*> - salary : double # inventory: Inventory instance: static Mall* performanceScore : int Mall() + Store() + Employee() + Store(id: int, n: string, cat: + ~Mall() + Employee(name: string, role: string, string, inv: Inventory) + static getInstance(): Mall* salary: double, performanceScore: + ~Store() [virtual] + initialize(n: string, loc: string): void + Store(other: const Store&) + getName(): string + ~Employee() [copy constructor] + getLocation(): string + getName() : string + operator=(other: const + getRole() : string + getStoreCapacity(): int Store&): Store& [assignment + getStoreCount(): int + getSalary() : double operator] + getPerformanceScore(): int + setName(name: string): void + getStoreID(): int + setLocation(location: string): void + setName(name: string) : void + getName(): string + setRole(role: string) : void + setStore(store: Store*): void + getCategory(): string + getStore(): Store* + setSalary(salary: double) : void + getInventory(): Inventory& + findStore(storeID: int): Store* + setPerformanceScore(score: int) : + getInventory() const: const + findStore(storeName: string): Store* Inventory& + displayInfo(): void + getStoreByID(id: int): Store* + setStoreID(id: int): void + calculateBonus(): double + displayInfo(): void + setName(n: string): void + toJSON(): json + displayAllStores(): void + setCategory(cat: string): void + removeStore(ids: int): void + fromJSON(j: json) : void + displayInfo() const: void + loadStoreDataFromFile(filename: string): void [virtual] + saveStoreDataToFile(filename: string): void + toJSON() const: json + addEmployee(emp: Employee*): void + fromJSON(j: const json&): + showEmployees(): void + getAllEmployee(): vector<Employee*>& + friend class StoreStats + getEmployeeCount(): int + friend bool + findEmployeeByName(name: string): Employee* compareStores(const Store& + removeEmployee(name: string): void s1, const Store& s2) OnlineBooking System + saveEmployeeData(filename: string): void + loadEmployeeData(filename: string): void -static OnlineBookingSystem* instance -vector<Booking*> bookings + friend class StoreStats + friend operator << (ostream&, const Mall&) EventManager* eventManager -Mall* mall -OnlineBookingSystem() +static OnlineBookingSystem* getInstance() +~OnlineBookingSystem() +bool createBooking(int customerId, int eventId, int numTickets, string Advertisement System Parking System bookingDate) +bool cancelBooking(int bookingId) -advertisements: -parkingSpots: +bool processPayment(int bookingId) vector<Advertisement*> vector<ParkingSpot*> +Booking* getBookingById(int -vehicles: -advertisers: bookingId) vector<Advertiser*> vector<Vehicle*> -tickets: +vector<Booking*> -mall: Mall* getBookingsByCustomerId(int -instance: vector<ParkingTicket*> AdvertisementSystem* -mall: Mall* customerId) +void displayAllBookings() const -instance: ParkingSystem* +AdvertisementSystem() +void displayCustomerBookings(int +getInstance(): Advertiseme customerId) const +ParkingSystem() +~AdvertisementSystem() +void saveBookingsToFile(string +getInstance(): ParkingSyste +addAdvertisement(ad: Adve filename) +~ParkingSystem() +void loadBookingsFromFile(string +addParkingSpot(spot: Park +findAdvertisementById(id: i filename) void Advertisement* +findParkingSpotById(id: int) +displayAllAdvertisements(): ParkingSpot* +getAdvertisements(): +displayAllParkingSpots(): v vector<Advertisement*>& +getParkingSpots(): CustomerSalesSystem +addAdvertiser(advertiser: A vector<ParkingSpot*>& void +addVehicle(vehicle: Vehicle customers: vector<Customer*> +findAdvertiserById(id: int): +findVehicleByLicensePlate(invoices: vector<Invoice*> +displayAllAdvertisers(): voi: string): Vehicle* transactions: vector<Transaction*> +getAdvertisers(): vector<Ac +displayAllVehicles(): void paymentMethods: vector<PaymentMethod*> +saveAdvertisementDataTof +getVehicles(): vector<Vehic instance: static CustomerSalesSystem* string): void -addTicket(ticket: ParkingTic CustomerSalesSystem() +loadAdvertisementDataFro void string): void +findTicketById(id: int): + getInstance(): static CustomerSalesSystem* ParkingTicket* + ~CustomerSalesSystem() +findActiveTicketByLicenseF + addCustomer(customer: Customer*): void string): ParkingTicket* + addInvoice(invoice: Invoice*); void +displayAllTickets(): void + addTransaction(transaction: Transaction*): +aetTickets(): void vector<ParkingTicket*>& + addPaymentMethod(method: +findAvailableSpot(): Parking PaymentMethod*): void +saveParkingDataToFile(file + findTransactionById(id: int): Transaction* string): void + findCustomerById(id: int): Customer* +loadParkingDataFromFile(f + getCustomers(): vector<Customer*>& string): void + findInvoiceById(id: int): Invoice* + displayAllCustomers(): void + saveCustomerDataToFile(filename: string): void + loadCustomerDataFromFile(filename:

string): void