## **Pentagon Gymnastics Management System UML Class Diagram** User # id: number # email: string # password: string Class # role: string <<controller>> # forename: string - id: number # surname: string - name: string **AuthController** # ageneasicate() boolean - description: string + register(req, res): Res... # dateRepitchie (Pate): void + login(req, res): Response - category: string - level: string + addSession(time): Session - maxCapacity: number + updateDetails(data): void # paparteuman():strongean + updateProfile(req, res)... + getFullName(): string + validateToken(req, res)... + checkCapacity(): boolean Member Session - membershipStatus: string Instructor **Administrator** - emergencyContact: string - id: number - medicalInfo: string - classId: number - specializations: string[] - permissions: string[] - skillLevel: string - timeSlot: string certifications: string[] - department: string - hourlyRate: number - capacity: number + bookClass(session): Boo... + 09@6116B001KNAg(UUSE)PEBo.. + cancelBooking(id): void + createClass(details): C... + manageUsers(): void + checkAvailability(): bo.. + subscribe(package): Sub... + updateSchedule(): void + generateReports(): Report + updateCapacity(): void + getBookingHistory(): Bo... + markAttendance(): void + configureSystem(): void 0..1 **Subscription** - id: number **Package** - userld: number **Booking** <<controller>> - id: number - packageld: number - ið: number - name: string - status: string SubscriptionController - description: string - startDate: Date + getPackages(req, res): ... userld: number र्म् इंस्रिकेस्ह्(न्निएकत न्म्एव्रस्ट्रिहेन्ह्रिम्ह्मिह्मिह्मार्ट्सिक्ट्रिस्ट्रिहेन्ह्रिस्ट्रिस - price: number + getUserSubscription(req... sessionId: number - maxClasses: number + calculatePrice(): number - priority: number + applyDiscount(amount): ... status: string + createSubscription(req,... +booking/piteoidate + switchPackage(req, res)... + upgrade(package): void + cancelSubscription(req,... + cancel(): void + renew(): void + isActive(): boolean + reschedule(session): void **Gearltem Payment** <<controller>> <<controller>> - id: number - id: number **PaymentController GearController** - name: string - amount: number + processPayment(req, res... + getGearltems(req, res):... - currency: string + simulatePayment(req, re... - category: string + createOrder(req, res): ... - status: string - price: number + getPaymentHistory(req, ... + updateStock(req, res): ... +Stepckatestoek(quantity): ... -+ Paly00ess (1)/ lbes of Eraing + refund(): void + checkAvailability(): bo... + verify(): boolean + applyDiscount(percent):...

## **UML Class Diagram Legend**

- △ Inheritance→ Association
- <<controller>> Stereotype
- + Public # Protected Private