

```

package com.capitalhr.erp;

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

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

// Core Modules
|
// 1. User Management
package com.capitalhr.erp.user;

@Entity
public class User {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private Long id;
    private String username;
    private String password;
    private String role;
    // Other fields, getters, setters
}

@Repository
public interface UserRepository extends JpaRepository<User, Long> {
    User findByUsername(String username);
}

@Service
public class UserService {
    @Autowired
    private UserRepository userRepository;

    // User CRUD operations
}

// 2. Employee Management
package com.capitalhr.erp.employee;

@Entity
public class Employee {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private Long id;
    private String name;
    private String department;
    private String position;
    // Other fields, getters, setters
}

@Repository
public interface EmployeeRepository extends JpaRepository<Employee, Long> {}

@Service
public class EmployeeService {
    @Autowired
    private EmployeeRepository employeeRepository;

    // Employee CRUD operations
}

// 3. Attendance Management
package com.capitalhr.erp.attendance;

@Entity
public class Attendance {

```

```

        @Id
        @GeneratedValue(strategy = GenerationType.IDENTITY)
        private Long id;
        @ManyToOne
        private Employee employee;
        private LocalDateTime checkInTime;
        private LocalDateTime checkOutTime;
        // Other fields, getters, setters
    }

    @Repository
    public interface AttendanceRepository extends JpaRepository<Attendance, Long> {}

    @Service
    public class AttendanceService {
        @Autowired
        private AttendanceRepository attendanceRepository;

        // Attendance CRUD operations
    }

    // 4. Payroll Management
    package com.capitalhr.erp.payroll;

    @Entity
    public class Payroll {
        @Id
        @GeneratedValue(strategy = GenerationType.IDENTITY)
        private Long id;
        @OneToOne
        private Employee employee;
        private BigDecimal basicSalary;
        private BigDecimal allowances;
        private BigDecimal deductions;
        // Other fields, getters, setters
    }

    @Repository
    public interface PayrollRepository extends JpaRepository<Payroll, Long> {}

    @Service
    public class PayrollService {
        @Autowired
        private PayrollRepository payrollRepository;

        // Payroll CRUD operations
    }

    // 5. Performance Management
    package com.capitalhr.erp.performance;

    @Entity
    public class Performance {
        @Id
        @GeneratedValue(strategy = GenerationType.IDENTITY)
        private Long id;
        @ManyToOne
        private Employee employee;
        private LocalDate evaluationDate;
        private String evaluator;
        private int rating;
        private String comments;
        // Other fields, getters, setters
    }

    @Repository
    public interface PerformanceRepository extends JpaRepository<Performance, Long> {}

    @Service
    public class PerformanceService {
        @Autowired
        private PerformanceRepository performanceRepository;
    }

```

```

    // Performance CRUD operations
}

// 6. Recruitment Management
package com.capitalhr.erp.recruitment;

@Entity
public class JobOpening {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private Long id;
    private String title;
    private String description;
    private LocalDate postingDate;
    private LocalDate closingDate;
    // Other fields, getters, setters
}

@Repository
public interface JobOpeningRepository extends JpaRepository<JobOpening, Long> {}

@Service
public class RecruitmentService {
    @Autowired
    private JobOpeningRepository jobOpeningRepository;

    // Recruitment CRUD operations
}

// 7. Training Management
package com.capitalhr.erp.training;

@Entity
public class Training {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private Long id;
    private String title;
    private String description;
    private LocalDate startDate;
    private LocalDate endDate;
    @ManyToMany
    private List<Employee> participants;
    // Other fields, getters, setters
}

@Repository
public interface TrainingRepository extends JpaRepository<Training, Long> {}

@Service
public class TrainingService {
    @Autowired
    private TrainingRepository trainingRepository;

    // Training CRUD operations
}

// Main Controller
@RestController
@RequestMapping("/api")
public class ErpController {
    // Inject all services

    // Endpoints for all operations
}

```

Output

Capital HR ERP System

Total Employees

250

Open Positions

5

Attendance Today

92%

Upcoming Trainings

3

Employee Directory

John Doe - Software Developer

Jane Smith - HR Manager

Bob Johnson - Sales Representative

Today's Attendance

Employee	Check-In	Check-Out
John Doe	08:55 AM	--
Jane Smith	09:02 AM	--

Payroll Summary

Employee	Basic Salary	Allowances	Deductions	Net Salary
John Doe	\$5000	\$500	\$200	\$5300

Recent Performance Evaluations

John Doe - Rating: 4.5/5 - Excellent performance in project delivery

Jane Smith - Rating: 4/5 - Strong leadership skills demonstrated

Open Positions

Senior Software Developer - Posted: 2023-10-01 | Closing: 2023-10-31

Marketing Specialist - Posted: 2023-10-05 | Closing: 2023-11-05

Upcoming Trainings

Agile Methodologies Workshop - Date: 2023-11-15 | Participants: 15

Leadership Skills Seminar - Date: 2023-11-20 | Participants: 10