**Lab Practical Extra:**

The Comprehensive HRMS Software is a multi-platform solution (web, desktop, mobile) for payroll processing and employee management, with integrations for accounting and time-tracking systems. It streamlines HR tasks like pays lip generation, attendance tracking, and employee data management across devices.

**Practical Assignment:**

### Objective: To understand and create a Project Charter and an initial Project Plan, incorporating key aspects such as stakeholder needs, project phases, and strategic planning.

### Description:

## ****Lab Exercise 1: Developing a Project Charter and Project Plan****

### ****Objective:****

To develops a secure, multi-platform HRMS (Human Resource Management System) that automates payroll processing, centralizes employee management, and integrates with third-party tools (accounting/time-tracking), improving HR efficiency and user experience across web, desktop, and mobile platforms

### ****Instructions:****

1. **Develop a Project Charter:**  
   Create a Project Charter document that includes:
   * **Project Title:** Comprehensive HRMS Software Development
   * **Project Purpose/Justification:**  
     To develop a multi-platform HRMS (Human Resource Management System) with payroll and employee management modules, streamlining HR operations for businesses.
   * **High-Level Project Description:**  
     The project involves designing, developing, and deploying an HRMS solution for web, desktop, and mobile platforms, integrating payroll processing, employee records, and third-party system compatibility (e.g., accounting software).
   * **Objectives and Success Criteria:**
     + Deliver a fully functional HRMS with payroll and employee management modules.
     + Ensure cross-platform compatibility (web/desktop/mobile).
     + Achieve seamless integration with accounting/time-tracking systems.
     + Meet user acceptance testing (UAT) benchmarks
   * **Assumptions and Constraints:**
     + Assumes access to development tools (e.g., React, .NET, Flutter).
     + Constraints: Budget limits, 12-month timeline, dependency on third-party APIs.
   * **Stakeholders:**
     + Project Sponsor (HR Director)
     + Development Team (Developers, UI/UX Designers)
     + End-users (HR Staff, Employees)
     + Automotive Partners (Accounting Software Vendors)
   * **Project Manager Assigned:** Nikhil Rathod
   * **Authorization:**  
     signature- \_\_\_\_\_\_\_\_\_\_
2. **Project Planning:**  
   Develop an initial Project Plan outline that includes:
   * **Project Phases:**
     + Requirement Analysis: Gather HR process workflows
     + UI/UX Design: Wireframes for all platforms
     + Application Development(React.js,.NET,Flutter)
     + API development for accounting/time-tracking
     + Testing & Debugging
     + Deployment
   * **Major Deliverables:**
     + SRS Document
     + UI Mockups (Figma)
     + Modular Codebase
     + Test Reports
     + Deployment Packages
   * **Timeline:**
     + Gantt chart (12 months total):
     + Planning (1 month)
     + Development (7 months)
     + Testing (2 months)
     + Deployment (2 months)
   * **Resource Requirements:**
     + Tools: Figma, GitHub, Jira, AWS
     + Team: 5 Developers, 2 QA Engineers, 1 UI/UX Designer
   * **Risk Management:**
     + **Risks: Integration failures, platform-specific bugs.**
     + **Mitigation: Agile sprints, API sandbox testing.**
3. **Documentation:**  
   Compile all documents into a single file for submission.

### ****Deliverables:****

* Completed Project Charter
* Initial Project Plan outline
* Timeline in Excel or project management software

## ****Lab Exercise 2: Stakeholder Analysis and Project Life Cycle Mapping****

### ****Objective:****

To perform a detailed stakeholder analysis and map out the project life cycle for Android Automotive App Development.

### ****Instructions:****

1. **Stakeholder Identification:**
   * Initiation: Define HRMS scope, select platforms.
   * Planning: Create charter, finalize tech stack.
   * Execution: Develop modules, integrate APIs.
   * Monitoring: Test across platforms, optimize performance.
   * Closing: Deploy, conduct training, review.
2. **Stakeholder Analysis:**  
   Create a Stakeholder Analysis Matrix:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Stakeholder Name | Role/Position | Interests/Concerns | Impact Level | Influence Level | Engagement Strategy |
| HR Director | Sponsor | Budget, ROI | High | High | Biweekly steering meetings |
| Developers | Internal Team | Technical feasibility | High | Medium | Daily stand-ups, sprint reviews |
| Accounting Vendor | External Partner | API compatibility | Medium | Medium | Technical workshops |
| HR Staff | End-User | Ease of use, reporting features | High | Low | Beta testing, feedback surveys |
| Employees | End-User | Self-service portal | Medium | Low | UX prototyping sessions |

**3. Project Life Cycle Mapping:**

**Stages & Key Activities:**

* **Initiation:** Define HRMS scope, select platform
* **Planning:** Create charter, finalize tech stack.
* **Execution:** Develop modules, integrate APIs
* **Monitoring & Controlling:** Test across platforms, optimize performance
* **Closing:** Deploy, conduct training, review.

**Influence of Stakeholders:**

* HR Director prioritizes payroll accuracy
* Employees influence self-service features
* Vendors dictate API constraints

**4. Documentation:**

### ****Deliverables:****

* Stakeholder Analysis Matrix
* Life Cycle Mapping Diagram
* Summary Report

## ****Lab Exercise 3: Project Selection Methods and Developing a Project Scope Statement****

### ****Objective:****

Deliver a secure, multi-platform HRMS with payroll, employee management, and third-party integrations.

### ****Instructions:****

1. **Project Selection Methods Summary:**

|  |  |  |
| --- | --- | --- |
| Method | Advantages | Disadvantages |
| Cost-Benefit Analysis | Financial clarity, informed decision-making | May overlook qualitative factors |
| Scoring Models | Considers multiple criteria | Requires subjective weighting |
| Payback Period | Easy to calculate, focuses on ROI timeline | Ignores long-term strategic benefits |

1. **Project Selection Exercise:**  
   **Chosen Method:** Scoring Model  
   **Rationale:** Suitable for evaluating technical, financial, and user-experience aspects.  
   Based on criteria scores, the Android Automotive App project is selected due to its high potential for real-world impact and technical feasibility.
2. **Project Scope Statement:**

* **Project Objective:**  
  To develop and deploy a user-friendly Android Automotive Application for in-vehicle use, compliant with Google's guidelines.
* **Scope Description:**  
  Design and implement core features such as:
  + Media Control
  + Navigation Integration
  + Voice Command Support
  + Optimized UI for car displays
* **Project Exclusions:**
  + Non-Automotive Android app compatibility
  + Hardware-level vehicle integrations
* **Acceptance Criteria:**
  + App passes compatibility tests on Automotive Emulator
  + Meets all functional requirements
  + Positive feedback from initial user testing
* **Assumptions and Constraints:**
  + Google Automotive guidelines remain stable
  + Development within semester timeline
  + Limited access to real vehicle hardware

1. **Documentation:**  
   Compile the comparison table, project selection rationale, and scope statement into a final report.

### ****Deliverables:****

* Project Selection Comparison Table
* Selection Rationale
* Detailed Project Scope Statement
* Final Report