DC InfoTech Pvt Ltd - Web Development Internship Task Plan

Objective:

The solutions will be evaluated based on usability, scalability, and innovation.

Problem Statements & Tasks

Task 1: Client Feedback Management Portal

Objective: Build a web-based portal to collect, analyze, and manage customer feedback for DC InfoTech Pvt Ltd's products and services.

- **Features Required:**
  - User authentication (admin and clients).
  - Feedback submission forms with categories and priorities.
  - Analytics dashboard to visualize feedback trends.
  - Export feedback as PDF or Excel.
- **Technologies Recommended:**
  - Frontend: React.js, TailwindCSS
  - Backend: Node.js, Express.js
  - Database: MongoDB or MySQL
  - Hosting: Firebase or Google Cloud

Task 2: Internal Task Management System

Objective: Create a task assignment and tracking system for internal employees.

- **Features Required:**
  - Task assignment by managers to employees.
  - Notifications for new tasks via email.
  - Task completion status tracking.
  - Calendar integration for task deadlines.
- **Technologies Recommended:**
  - Frontend: Angular or Vue.js
  - Backend: Python (Flask/Django) or GoLang
  - Database: PostgreSQL
  - Hosting: AWS or DigitalOcean

Task 3: Real-Time Sales Metrics Dashboard

Objective: Design a web application to monitor real-time sales and revenue data for DC InfoTech Pvt Ltd.

- **Features Required:**
  - Data fetching and visualization using APIs.
  - Dynamic charts and graphs for KPIs like total sales, revenue growth, and product performance.
  - Multi-user access with different privilege levels (viewer, editor).
- **Technologies Recommended:**
  - Frontend: Svelte or React.js with D3.js
  - Backend: Node.js or Ruby on Rails
  - Database: Firebase Realtime Database
  - Hosting: Google App Engine

Task 4: Employee Training & Knowledge Base Platform

Objective: Develop an internal web portal for employees to access training materials and company policies.

- **Features Required:**
  - Login system with role-based access (HR, employees).
  - Upload and view documents (PPTs, PDFs).
  - Search and filter options for quick access.
  - Feedback system for employees to suggest improvements.
- **Technologies Recommended:**
  - Frontend: Bootstrap with Vanilla JS or React
  - Backend: PHP (Laravel) or .NET Core
  - Database: SQLite or MariaDB
  - Hosting: Microsoft Azure

Task 5: Real-Time Chat Application

- **Objective: Create a real-time chat application for internal communication within the company.**
- **Features Required:**
  - **User authentication for employees.**
  - **Real-time messaging (text, images, files).**
  - **Group chat functionality and private messages.**
  - **Chat history and search functionality.**
  - **Admin panel for user management (ban, promote, etc.).**
- **Technologies Recommended:**
  - **Frontend: React.js with Socket.io**
  - **Backend: Node.js with Express.js**
  - **Database: MongoDB or MySQL**
  - **Hosting: AWS or Google Cloud**

Task 6: Learning Management System (LMS)

Objective: Develop a web-based Learning Management System to manage and deliver training materials, track employee progress, and handle certifications.

Features Required:

1. **User Authentication:**
    - **Admin and student login systems.**
    - **Role-based access (Admin, Instructor, Student).**
2. **Course Management:**
    - **Admins can create courses, upload course materials (videos, PDFs, PPTs).**
    - **Categorize courses based on topics.**
    - **Ability to update course details (e.g., name, description, materials).**
3. **Course Enrollment:**
    - **Students can browse courses and enroll.**
    - **Ability to view course details before enrolling.**
4. **Progress Tracking:**
    - **Track student progress (e.g., modules completed, quizzes passed).**
    - **Admins and instructors can view student progress reports.**
5. **Quizzes & Assignments:**
    - **Create quizzes and assignments for students.**
    - **Auto-grading system for quizzes.**
    - **Assignment submission system where students can upload their work.**
6. **Certificate Generation:**
    - **Students receive certificates on course completion.**
    - **Certificate generation (PDF) after passing the course.**
7. **Discussion Forums:**
    - **Students can interact with instructors and peers via forum posts.**
    - **Ability to post questions, answer others' questions, and discuss course material.**
8. **Notifications:**
    - **Students get notifications for new courses, updates, and deadlines.**

    - **Admins and instructors get notifications about new enrollments and submissions.**
9. **Admin Dashboard:**
    - **Manage courses, students, progress reports, and enrollments.**
    - **Monitor student activities and feedback.**
10. **Search & Filter:**
    - **Students can search for courses by category, difficulty level, and rating.**
    - **Filters for sorting courses (e.g., most popular, newest, highest rated).**

Technologies Recommended:

- **Frontend: React.js or Vue.js**
- **Backend: Node.js with Express.js or Python (Django/Flask)**
- **Database: MongoDB or PostgreSQL**
- **Authentication: JWT (JSON Web Tokens) or OAuth for secure user login**
- **File Storage: Cloud storage for course materials (e.g., AWS S3, Google Cloud Storage)**
- **Hosting: AWS, Google Cloud, or DigitalOcean**

Submission & Evaluation

- **Submission Process:**
    - Interns will submit their work through an online form shared at the end of the internship.
    - Deliverables must include:
        1. Hosted project URL or GitHub repository.
        2. Documentation of features and implementation.
        3. Video walkthrough/demo of the solution.
- **Evaluation Criteria:**
    - Functionality: Does the solution meet requirements?
    - Scalability: Can the application handle real-world usage?
    - Innovation: Creative problem-solving approaches
    - UI/UX: Ease of use and design quality.

Support Available:

- Interns can email queries to DC InfoTech Pvt Ltd employees.
- Guidance can also be sought from mentors or employees on LinkedIn.

After completing each task, remember to fill out the Internship Completion Form .You can submit this form one by one or all at once—whichever works best for you. However, please ensure that all submissions are made before the end of your three-month internship, as this will be considered during your evaluation.

Summary Timeline Overview:

- **Month 1:** Task 1 (2 weeks), Task 2 (1 week), Task 3 (1 week)
- **Month 2:** Task 4 (2 weeks), Task 5 (1 week), Task 6 - Part 1 (1 week)
- **Month 3:** Task 6 - Part 2 (2 weeks), Final Review & Bug Fixes (2 weeks)