

# **Alumni Project Performance Analytics and Visualization System**

## **I. Features:**

### **1. User Management**

- Admin login/logout
- Role-based access (Admin, Faculty)
- User account management (add/edit/delete users)

### **2. Alumni & Project Database**

- Alumni profile records (name, batch, course, contact, employment status)
- Project records (title, category, year, adviser, members)
- Upload supporting documents

### **3. Performance Analytics**

- Project success indicators (awards, implementation status, impact)
- Alumni employment statistics
- Skills utilization tracking
- Trend analysis per batch/year

### **4. Data Visualization Dashboard**

- Interactive charts (bar, line, pie, heatmap)
- Filter by year, program, project type
- Comparative analysis between batches
- Key Performance Indicators (KPIs)

### **5. Search & Reports**

- Advanced search for alumni/projects
- Export reports (PDF/Excel)
- Printable summaries

### **6. System Utilities**

- Data import/export
- Backup & restore
- Audit logs

## **II. Task Assignment of Members**

### **1. Ablang, Jonathan Caballero**

- Define requirements, scope, and timeline - Week 1
- Set up Kanban board and assign tasks - Week 1

- Monitor progress and conduct meetings - Weeks 2–9
- Coordinate integration and resolve issues - Weeks 7–8
- Prepare final presentation - Week 9

2. Benito, George Christian Valero

- Design ERD and database schema - Week 1
- Implement database tables and relationships - Week 2
- Develop authentication and role-based access - Week 3
- Implement CRUD for alumni and projects - Week 4
- Validate data and test database operations - Weeks 2–8

3. Bautista, Shaila Jane Vivit

- Gather UI requirements and plan layout - Week 1
- Create wireframes for key pages - Week 2
- Design high-fidelity mockups - Week 3
- Define visual style (colors, typography, navigation) - Week 3
- Finalize UI assets for development - Week 4

4. Agaoid, Jemima Victoria Peralta

- Identify metrics and define KPIs - Week 1
- Implement analytics and statistical computations - Weeks 2–3
- Perform trend and batch analysis - Weeks 2–4
- Aggregate and validate data - Week 4
- Prepare analytics output for dashboard - Week 5

5. Canido, Ram Reniel Malicdem

- Set up frontend project structure - Week 1
- Implement login and dashboard interfaces - Week 2–3
- Integrate charts and KPI displays - Week 5

- Connect frontend to backend APIs - Week 4
- Add filters, search, and responsive design - Week 6

## 6. Dacanay, Ethelyn Policarpio

- Create test plan and test cases - Week 1
- Test system features and usability - Weeks 2–8
- Track bugs and verify fixes - Weeks 2–8
- Prepare user manual - Weeks 8–9
- Compile and finalize documentation - Week 9

## **III. Scope of the System**

The Alumni Project Performance Analytics and Visualization System is designed to:

- Serve as a centralized database for storing alumni profiles and project records, including detailed information such as batch, course, adviser, project members, employment status, and supporting documents.
- Provide role-based user management, allowing Admin and Faculty users to securely log in, manage accounts, and access system features based on permissions.
- Enable performance analytics by tracking project success indicators (awards, implementation, impact), alumni employment statistics, and skills utilization across batches and years.
- Offer a data visualization dashboard with interactive charts (bar, line, pie, heatmap), filters by year, program, or project type, and comparative analysis between batches.
- Support search and reporting capabilities, including advanced search for alumni/projects, exportable reports in PDF/Excel, and printable summaries for academic and administrative decision-making.
- Include system utilities for data import/export, backup and restore, and audit logs to ensure data integrity and security.

This system is intended to improve academic planning and decision-making by providing administrators and faculty with actionable insights derived from alumni projects and outcomes