

Account Information System (AIS)

Project Overview:

The **Account Information System (AIS)** is a centralized digital platform designed to efficiently manage, track, and maintain user account information within an organization. The system streamlines account-related operations by storing all critical customer or employee details in a secure, organized, and easily accessible manner.

AIS enhances data accuracy, minimizes manual workload, and ensures faster decision-making by integrating automated workflows, validation rules, role-based access, and real-time data visibility. It is built with a modern, scalable architecture to support both small-scale operations and large enterprise environments.

Role & Responsibility:

- Developed and maintained the **frontend UI** using **HTML5, CSS3, Bootstrap, jQuery, and JavaScript**, ensuring a responsive and user-friendly experience.
- Implemented **backend business logic** using **ASP.NET MVC (C#)** following MVC architecture and coding best practices.
- Created and optimized **controllers, models, and views** to support core AIS functionalities such as account creation, updates, and validation workflows.
- Built reusable **partial views, JavaScript utilities, and UI components** to improve maintainability and reduce development effort.
- Integrated **ADO.NET** for secure, fast, and efficient communication between the application and **SQL Server** database.
- Designed and executed **SQL queries, stored procedures, functions, and triggers** to support account management operations and data validation.
- Ensured **data accuracy and consistency** by applying server-side validations, constraint checks, and error handling.
- Worked with **Role-Based Authentication** to implement secure access controls and restrict functionalities based on user roles.
- Deployed and configured the application on **On-Premise IIS**, performing build transitions, web.config updates, and environment-level configurations.

- Conducted thorough **unit testing and debugging** to ensure high-quality, bugfree module delivery.
- Collaborated with team members to understand requirements, create high-level designs, and deliver features on time.
- Provided **production support**, resolved defects, and improved system performance through code optimizations and SQL tuning.

Key Objective:

- To maintain a **centralized repository** of account information.
- To ensure **data accuracy, security, and consistency** across the system.
- To reduce manual effort by enabling **automated data management workflows**.
- To provide **quick access** to customer/employee account details.
- To improve **reporting, analytics, and operational efficiency**.

Tech Stack: ASP.NET MVC, C#, SQL Server, SOAP

Core Features

1. User Account Management

- Create, update, delete, and view account information
- Unique identification for every account
- Role-based access to secure sensitive information

2. Data Validation & Verification

- Mandatory field checks
- Format validation (email, phone number, IDs)
- Duplicate record detection

3. Activity Tracking

- Log of account updates and changes
- Audit trail for compliance and monitoring

4. Search & Filtering

- Advanced search by name, ID, phone, department, etc.

- Custom filters for faster access to records

5. Reports & Dashboard

- Summary of active/inactive accounts
- Exportable reports (Excel, CSV, PDF)
- Real-time charts and insights

6. Integration Support

- API-based integration with HR, CRM, ERP, or financial systems
- Data synchronization and import/export tools

7. Security & Compliance

- Role-based access control (RBAC)
- Encrypted data storage
- Compliance with organizational security standards

Technology Stack

- **Frontend:** html5, Bootstrap, css3, jQuery, Javascript
- **Backend:** ASP.NET MVC, C#, ADO.NET
- **Database:** SQL SERVER
- **Cloud:** On-premise(IIS)
- **Authentication:** Role Based Authentication

Results:

- Improved efficiency in managing account data
- Reduced errors through validation and automation
- Centralized and structured account lifecycle management
- Enhanced security and data privacy
- Faster onboarding and account update processing