**PRN222 Assignment 01 – README**

## 1. Introduction

FUNewsManagementSystem is a News Management System for universities, built with ASP.NET Core MVC using the 3-Layer Architecture model:  
- DAL (Data Access Layer): manages database connection, Entities, and Repositories  
- BLL (Business Logic Layer): handles business logic and service processing  
- FUNewsManagementSystem (Presentation Layer): MVC Web Application (Controllers + Views + Models)  
  
 Main features include:  
- Account, category, article, and tag management  
- Related news recommendation  
- Statistical report by author and category  
- Public viewing without login

## 2. Project Structure

Solution 'ASS1'  
│  
├── BLL  
│ └── Service/  
│  
├── DAL  
│ ├── Models/  
│ └── Repository/  
│  
└── FUNewsManagementSystem  
 ├── Controllers/  
 ├── Models/  
 ├── Services/  
 ├── Views/  
 ├── appsettings.json  
 └── Program.cs

## 3. Technologies Used

- ASP.NET Core MVC (.NET 8.0)  
- Entity Framework Core  
- SQL Server 2019  
- LINQ for data query and sorting  
- Repository Pattern + Singleton Pattern  
- Bootstrap 5, Razor View Engine

## 4. Default Accounts

- Admin: admin@FUNewsManagementSystem.org / @@abc123@@  
- Staff: [IsabellaDavid@FUNewsManagement.org](mailto:IsabellaDavid@FUNewsManagement.org) / @1  
- Lecturer: [EmmaWilliam@FUNewsManagement.org](mailto:EmmaWilliam@FUNewsManagement.org) / @1

## 5. How to Run the Project

1. Open SQL Server Management Studio and create a database named FUNewsDB.  
2. Update the connection string in appsettings.json:  
 "ConnectionStrings": { "DefaultConnection": "Server=.;Database=FUNewsDB;Trusted\_Connection=True;" }  
3. Run the project using Visual Studio 2022 or use command line:  
 dotnet run  
4. Open your browser and go to http://localhost:5000

## 6. Role-based Features

Admin:  
- Manage user accounts (CRUD + search)  
- Generate statistical reports by category, author, and status  
- Export reports to Excel  
  
Staff:  
- Manage categories, articles, and tags (CRUD + search)  
- View personal article history  
- Update personal profile  
  
Lecturer:  
- View and search public news articles only