# Project Proposal

**Title of the Project:** TicketEasy - A Web-based Ticketing Application

**Team Members:**

- [Delara Amiri]
- [Debora Correa Batista Bastos]
- [Arjun Dhakal]
- [Mihai Coanda]

**Project Description:** TicketEasy is a web application designed to streamline the process of managing and resolving tickets for various issues, inquiries, and requests. The system will provide a user-friendly interface for users to submit tickets, track their progress, and communicate with support teams. Admins will have the ability to manage users, tickets, and monitor overall system activity.

**Technologies Used:**

- ASP.NET Core(C#)
- ASP.NET Core Identity for authentication & authorization
- Entity Framework for data access
- Microsoft SQL Management Studio for database management
- LINQ
- HTML, CSS, and JavaScript for front-end development
- Azure cloud platform

**Additional Libraries:**

- jQuery for enhanced user interaction
- Bootstrap for responsive design
- FontAwesome for icons
- Toastr for notifications
- Bootwatchs for themes

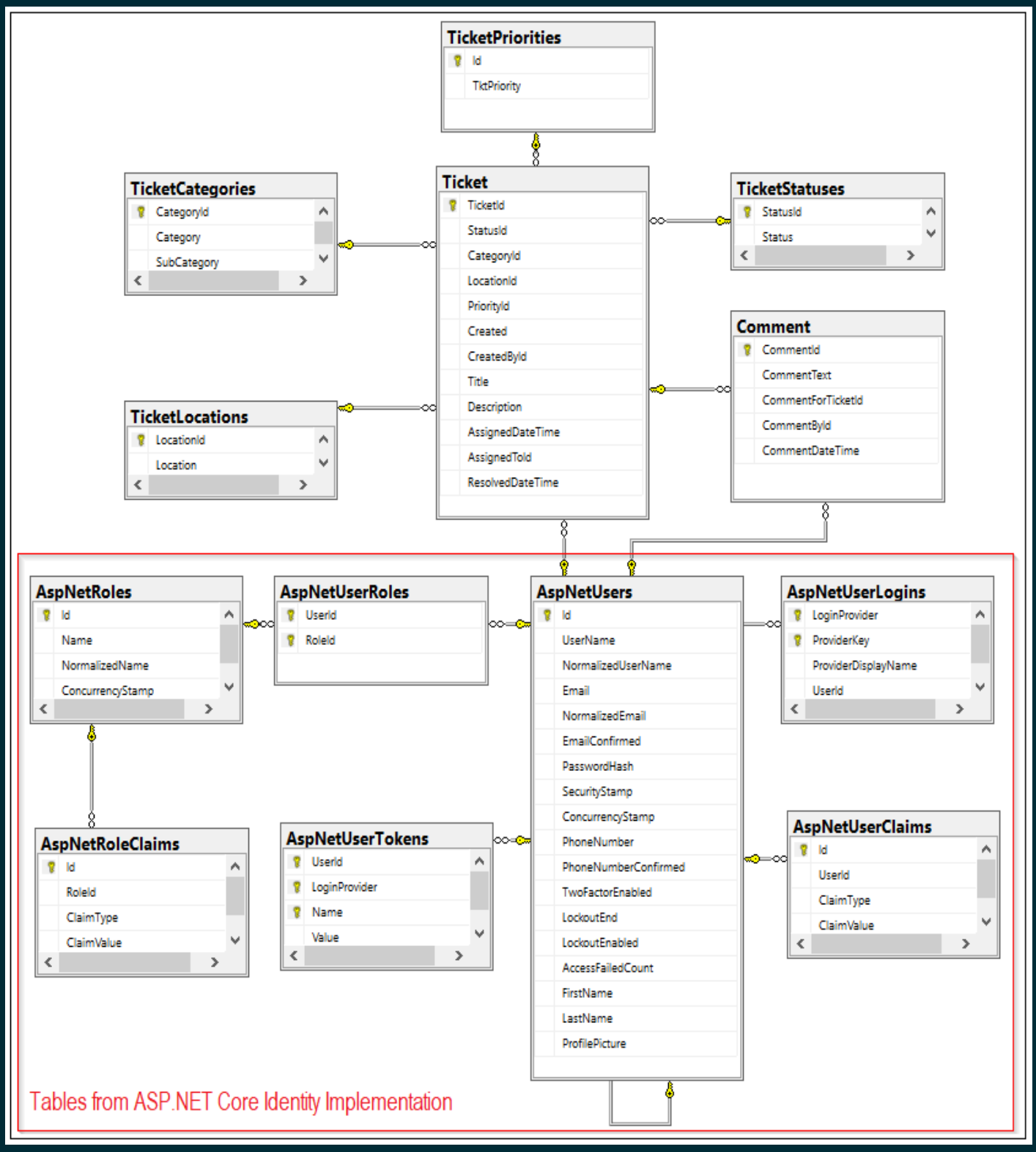
**Special Features:**

- User registration and authentication system
- User roles and permissions (Admin, Manager, Agent, User)
- Ticket submission and tracking system
- Email notifications for ticket creation, resolution, and closure
- Admin panel for user and ticket management (CRUD operations)
- Search functionality for tickets
- Pagination, sorting, autocomplete
- Responsive and user-friendly design
- Charts and diagrams for statistical analysis
- Comments feature
- Notification feature (if time allows)
- Live chat feature (if time allows)
- Deployment on Azure

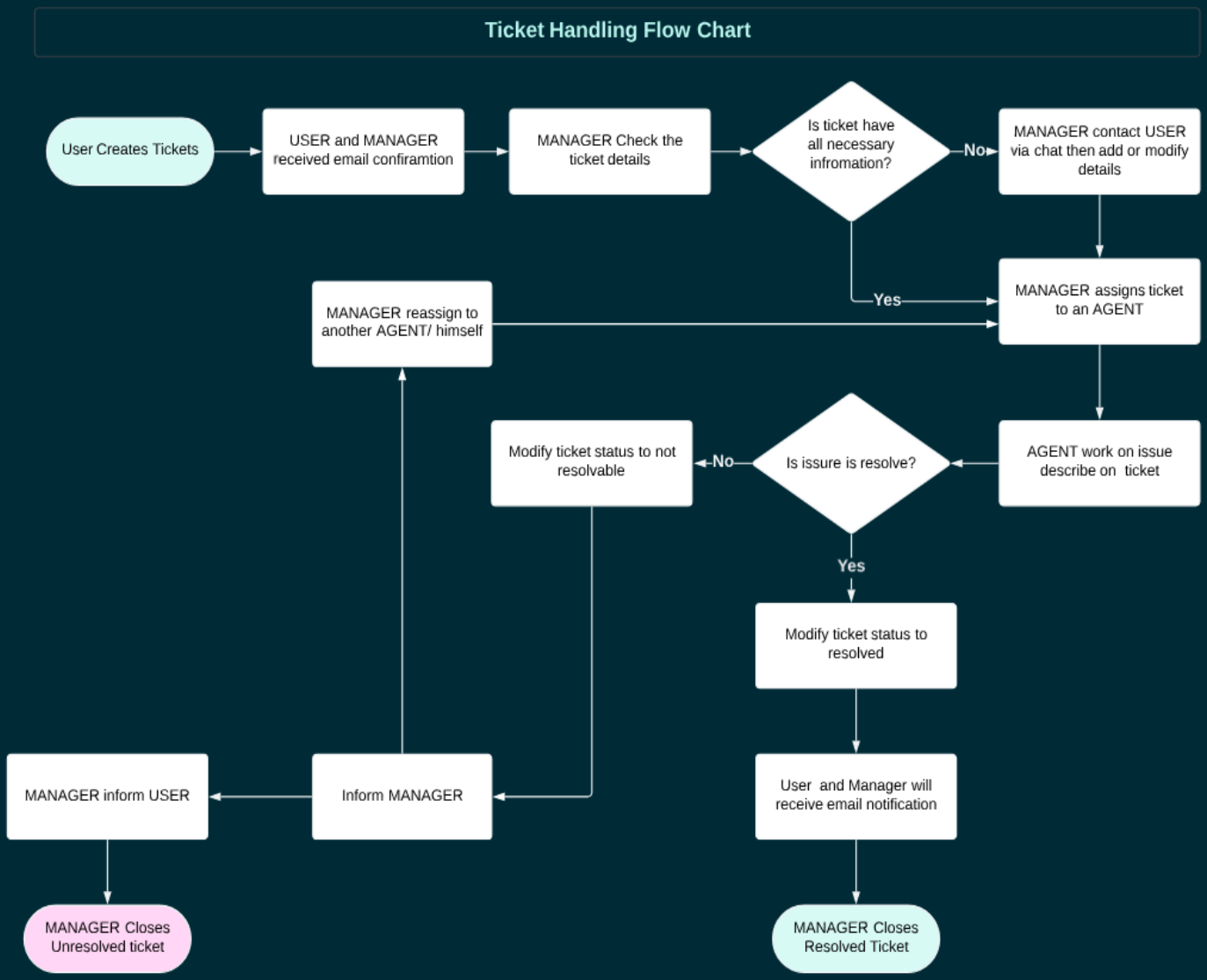
**Challenging Items:**

- Implementing real-time ticket updates without manual refresh
- Designing an intuitive user interface for ticket submission
- Managing email notifications efficiently
- Implementing role-based access control effectively

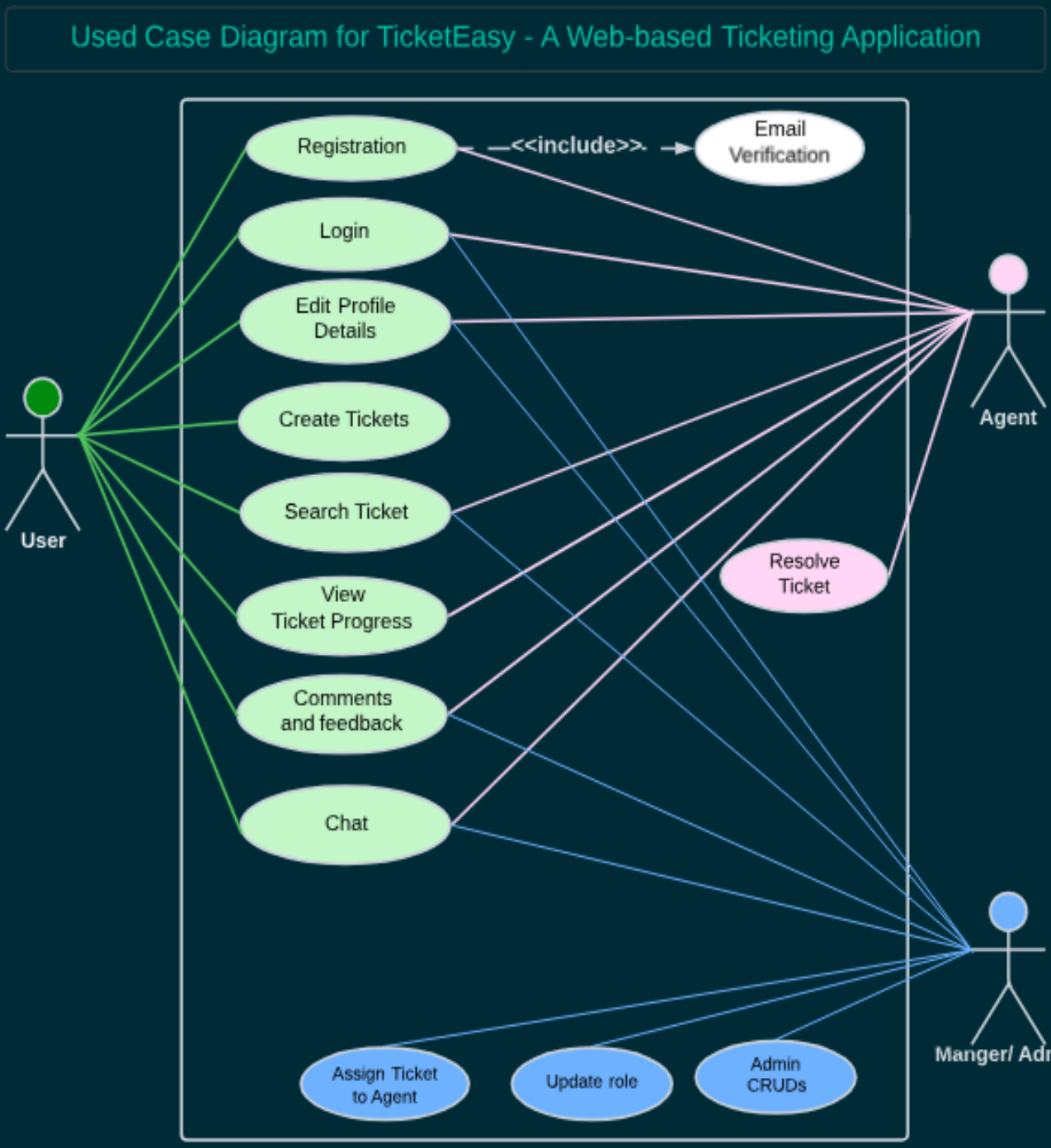
## Database Entity Relationship Diagram (ERD)



# Ticket Handling Flow Chart



## Use Case Diagram



With this basic structure, you have the core entities needed for a ticketing system. Users can submit tickets, which can have associated comments and attachments. Users can be assigned to tickets, and admins can manage user roles.

**Questions to Discuss with the Teacher:**

- How should we handle data security and privacy for user information and tickets?
- What is the preferred method for handling user authentication and role-based access control?
- Are there any specific design guidelines or preferences for the user interface?
- Should the application support multiple languages?
- What performance considerations should we keep in mind, especially when handling a large number of tickets?
- How should we handle ticket prioritization and assignment to support agents?
- Are there any specific regulations or compliance requirements that need to be addressed?

Once the proposal is approved by the teacher, we will proceed with the development of the TicketEasy web application, adhering to the proposed features and guidelines.