GAYRİMENKUL SATIŞ-KİRALAMA SİSTEMİ

Web Programming Course Project Report

1.PROJECT DESCRIPTION

This web project is a listing and management platform designed for the real estate sector. The system enables users to easily find properties for sale or rent that match their needs. It provides an interactive web interface that includes functions for adding, editing, and viewing listings.

2.USED TECHNOLOGIES

•.NET 9.0 Core MVC: Web application framework

•Entity Framework Core 9.0: ORM tool, Code-First approach

•ASP.NET Core Identity: User authentication and authorization

•SQLite: Database management system

•Bootstrap 5.3: Responsive user interface

•Razor View Engine & Tag Helpers: Dynamic page generation

3.MVC PATTERN IMPLEMENTATION

Model Layer:

•Category.cs: Category data model (CategoryId, Name)

•Property.cs: Real estate data model (PropertyId, Title, Price, RoomCount, SquareMeters, City, CategoryId)

•AppDbContext.cs: Entity Framework database context

Controller Layer (3 controllers):

•HomeController: Main page management (Showcase featured properties)

•AccountController: Register, Login, Logout operations

•CategoryController: Category CRUD operations (Create, Read, Update, Delete)

View Layer (13 views):

•Account: Login.cshtml, Register.cshtml, Profile.cshtml,

•Category: Index.cshtml, Create.cshtml, Edit.cshtml, Delete.cshtml

•Home: Index.cshtml, Edit.cshtml, Detail.cshtml, Create.cshtml, Delete.cshtml

•Shared: _Layout.cshtml (Navbar, Footer)

4.APPLICATION FEATURES

4.1 Authentication & Authorization

•User registration and login system with ASP.NET Core Identity

Access to property management (create, edit, delete) is restricted unless the user is logged in

Public users can view listings, but only authorized users can manage them.

4.2 CRUD Operations

Category Management:

•Create: Form for adding a new category (e.g., For Sale, For Rent, Villa, Apartment)

•Read: Listing all property categories

•Update: Editing an existing category name

•Delete: Deleting a category

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Project File Structure:

Gayrimenkul/
├── Controllers/
│   ├── AccountController.cs
│   ├── CategoryController.cs
│   └── HomeController.cs
├── Data/
│   └── AppDbContext.cs
├── Models/
│   ├── Category.cs
│   ├── Property.cs
│   └── User.cs
├── Views/
│   ├── Account
│   ├── Category
│   ├── Home
│   └── Shared
├── Migrations/      (EF Core migrations)
├── wwwroot/         (Static files: css, js, images)
├── Program.cs       (Application configuration)
└── appsettings.json (Database connection string)
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