

REPORT ON
CourseMate

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1. Introduction

CourseMate is a web-based knowledge-sharing platform for university communities, built using ASP.NET Core MVC framework and C#. Students can post questions about anything and receive answers through comments from fellow community members. The platform features upvoting/downvoting for comments, academic tagging with course integration, anonymous posting, and administrative controls for content moderation.

2. Problem Statement

University students struggle to find reliable, peer-reviewed answers outside classroom hours. Existing platforms often lack a clear academic structure and a university-specific context. Students need course-specific information and academic expertise that generic platforms cannot provide effectively. There's a need for a university-focused platform combining unrestricted posting with academic context and community-driven quality control.

3. Objective

Develop a robust web application where university students can post any questions and receive quality responses, implement upvoting/downvoting for comments to promote best responses, integrate academic structure through course tagging and university information, establish administrative controls for content moderation, enable anonymous posting for sensitive topics, implement a points-based reputation system, and build a scalable ASP.NET Core MVC framework and C# architecture for academic environments.

4. Societal and Environmental Impact

Societal Impact

CourseMate democratizes academic knowledge access and creates university-specific knowledge communities. The voting system ensures quality responses rise to the top through community consensus. It bridges knowledge gaps across disciplines and departments, fostering academic collaboration while maintaining safety through content moderation.

Environmental Impact

The digital platform reduces physical consultations, printed materials, and travel for information seeking. It promotes knowledge reuse and prevents duplication of effort, supporting environmental sustainability by minimizing paper-based sharing and reducing carbon footprint from traditional consultation methods.

5. Proposed Features

- **User Management:** Registration with university information, secure authentication, role-based access, points-based reputation system.
- **Post Management:** Unrestricted posting, rich text editor, academic tagging (course names/codes/varsity), anonymous posting capability.
- **Response System:** Comment-based responses, upvoting/downvoting for comments, vote-based ranking.
- **Admin Controls:** Content monitoring, illegal/abusive content deletion, user restrictions, report handling, automated moderation.
- **Interactive Features:** Post saving, notifications, advanced search with academic filters, trending content.
- **Quality Assurance:** Community-driven flagging, reputation tracking, and content moderation across academic topics.

6. Entity Relationship Diagram

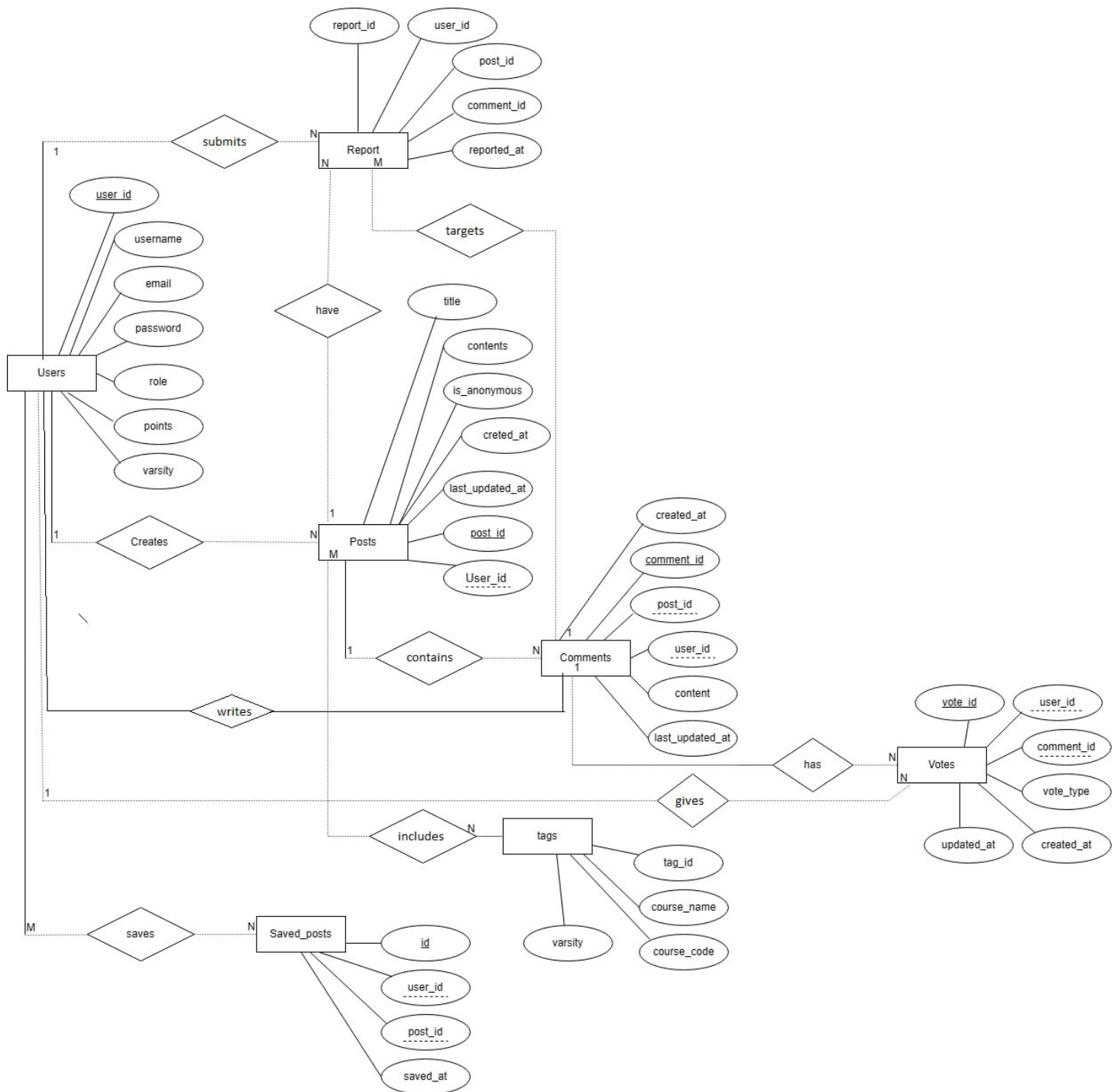


Figure 1: Entity Relationship Diagram

7. Use Case Diagram

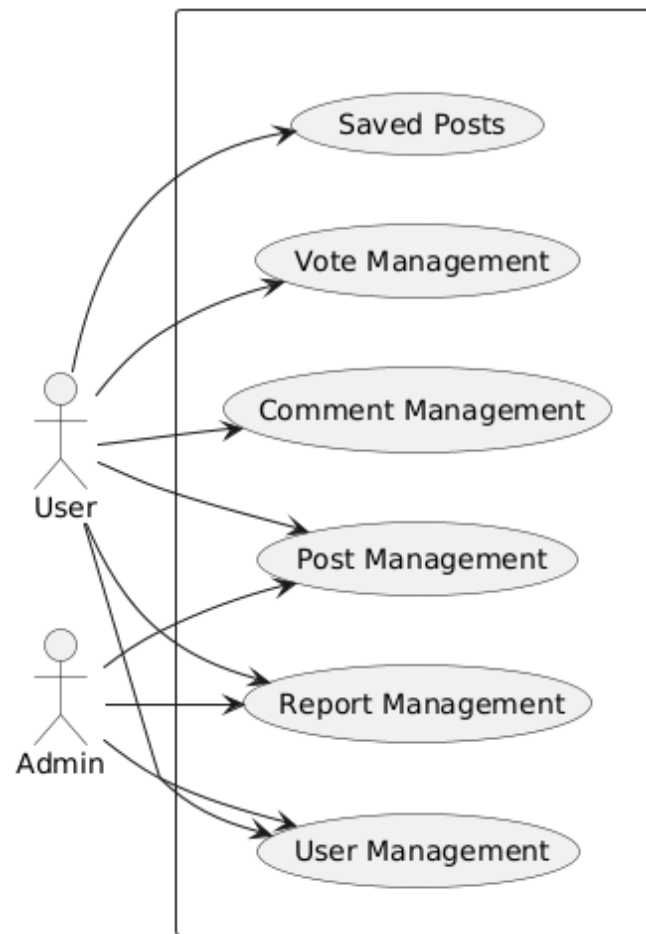


Figure 2: Use Case Diagram

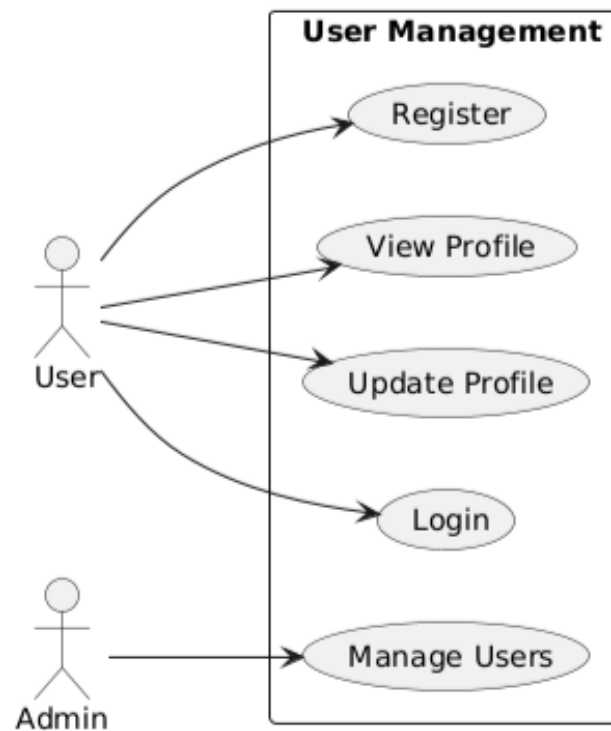


Figure 3: Use Case Diagram

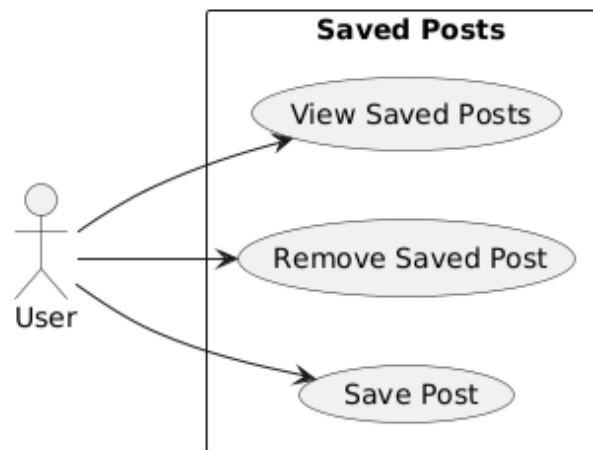


Figure 4: Use Case Diagram

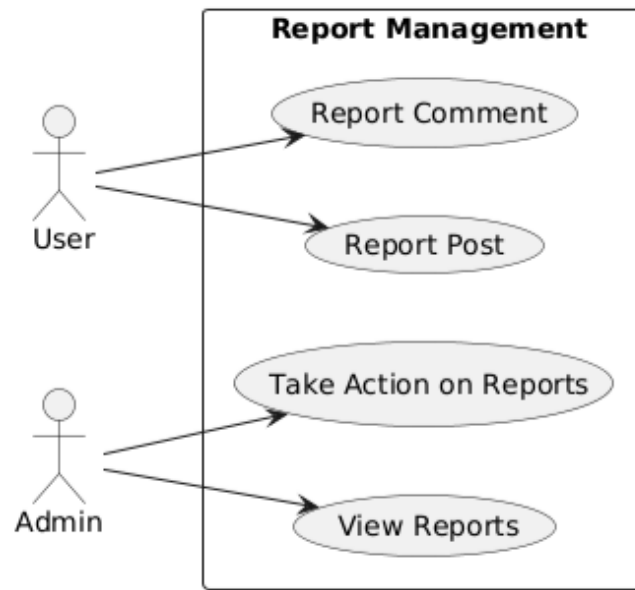


Figure 5: Use Case Diagram

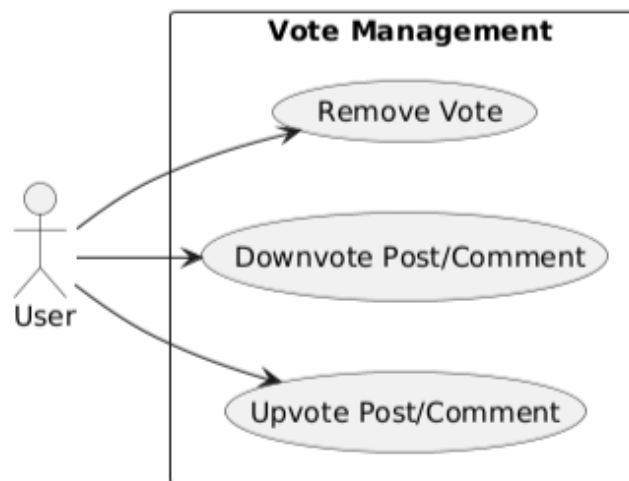


Figure 6: Use Case Diagram

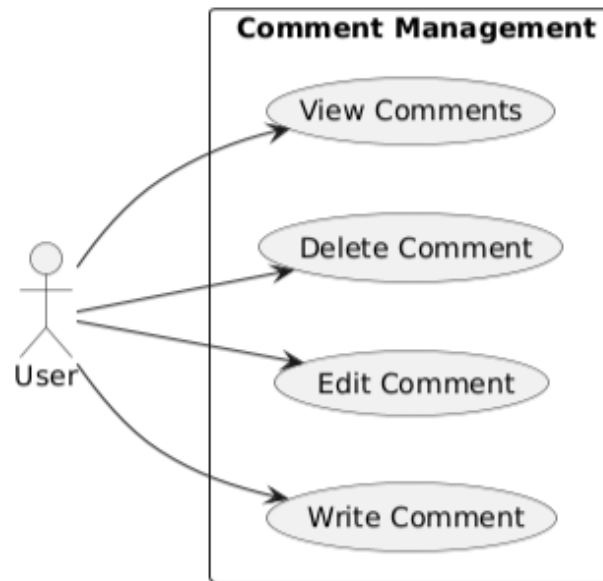


Figure 7: Use Case Diagram

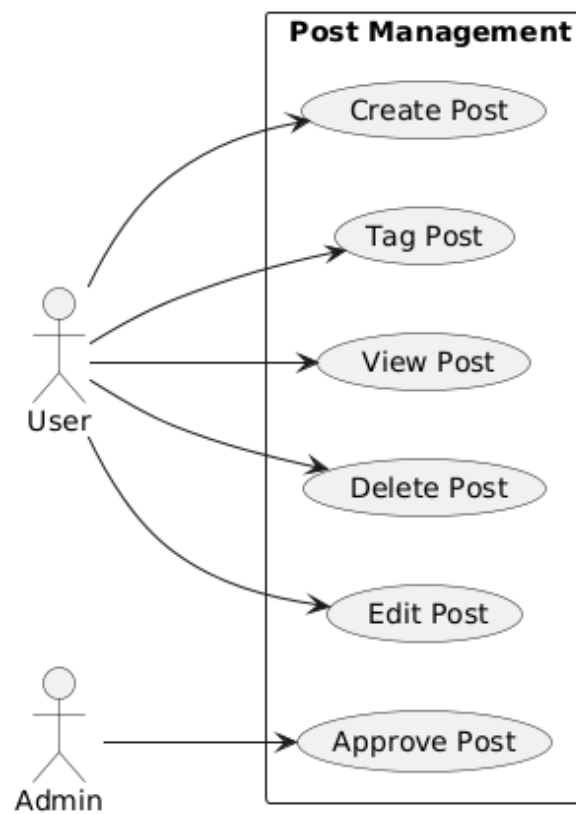


Figure 8: Use Case Diagram

8. Conclusion

CourseMate combines unrestricted academic inquiry with university-specific structure and community-driven quality control. The ASP.NET Core MVC implementation ensures scalability and security for diverse academic content. Features like anonymous posting, academic tagging, and points-based reputation create an environment where academic curiosity thrives safely. The platform addresses critical gaps in university knowledge sharing by integrating academic structure with unrestricted posting. Success depends on maintaining a balance between academic freedom and safety, making *CourseMate* the premier destination for university students seeking reliable answers while protecting users from harmful content.