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StratForge: Web Application for Competitive E-Sport Players

Project in Web Applications with C# [ICD0024] and ASP.NET Web Applications [ICD0015]

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Author's Declaration of Originality

I hereby certify that I am the sole author of this thesis. All the used materials, references to the literature and the work of others have been referred to. This thesis has not been presented for examination anywhere else.

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Introduction

In the dynamic landscape of competitive gaming, CS2 has emerged as the next evolution of strategic gameplay, drawing upon the legacy of its predecessor while introducing innovative features and challenges. At the forefront of this new era stands StratForge, a groundbreaking tactical helper designed to meet the demands of competitive CS2 players.

CS2 presents players with a complex and ever-evolving battlefield, where split-second decisions and precise execution can tip the scales of victory. StratForge serves as a beacon of guidance in this intricate landscape, offering players a comprehensive toolkit to navigate the challenges and opportunities that lie ahead.

At its core, StratForge is a repository of strategic wisdom, housing a wealth of resources designed to unravel the mysteries of CS2 gameplay. From detailed smoke lineups that obscure vision and control map areas, to in-depth round-by-round strategies tailored to each map, StratForge equips players with the insights and tools they need to thrive in the heat of competition.

Success in CS2 hinges not only on individual skill but also on effective teamwork and communication. StratForge fosters collaboration and coordination among teammates, providing intuitive interfaces for strategizing, calling out plays, and coordinating executes in real-time. By synchronizing efforts and fostering synergy, teams can achieve unparalleled levels of cohesion and performance.

StratForge is the culmination of a shared passion for CS2 and a deep understanding of the demands of competitive gameplay. Crafted by users' personal and shared resources, every feature, and tool within StratForge reflects a commitment to excellence and a dedication to empowering players to reach their full potential.

As CS2 continues to evolve and redefine the landscape of competitive gaming, StratForge stands as a steadfast companion, guiding players on their journey towards mastery and success. From the thrill of victory to the lessons learned in defeat, The purpose of this work is to offer players the tools they need to navigate the challenges, seize the opportunities, and forge their path to greatness in the world of CS2. The project will be completed in the parameters of the course's demands and provided resources.

To fulfil this work, the author will create an ERD schema, creates a database and builds application layers respectively to the lecturer's requests and wishes. The course work consists of the documentation (the given document), ERD schema and application source code.

1 Overview

StratForge is a comprehensive tactical helper for competitive CS2 players, built with a focus on user-centric design and seamless integration with gameplay. From the perspective of application development, StratForge embodies several key principles and components:

Modular Architecture: The application is designed with a modular architecture, allowing for easy scalability and extensibility as new features and functionalities are added. Each module, such as the strategy repository, round-by-round planner, and map integration, is developed independently and integrated seamlessly into the overall system.
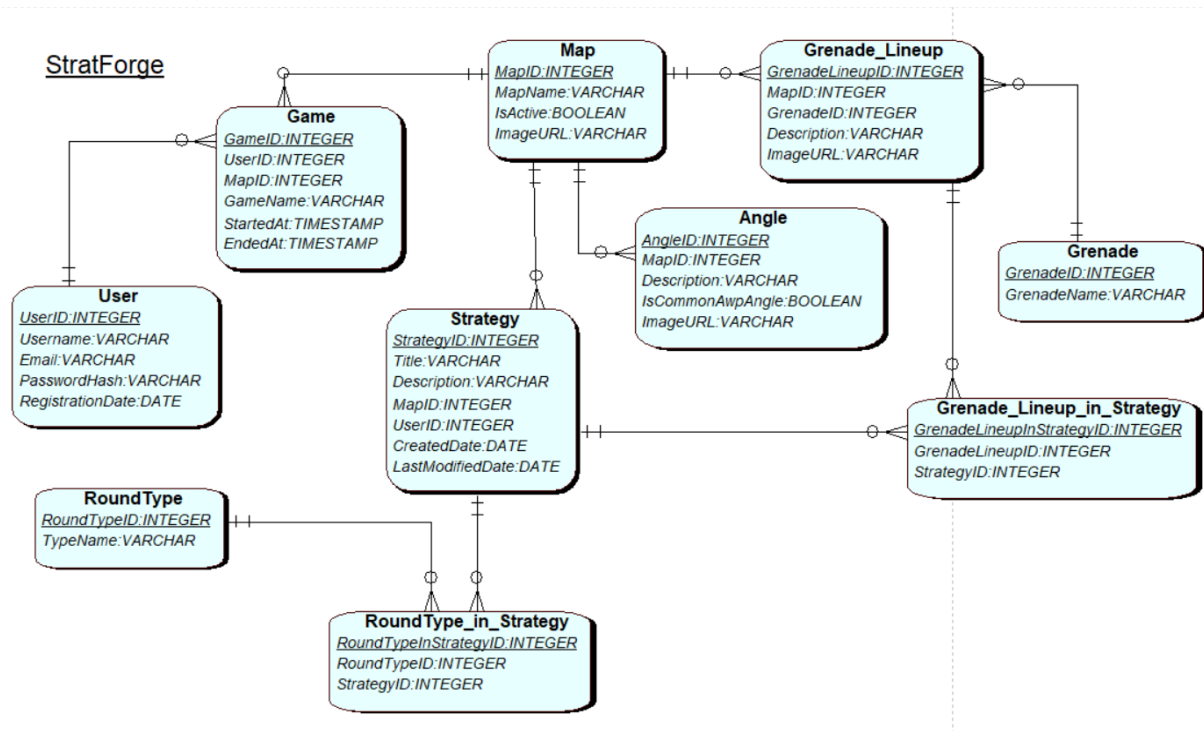
User-Generated Content: A central aspect of StratForge's development is its reliance on user-generated content. Users are empowered to contribute their own strategies, tactics, and insights to the platform, enriching the collective knowledge base and ensuring relevance to the evolving CS2 meta. Development efforts focus on providing intuitive tools and interfaces for users to create, share, and collaborate on strategic content.

Data Management: The application's backend infrastructure includes data management capabilities to handle the vast amount of user-generated content. This includes implementing databases, data validation processes, and content moderation tools to ensure the accuracy and quality of the information stored within the platform. Development efforts prioritize data security, integrity, and accessibility to facilitate smooth user interactions.

Real-Time Integration: One of the key challenges in developing StratForge is achieving seamless integration with actual gameplay. Development efforts focus on leveraging web technologies to deliver a responsive and interactive user experience accessible through any web browser. This includes implementing real-time data synchronization mechanisms to ensure that recommended strategies are always up-to-date and relevant to the current state of the game.

2 Analysis

2. 1 ERD Schema

2.2 Positive Flow Chart

From home page to starting a game:

Home Page:

After login user landing page:

After clicking on new game:

After picking a map:

References

1. Käver, A. Building Distributed System (ICD0009) course materials. Read:

15.02.2023 https://courses.taltech.akaver.com/web-applications-with-csharp/home/