

PROTOKOLL

im Studiengang BID

Lehrveranstaltung SWEN

Monster Trading Card Game - Protokoll

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1 Design

The database consists of the following five tables:

- cards
- matchCardstoPackage
- packages
- trades
- users

The table cards consists of the attributes cardid, fightable,element,name,damage,owner and deck. The table matchCardstoPackage consists of packageid and cardid and is used to for an n:m relationship between the table cards and packages. The packages table only has the attributes packagedid and bought. The table trades uses the primary keys cardid and username alongside tradeid, mindamage and type to store trades in the database. The largest table is users which consists of the attributes username, password, money, name, bio, image, wins, losses, elo and token.

LINK TO GITHUB REPO: https://github.com/senorwish/MTCG_Wunsch

2 Lessons Learned

The C# project on the monster trading card game was one of the biggest projects I have ever coded. One of the major lessons I learned was the importance of proper project management. With such a large project, it was essential to break it down into smaller tasks and set clear goals and deadlines for each. This helped to keep the project on track and ensure that all parts of the game were developed and integrated seamlessly. Another important lesson was the importance of testing and debugging. With a project of this size, it was crucial to thoroughly test the game mechanics and server to ensure that it was functioning as intended and to quickly fix any bugs that were identified. Additionally, the project taught me the importance of research when working on a large-scale project. Googleing missing pieces helped to bring new ideas and perspectives to the project, and made it possible to achieve more than what could have been done alone. Overall, the C# project was a challenging but valuable learning experience that taught me valuable skills in project management, testing, and coding in general.

3 UNIT Testing

In the C# project on the monster trading card game, I also focused on unit testing various aspects of the game. One of the areas I tested was the battle feature, which was a core part of the game. I wrote test cases to ensure that the battle mechanics were working correctly and that the game was providing an accurate representation of the battle outcome. I also tested the battle logic, which included testing the different conditions that could occur during

a battle and verifying that the game was handling them correctly. Additionally, I wrote test cases to ensure that the cards in the game were working properly and that the game was displaying the correct information for each card. I also performed testing on the route parser. Overall, the unit testing helped me to identify and fix bugs early in the development process and ensure that the game was functioning as intended for the end user.

Test	Dauer	Merkmale	Fehlermeldung
▲ MTCGServer.Test (20)	87 ms		
▲ MTCGServer.Test (20)	87 ms		
▲ BattlelogicTest (2)	67 ms		
TestFightWithSpecialRuleGoblin...	67 ms		
TestFightWithSpecialRuleWizar...	< 1 ms		
▲ CardTest (8)	9 ms		
TestCardConstructor	9 ms		
TestFightable	< 1 ms		
TestGetElementFromDragon	< 1 ms		
TestGetElementFromElf	< 1 ms		
TestGetElementFromTroll	< 1 ms		
TestGetFireElementFromName	< 1 ms		
TestGetRegualElementFromName	< 1 ms		
TestGetWaterElementFromName	< 1 ms		
▲ TestRouteParser (6)	11 ms		
TestIsMatch_WithInvalidDeck	3 ms		
TestIsMatch_WithInvalidId	8 ms		
TestIsMatch_WithInvalidUserna...	< 1 ms		
TestIsMatch_WithValidDeck	< 1 ms		
TestIsMatch_WithValidId	< 1 ms		
TestIsMatch_WithValidUsername	< 1 ms		
▲ TestUser (4)	< 1 ms		
TestEloForNewUser	< 1 ms		
TestLoseForNewUser	< 1 ms		
TestNewUserMoney	< 1 ms		
TestWinForNewUser	< 1 ms		

4 Additional information

Link to github repo: https://github.com/senorwish/MTCG_Wunsch