**Dokumentation MonsterTradingCardGame**

[Allgemeine Infos 2](#_Toc100243231)

[Design 2](#_Toc100243232)

[SWE1HttpServer 2](#_Toc100243233)

[MonsterTradingCardGame: 2](#_Toc100243234)

[UnitTests: 3](#_Toc100243235)

[Programmaufbau 3](#_Toc100243236)

[Hauptprogramm: 3](#_Toc100243237)

[Battle: 3](#_Toc100243238)

[Lessons learned 3](#_Toc100243239)

[Unit Tests 4](#_Toc100243240)

[Unique Feature 4](#_Toc100243241)

[JSON Ausgaben 4](#_Toc100243242)

[Battle: 4](#_Toc100243243)

# Allgemeine Infos

Student: Gazzia Fabian - if20b031

Git Repo: https://github.com/Battlecoob/MonsterTradingCardGame.git

Zeitaufwand: ca. 70h

Programmiersprache: C#

Da ich das Projekt auf MacOS geschrieben habe, konnte ich das Curl-Skript (.bat) aus Moodle nicht verwenden und musste mein eigenes Shell-Skript schreiben. Leider habe ich es nicht geschafft einen background-process zu erstellen, worüber das Command zum Start des Kartenbattles aufgerufen wird. Ein workaround dafür ist, während dem laufenden Shell-Skripts zwei Terminals zu öffnen und den Curl Aufruf manuell einzufügen.

# Design

Das Projekt besteht aus drei Solutions:

* SWE1HttpServer.Core
* MonsterTradingCardGame
* UnitTests

## SWE1HttpServer

Dieser Http Server wurde in den Vorlesungen der Lehrveranstaltung SWEN1 gemeinsam programmiert und durfte deshalb für das Semesterprojekt verwendet werden.

Ich bin froh, dass dieser Programmteil "bereitgestellt" wurde und gemeinsam erarbeitet wurde, da uns sehr viel Arbeit abgenommen wurde. Lediglich die RouteParser & Identity Klasse mussten mithilfe eines bereits geschriebenen Interfaces selbst programmiert werden. Um aus dem iterativen Server einen parallelen Server zu erstellen, musste nur das File *Server/HttpServer.cs* abgeändert werden.

## MonsterTradingCardGame:

Diese Solution beinhaltet den eigentlichen Projektcode (abgesehen vom Http Server). Für eine erleichterte Orientierung habe ich meine Files folgend aufgeteilt:

* DAL
  + Klassen & Interfaces für meine Datenbank (initialisiert alle Tabellen) und Tabellen (User, Card, Deck, Package, Trading)
* Exceptiones
  + Exceptiones, die im ganzen Code verteilt verwendet werden
* Managers
  + Klassen & Interfaces für meine Manager (Repository- & Battle Manager, IdentityProvider und RouteParser)
    - Diese sind für unterschiedliche Dinge zuständig. Beispielsweise registriert der RouteParser die unterschiedlichen http-Routen aus dem Hauptprogramm (*Program.cs*), der BattleManager führt den Kartenkampf aus, etc.
* Models
  + restlichen Klassen, Interfaces & Enums für den allgemeinen Projektablauf
* RouteCommands: Klassen für die Implementierung der unterschiedlichen http-Routen

## UnitTests:

Diese Solution haust alle Unit Tests, welche später näher beschrieben werden.

# Programmaufbau

## Hauptprogramm:

1. Aufbau und Initialisierung der PostgresSQL Datenbank
2. Initialisierung vom Repository Manager
   1. Dieses Objekt ist zuständig für den Zugriff aller Datenbank repositories bzw. die Schnittstelle zwischen den Route Commands und den Datenbanken
3. Initialisierung von IdentityProvider, RouteParser und Router
4. Registrierung der verfügbaren Route Commands
5. Initialisierung und Start des Http Servers

## Battle:

1. A

# Lessons learned

Mein größtes Problem an diesem Projekt war meine eigene Zeiteinteilung und Prokrastination. Letzteres hang damit zusammen, da ich von Anfang an von der Größe des Projektes eingeschüchtert war. Gemeinsam mit dem restlichen Stress von anderen Lehrveranstaltungen war es einfacher, sich auf andere Tätigkeiten zu konzentrieren, als sich hinzusetzen und dieses Projekt in kleinere überschaubare Teile zu brechen. Das hat dazu geführt, dass ich das ganze Projekt hauptsächlich während der Berufspraxis, sprich abends nach der Arbeit, geschrieben habe. Das bedeutet, dass ich selten länger als zwei Stunden am Stücke am MTCG arbeiten konnte. Ich habe mein Bestes gegeben, stets organisiert zu arbeiten und immer genau zu dokumentieren wo ich aufgehört habe, das Problem an dem ich zu diesem Zeitpunkt gearbeitet habe und was mein Ziel für die nächste Programmier-Session war.

Außerdem war MTCG mein bisher größtes Projekt. Ich habe gelernt, große Projekte in viele kleiner beschauliche Teile zu zerlegen, da die Größe sonst einfach erdrückend wirkt.

Da ich bisher ebenfalls nur wenig Erfahrung in C# hatte, habe ich natürlich auch viel zur Programmiersprache selbst gelernt. Ich konnte mich relativ schnell einarbeiten, da viele Ähnlichkeiten zu meiner präferierten Sprache C++ bestehen.

Ebenfalls habe ich auch die Effektivität von Exceptiones und Unit Tests gelernt, da ich diese vor dem Projekt nur selten verwendet hatte.

# Unit Tests

Da ich bei meiner ersten Wiederholungsprüfung weder das Karten-Battle noch das Trading Feature implementiert hatte, viel es mir damals schwer 20 Tests zu erfinden, die unterschiedliche Dinge prüfen.

Im Endeffekt habe ich mich auf das Testen meiner RepositoryManager Klasse konzentriert, da diese den Großteil des Projektablaufs beinhaltet. Begonnen habe ich mit Tests zur Erstellung und Login von Usern, dann Decks und Karten, die Änderung und Anzeige von User Daten und Stats und zu guter Letzt die richtige Darstellung des Scoreboards, da dieses schließlich nach ELO sortiert werden sollte.

Für das Battle erstellte ich Unit Tests, welche meine Kalkulation des Element Multipliers testen – Wasser ist auf Feuer effektiv und hat macht somit doppelten Schaden – und der Berechnung der Karten Spezialeffekten – Knight Karten ertrinken und verlieren somit gegen einen Waterspell.

# Unique Feature

Hierfür habe ich das Feature implementiert, dass User ihre Karten an andere User verschenken können. Die Implementierung hierfür ging relativ flott, da ich vieles vom Trading Feature übernehmen konnte.

**Verwendung**:

*curl -i -X POST http://localhost:10001/gift/{gift-receiver-username} --header "Content-Type: application/json" --header "Authorization: Basic {authToken}" -d "\"{cardId}\""*

# JSON Ausgaben

Um schnell die JSON Ausgaben des Servers zu lesen und analysieren verwendete ich einen online JSON Viewer (<https://jsonformatter.org/json-viewer>).

## Battle

|  |  |  |  |
| --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | | object |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Draw | : | false | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Loser | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Winner | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | RoundCount | : | 8 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Decks |  | [2] | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 0 |  | {3} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Token | : | kienboec-mtcgToken | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardIds |  | [4] | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 0 | : | 845f0dc7-37d0-426e-994e-43fc3ac83c08 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 1 | : | 99f8f8dc-e25e-4a95-aa2c-782823f36e2a | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 2 | : | e85e3976-7c86-4d06-9a80-641c2019a79f | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 3 | : | 171f6076-4eb5-4a7d-b3f2-2d650cc3d237 | |
|  |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 1 |  | {3} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | 2 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Token | : | altenhof-mtcgToken | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardIds |  | [4] | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 0 | : | aa9999a0-734c-49c6-8f4a-651864b14e62 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 1 | : | d6e9c720-9b5a-40c7-a6b2-bc34752e3463 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 2 | : | d60e23cf-2238-4d49-844f-c7589ee5342e | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 3 | : | 02a9c76e-b17d-427f-9240-2dd49b0d3bfd | |
|  |
|  |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Rounds |  | [8] | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 0 |  | {5} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Draw | : | false | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Loser | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Winner | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | RoundNumber | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Players |  | [2] | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 0 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | e85e3976-7c86-4d06-9a80-641c2019a79f | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | WaterSpell | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 20 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 2 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 20 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 3 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 1 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | d60e23cf-2238-4d49-844f-c7589ee5342e | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | WaterSpell | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 22 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 2 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 22 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 5 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |
|  |
|  |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 1 |  | {5} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Draw | : | false | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Loser | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Winner | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | RoundNumber | : | 2 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Players |  | [2] | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 0 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | 99f8f8dc-e25e-4a95-aa2c-782823f36e2a | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | Dragon | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 50 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 3 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 100 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 4 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 2 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 1 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | aa9999a0-734c-49c6-8f4a-651864b14e62 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | RegularSpell | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 50 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 2 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 2 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 25 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 4 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 0.5 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |
|  |
|  |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 2 |  | {5} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Draw | : | false | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Loser | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Winner | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | RoundNumber | : | 3 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Players |  | [2] | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 0 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | aa9999a0-734c-49c6-8f4a-651864b14e62 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | RegularSpell | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 50 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 2 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 2 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 50 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 5 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 1 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | 02a9c76e-b17d-427f-9240-2dd49b0d3bfd | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | RegularSpell | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 45 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 2 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 2 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 45 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 3 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |
|  |
|  |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 3 |  | {5} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Draw | : | false | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Loser | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Winner | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | RoundNumber | : | 4 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Players |  | [2] | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 0 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | 171f6076-4eb5-4a7d-b3f2-2d650cc3d237 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | RegularSpell | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 28 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 2 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 2 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 56 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 6 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 2 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 1 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | e85e3976-7c86-4d06-9a80-641c2019a79f | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | WaterSpell | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 20 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 2 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 10 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 2 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 0.5 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |
|  |
|  |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 4 |  | {5} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Draw | : | false | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Loser | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Winner | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | RoundNumber | : | 5 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Players |  | [2] | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 0 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | 845f0dc7-37d0-426e-994e-43fc3ac83c08 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | WaterGoblin | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 10 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 4 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 10 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 5 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 1 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | d60e23cf-2238-4d49-844f-c7589ee5342e | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | WaterSpell | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 22 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 2 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 22 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 3 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |
|  |
|  |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 5 |  | {5} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Draw | : | false | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Loser | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Winner | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | RoundNumber | : | 6 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Players |  | [2] | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 0 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | 02a9c76e-b17d-427f-9240-2dd49b0d3bfd | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | RegularSpell | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 45 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 2 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 2 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 90 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 6 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 2 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 1 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | d60e23cf-2238-4d49-844f-c7589ee5342e | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | WaterSpell | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 22 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 2 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 11 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 2 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 0.5 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |
|  |
|  |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 6 |  | {5} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Draw | : | false | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Loser | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Winner | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | RoundNumber | : | 7 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Players |  | [2] | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 0 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | 02a9c76e-b17d-427f-9240-2dd49b0d3bfd | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | RegularSpell | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 45 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 2 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 2 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 45 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 7 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 1 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | d6e9c720-9b5a-40c7-a6b2-bc34752e3463 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | Knight | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 20 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 2 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 5 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 20 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |
|  |
|  |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 7 |  | {5} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Draw | : | false | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Loser | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Winner | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | RoundNumber | : | 8 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Players |  | [2] | |
| |  |  |  |  | | --- | --- | --- | --- | |  | 0 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | d6e9c720-9b5a-40c7-a6b2-bc34752e3463 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | Knight | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 20 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 2 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 5 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 20 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 8 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | kienboec | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | 1 |  | {7} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Card |  | {6} | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Id | : | 845f0dc7-37d0-426e-994e-43fc3ac83c08 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Name | : | WaterGoblin | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 10 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardType | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Element | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Species | : | 4 | |
|  |
| |  |  |  |  | | --- | --- | --- | --- | |  | Damage | : | 10 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | CardsLeft | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Username | : | altenhof | |
| |  |  |  |  | | --- | --- | --- | --- | |  | ElementMultiplier | : | 1 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | Speciality | : | 0 | |
| |  |  |  |  | | --- | --- | --- | --- | |  | SpecialityString | : | none | |