cardGames

Package in package 'Model'

cardGames
Version   Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

Client

Package in package 'cardGames'

Client
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

Client diagram

Class diagram in package 'Client'

Client
Version 1.0
loic lopez created on 11/12/2017. Last modified 11/12/2017

Program
- _ipaddr: string = "127.0.0.1"_
- _port: int = 8080_
- _username: string_
+ GetUserInfos(): void
+ GetUsername(): string
+ Main(): void
- RunClientAsync(): Task

Figure 1: Client

ClientHandler

Package in package 'Client'

ClientHandler
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

ClientHandler diagram

Class diagram in package 'ClientHandler'

ClientHandler
Version 1.0
loic lopez created on 11/12/2017. Last modified 11/12/2017

```
                                                    SimpleChannelInboundHandler
                                                    ClientHandler

        -    _channel: IChannel
        -    _queue: ConcurrentQueue<Response> = new ConcurrentQ...
        -    _response: Response = new Response()
        -    _username: string

        #    ChannelRead0(IChannelHandlerContext, Response): void
        +    ChannelRegistered(IChannelHandlerContext): void
        -    CheckEntry(string, string): void
        +    ExceptionCaught(IChannelHandlerContext, Exception): void
        -    GetResponse(): Response.Types.Type
        -    PrintConsole(): void
        -    PrintConsoleBuffered(): void
        +    RegisterServer(string): void
        -    SendRequest(string, Request.Types.Type, IReadOnlyCollection<string>): void
        +    WaitUserEntry(): void
```

Figure 2: ClientHandler

ClientHandler

Class in package 'ClientHandler'

ClientHandler
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017
Extends SimpleChannelInboundHandler

ATTRIBUTES

◆ _channel : IChannel Private

[Is static True. Containment is Not Specified.]

◆ _queue : ConcurrentQueue<Response> Private = new ConcurrentQueue<Response>()

[Is static True. Containment is Not Specified.]

◆ _response : Response Private = new Response()

[Is static True. Containment is Not Specified.]

◆ _username : string Private

[Is static True. Containment is Not Specified.]

OPERATIONS

◆ ChannelRead0 (ctx : IChannelHandlerContext , msg : Response) : void Protected

Properties:
    override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ ChannelRegistered (context : IChannelHandlerContext) : void Public

Properties:
    override = true

OPERATIONS

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ CheckEntry (entry : string , username : string) : void Private

[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ ExceptionCaught (contex : IChannelHandlerContext , e : Exception) : void Public

Properties:
    override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ GetResponse () : Response.Types.Type Private

[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ PrintConsole () : void Private

[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ PrintConsoleBuffered () : void Private

[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ RegisterServer (username : string) : void Public

[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ SendRequest (username : string , type : Request.Types.Type , param : IReadOnlyCollection<string>) : void Private

[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ WaitUserEntry () : void Public

[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

ClientInitializer

Package in package 'Client'

<div align="right">

ClientInitializer
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

</div>

ClientInitializer diagram

Class diagram in package 'ClientInitializer'

<div align="right">

ClientInitializer
Version 1.0
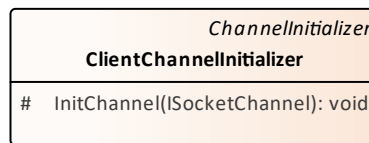loic lopez created on 11/12/2017. Last modified 11/12/2017

</div>

| *ChannelInitializer* |
| **ClientChannelInitializer** |
| #   InitChannel(ISocketChannel): void |

Figure 3: ClientInitializer

ClientChannelInitializer

Class in package 'ClientInitializer'

<div align="right">

ClientChannelInitializer
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017
Extends ChannelInitializer

</div>

OPERATIONS

◆   InitChannel (channel : ISocketChannel) : void Protected
 	
Properties:
    override = true
 	
                           [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Library

Package in package 'Client'

<div align="right">

Library
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

</div>

Library diagram

Class diagram in package 'Library'

<div align="right">

Library
Version 1.0
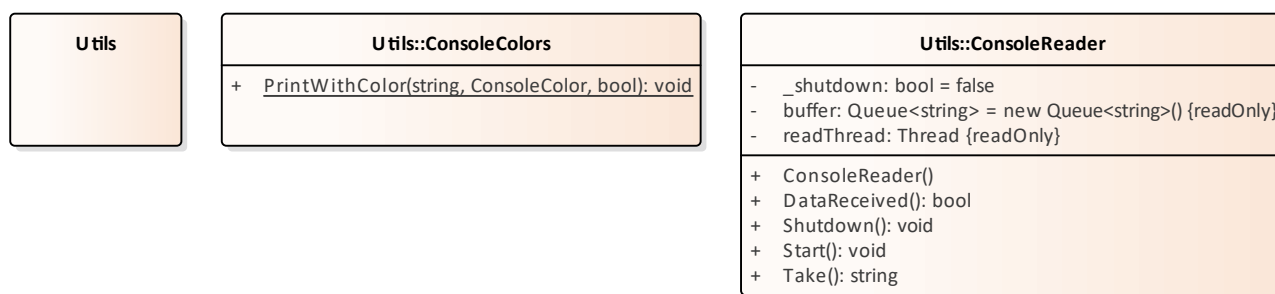loic lopez created on 11/12/2017. Last modified 11/12/2017

</div>

Utils

Utils::ConsoleColors
+   PrintWithColor(string, ConsoleColor, bool): void

Utils::ConsoleReader
-   _shutdown: bool = false
-   buffer: Queue<string> = new Queue<string>() {readOnly}
-   readThread: Thread {readOnly}
+   ConsoleReader()
+   DataReceived(): bool
+   Shutdown(): void
+   Start(): void
+   Take(): string

<div align="center">

Figure 4: Library

</div>

Utils

Class in package 'Library'

<div align="right">

Utils
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

</div>

ELEMENTS OWNED BY Utils
📇 ConsoleColors : Class
📇 ConsoleReader : Class

ConsoleColors

Class owned by 'Utils', in package 'Library'

<div align="right">

ConsoleColors
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

</div>

OPERATIONS
🔶 PrintWithColor (text : string , color : ConsoleColor , withNewline : bool) : void Public

OPERATIONS
[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

ConsoleReader

Class owned by 'Utils', in package 'Library'

ConsoleReader
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

ATTRIBUTES
◆ _shutdown : bool Private = false
[Is static False. Containment is Not Specified.]
◆ buffer : Queue<string> Private Const = new Queue<string>()
[Is static False. Containment is Not Specified.]
◆ readThread : Thread Private Const
[Is static False. Containment is Not Specified.]

OPERATIONS
◆ ConsoleReader () : Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
◆ DataReceived () : bool Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
◆ Shutdown () : void Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
◆ Start () : void Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
◆ Take () : string Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Program

Class in package 'Client'

Program
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

ATTRIBUTES

◆ _ipaddr : string Private = "127.0.0.1"

[Is static True. Containment is Not Specified.]

◆ _port : int Private = 8080

[Is static True. Containment is Not Specified.]

◆ _username : string Private

[Is static True. Containment is Not Specified.]

OPERATIONS

◆ GetUserInfos () : void Public

[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ GetUsername () : string Public

[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ Main () : void Public

[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ RunClientAsync () : Task Private

Properties:
   async = true

[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Server

Package in package 'cardGames'

Server diagram

Class diagram in package 'Server'

Server
-    port: int = 8080
+   Main(string[]): void -   RunServerAsync(): Task
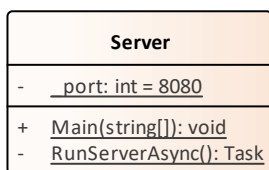
Figure 5: Server

ServerHandler

Package in package 'Server'

ServerHandler diagram

Class diagram in package 'ServerHandler'

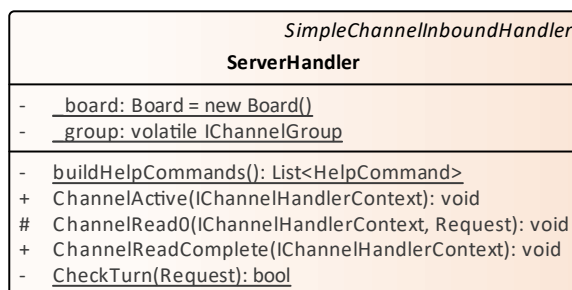| *SimpleChannelInboundHandler*
ServerHandler |
| --- |
| -   board: Board = new Board()
-    group: volatile IChannelGroup |
| -   buildHelpCommands(): List<HelpCommand>
+   ChannelActive(IChannelHandlerContext): void
#   ChannelRead0(IChannelHandlerContext, Request): void
+   ChannelReadComplete(IChannelHandlerContext): void
-    CheckTurn(Request): bool |

Figure 6: ServerHandler

ServerHandler

Class in package 'ServerHandler'

<div align="right">

ServerHandler
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017
Extends SimpleChannelInboundHandler

</div>

ATTRIBUTES

◆ _board : Board Private = new Board()

[Is static True. Containment is Not Specified.]

◆ _group : IChannelGroup Private

[Is static True. Containment is Not Specified.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination)

Source: Public (Class) ServerHandler   Target: Private _board (Class) Board

OPERATIONS

◆ buildHelpCommands () : List<HelpCommand> Private

[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ ChannelActive (contex : IChannelHandlerContext) : void Public

Properties:
   override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ ChannelRead0 (ctx : IChannelHandlerContext , msg : Request) : void Protected

Properties:
   override = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ ChannelReadComplete (ctx : IChannelHandlerContext) : void Public

Properties:
   override = true
   expressionBody = true

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ CheckTurn (msg : Request) : bool Private

[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

ServerInitializer

Package in package 'Server'

ServerInitializer diagram

Class diagram in package 'ServerInitializer'

Figure 7: ServerInitializer

ServerChannelInitializer

Class in package 'ServerInitializer'

OPERATIONS

◆ InitChannel (channel : ISocketChannel) : void Protected
 	
    Properties:
        override = true
 	
                [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

gameCore

Package in package 'Server'

gameCore diagram

Class diagram in package 'gameCore'

Player

-    _cards: List<Card>
-    _histurn: bool
-    _inBattle: bool

+   addCard(Card): void
+   GetCards(): List<Card>
+   isHisTurn(): bool
+   IsInBattle(): bool
+   PlayACard(): Card
+   Player()
+   SetHisTurn(bool): void
+   SetInBattle(bool): void

Board

-    _designedPlayer: string
-    _inBattle: bool
-    _playedCards: List<Card>
-    _playerNames: List<string>
-    _players: Dictionary<string, Player>
-    _waitingPlayerList: List<string>
+   MaxPlayers: int = 2

+   Board()
+   CanPlay(string): bool
+   CreateGameInstance(): void
-    FirstPlayCheck(string, string): Response
+   GetLastPlayedCard(): List<string>
+   GetNbrOfPlayers(): int
+   NewPlayer(string): bool
+   PassTurn(string): Response
-    PlayACardAndDoNothing(Response, string): Response
+   PlayCard(string): Response
+   RemovePlayer(string): void

Figure 8: gameCore

Cards

Package in package 'gameCore'

Cards diagram
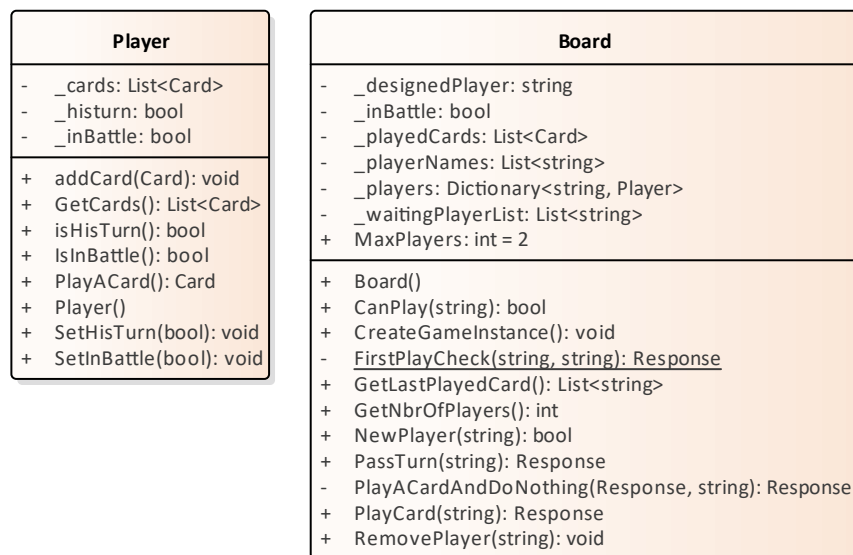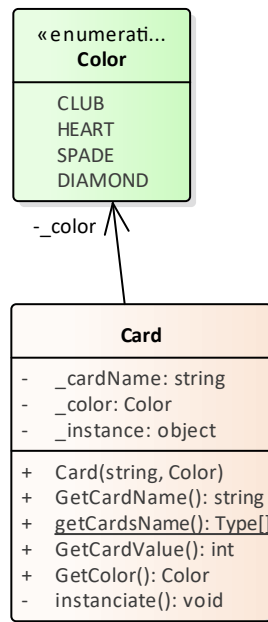
Class diagram in package 'Cards'

Figure 9: Cards

AbstractCard

Package in package 'Cards'

AbstractCard
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

AbstractCard diagram

Class diagram in package 'AbstractCard'

AbstractCard
Version 1.0
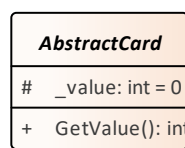loic lopez created on 11/12/2017. Last modified 11/12/2017

Figure 10: AbstractCard

AbstractCard

Class in package 'AbstractCard'

AbstractCard
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

INCOMING STRUCTURAL RELATIONSHIPS

➡ Generalization from King to AbstractCard

[Direction is 'Source -> Destination'.]

➡ Generalization from Jack to AbstractCard

[Direction is 'Source -> Destination'.]

➡ Generalization from Six to AbstractCard

[Direction is 'Source -> Destination'.]

➡ Generalization from Ten to AbstractCard

[Direction is 'Source -> Destination'.]

➡ Generalization from Four to AbstractCard

[Direction is 'Source -> Destination'.]

➡ Generalization from Nine to AbstractCard

[Direction is 'Source -> Destination'.]

➡ Generalization from Five to AbstractCard

[Direction is 'Source -> Destination'.]

➡ Generalization from Three to AbstractCard

[Direction is 'Source -> Destination'.]

➡ Generalization from Eight to AbstractCard

[Direction is 'Source -> Destination'.]

➡ Generalization from Seven to AbstractCard

[Direction is 'Source -> Destination'.]

➡ Generalization from Ace to AbstractCard

[Direction is 'Source -> Destination'.]

➡ Generalization from Queen to AbstractCard

[Direction is 'Source -> Destination'.]

➡ Generalization from Two to AbstractCard

[Direction is 'Source -> Destination'.]

ATTRIBUTES

◆ _value : int Protected = 0

[Is static False. Containment is Not Specified.]

OPERATIONS

◆ GetValue () : int Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

OPERATIONS

CardsPack

Package in package 'Cards'

CardsPack
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

CardsPack diagram

Class diagram in package 'CardsPack'

CardsPack
Version 1.0
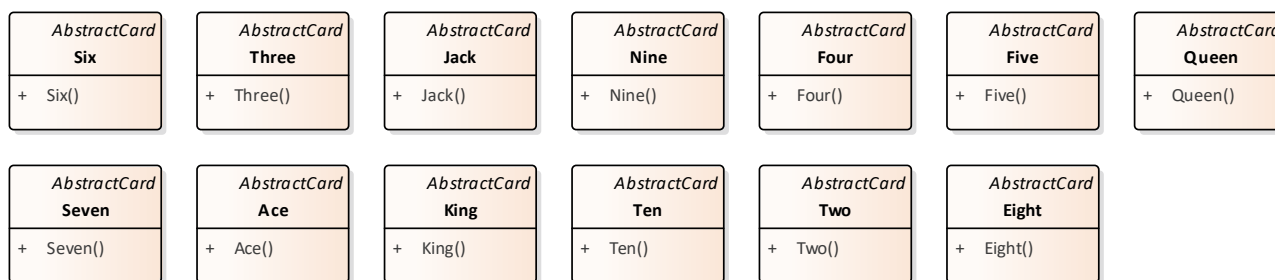loic lopez created on 11/12/2017. Last modified 11/12/2017

AbstractCard **Six**	*AbstractCard* **Three**	*AbstractCard* **Jack**	*AbstractCard* **Nine**	*AbstractCard* **Four**	*AbstractCard* **Five**	*AbstractCard* **Queen**
+ Six()	+ Three()	+ Jack()	+ Nine()	+ Four()	+ Five()	+ Queen()

AbstractCard **Seven**	*AbstractCard* **Ace**	*AbstractCard* **King**	*AbstractCard* **Ten**	*AbstractCard* **Two**	*AbstractCard* **Eight**
+ Seven()	+ Ace()	+ King()	+ Ten()	+ Two()	+ Eight()

Figure 11: CardsPack

Ace

Class in package 'CardsPack'

Ace
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017
Extends AbstractCard

OUTGOING STRUCTURAL RELATIONSHIPS
⬅ Generalization from Ace to AbstractCard [Direction is 'Source -> Destination'.]

OPERATIONS
◆ Ace () : Public [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Eight

Class in package 'CardsPack'

Eight
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

Extends AbstractCard

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Eight to AbstractCard

[Direction is 'Source -> Destination'.]

OPERATIONS

◆ Eight () : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Five

Class in package 'CardsPack'

Five
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017
Extends AbstractCard

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Five to AbstractCard

[Direction is 'Source -> Destination'.]

OPERATIONS

◆ Five () : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Four

Class in package 'CardsPack'

Four
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017
Extends AbstractCard

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Four to AbstractCard

[Direction is 'Source -> Destination'.]

OPERATIONS

◆ Four () : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Jack

Class in package 'CardsPack'

Jack
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017
Extends AbstractCard

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Jack to AbstractCard

[Direction is 'Source -> Destination'.]

OPERATIONS

🔶 Jack () : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

King

Class in package 'CardsPack'

King
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017
Extends AbstractCard

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from King to AbstractCard

[Direction is 'Source -> Destination'.]

OPERATIONS

🔶 King () : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Nine

Class in package 'CardsPack'

Nine
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017
Extends AbstractCard

OUTGOING STRUCTURAL RELATIONSHIPS

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Nine to AbstractCard

[Direction is 'Source -> Destination'.]

OPERATIONS

◆ Nine () : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Queen

Class in package 'CardsPack'

Queen
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017
Extends AbstractCard

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Queen to AbstractCard

[Direction is 'Source -> Destination'.]

OPERATIONS

◆ Queen () : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Seven

Class in package 'CardsPack'

Seven
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017
Extends AbstractCard

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Seven to AbstractCard

[Direction is 'Source -> Destination'.]

OPERATIONS

◆ Seven () : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Six

Class in package 'CardsPack'

Six
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017
Extends AbstractCard

OUTGOING STRUCTURAL RELATIONSHIPS
← Generalization from Six to AbstractCard
[Direction is 'Source -> Destination'.]

OPERATIONS
◆ Six () : Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Ten

Class in package 'CardsPack'

Ten
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017
Extends AbstractCard

OUTGOING STRUCTURAL RELATIONSHIPS
← Generalization from Ten to AbstractCard
[Direction is 'Source -> Destination'.]

OPERATIONS
◆ Ten () : Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Three

Class in package 'CardsPack'

Three
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017
Extends AbstractCard

OUTGOING STRUCTURAL RELATIONSHIPS
← Generalization from Three to AbstractCard
[Direction is 'Source -> Destination'.]

OPERATIONS

◆ Three () : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Two

Class in package 'CardsPack'

Two
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017
Extends AbstractCard

OUTGOING STRUCTURAL RELATIONSHIPS

⬅ Generalization from Two to AbstractCard

[Direction is 'Source -> Destination'.]

OPERATIONS

◆ Two () : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Card

Class in package 'Cards'

Card
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

ATTRIBUTES

◆ _cardName : string Private

[Is static False. Containment is Not Specified.]

◆ _color : Color Private

[Is static False. Containment is Not Specified.]

◆ _instance : object Private

[Is static False. Containment is Not Specified.]

ASSOCIATIONS

✏ Association (direction: Source -> Destination)

Source: Public (Class) Card   Target: Private _color (Enumeration) Color

ASSOCIATIONS

✎ Association (direction: Source -> Destination)

Source: Public (Class) Board   Target: Private _playedCards (Class) Card
                                                                              Cardinality: [0..*]

✎ Association (direction: Source -> Destination)

Source: Public (Class) Player   Target: Private _cards (Class) Card
                                                                              Cardinality: [0..*]

OPERATIONS

◆ Card (cardName : string , color : Color) : Public
                    [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ GetCardName () : string Public

   Properties:
       expressionBody = true
                    [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ getCardsName () : Type Public

   Properties:
       array = []
                    [Is static True. Is abstract False. Is return array True. Is query False. Is synchronized False.]

◆ GetCardValue () : int Public
                    [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ GetColor () : Color Public

   Properties:
       expressionBody = true
                    [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ instanciate () : void Private
                    [Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Color

Enumeration in package 'Cards'

<div align="right">

Color
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

</div>

ATTRIBUTES

ATTRIBUTES	
◆ CLUB : Public	
	[Is static False. Containment is Not Specified.]
◆ HEART : Public	
	[Is static False. Containment is Not Specified.]
◆ SPADE : Public	
	[Is static False. Containment is Not Specified.]
◆ DIAMOND : Public	
	[Is static False. Containment is Not Specified.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination)

Source: Public (Class) Card   Target: Private _color (Enumeration) Color

Library

Package in package 'gameCore'

Library
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

Library diagram

Class diagram in package 'Library'

Library
Version 1.0
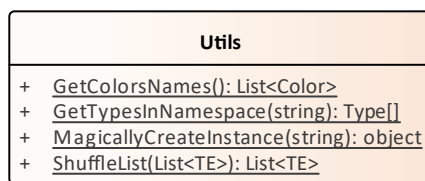loic lopez created on 11/12/2017. Last modified 11/12/2017

Utils
+ GetColorsNames(): List<Color>
+ GetTypesInNamespace(string): Type[]
+ MagicallyCreateInstance(string): object
+ ShuffleList(List<TE>): List<TE>

Figure 12: Library

Utils

Class in package 'Library'

Utils
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

OPERATIONS
◆ GetColorsNames () : List<Color> Public   [Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]
◆ GetTypesInNamespace (nameSpace : string) : Type Public   Properties: array = []   [Is static True. Is abstract False. Is return array True. Is query False. Is synchronized False.]
◆ MagicallyCreateInstance (className : string) : object Public   [Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]
◆ ShuffleList (inputList : List<TE>) : List<TE> Public   Properties: generic = <TE>   [Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Board

Class in package 'gameCore'

<div align="right">

Board
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

</div>

ATTRIBUTES

🔹 _designedPlayer : string Private

[Is static False. Containment is Not Specified.]

🔹 _inBattle : bool Private

[Is static False. Containment is Not Specified.]

🔹 _playedCards : List<Card> Private

[Is static False. Containment is Not Specified.]

🔹 _playerNames : List<string> Private

[Is static False. Containment is Not Specified.]

🔹 _players : Dictionary<string, Player> Private

[Is static False. Containment is Not Specified.]

🔹 _waitingPlayerList : List<string> Private

[Is static False. Containment is Not Specified.]

🔹 MaxPlayers : int Public = 2

Properties:
  const = true

[Is static False. Containment is Not Specified.]

ASSOCIATIONS

✏️ Association (direction: Source -> Destination)

Source: Public (Class) Board   Target: Private _playedCards (Class) Card
                                                          Cardinality: [0..*]

✏️ Association (direction: Source -> Destination)

Source: Public (Class) ServerHandler   Target: Private _board (Class) Board

OPERATIONS

🔹 Board () : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

OPERATIONS
◆ CanPlay (playerName : string) : bool Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
◆ CreateGameInstance () : void Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
◆ FirstPlayCheck (color : string , cardName : string) : Response Private
[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]
◆ GetLastPlayedCard () : List<string> Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
◆ GetNbrOfPlayers () : int Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
◆ NewPlayer (userName : string) : bool Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
◆ PassTurn (username : string) : Response Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
◆ PlayACardAndDoNothing (response : Response , username : string) : Response Private
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
◆ PlayCard (username : string) : Response Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]
◆ RemovePlayer (userName : string) : void Public
[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Player

Class in package 'gameCore'

Player
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

ATTRIBUTES
◆ _cards : List<Card> Private
[Is static False. Containment is Not Specified.]
◆ _histurn : bool Private
[Is static False. Containment is Not Specified.]

ATTRIBUTES

◆ _inBattle : bool Private

[Is static False. Containment is Not Specified.]

ASSOCIATIONS

✎ Association (direction: Source -> Destination)

Source: Public (Class) Player

Target: Private _cards (Class) Card
Cardinality: [0..*]

OPERATIONS

◆ addCard (card : Card) : void Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ GetCards () : List<Card> Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ isHisTurn () : bool Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ IsInBattle () : bool Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ PlayACard () : Card Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ Player () : Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ SetHisTurn (hisTurn : bool) : void Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ SetInBattle (inBattle : bool) : void Public

[Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False.]

Server

Class in package 'Server'

Server
Version 1.0 Phase 1.0 Proposed
loic lopez created on 11/12/2017. Last modified 11/12/2017

ATTRIBUTES

◆ _port : int Private = 8080

[Is static True. Containment is Not Specified.]

OPERATIONS

◆ Main (args : string[]) : void Public

[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]

◆ RunServerAsync () : Task Private

Properties:
    async = true

[Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False.]