

Diagrams

Component Diagram



Figure 1: Component diagram

Class Diagram

Activity Diagram

UI Mockups

REST Interfaces

Endpoints

/games endpoint

Mapping	Method	Parameter	Parameter Type	Status Code	Response	Description
/games	POST	playerIDs: String[]	Body	...	...	initiate a new game
/games/{gameID}	GET	-	Query	...	...	retrieve all information of a game
/games/{gameID}	PATCH	matchesPlayed: int, ...	Body	...	...	change state of a running game

/matches endpoint

Mapping	Method	Parameter	Parameter Type	Status Code	Response	Description
/matches	POST	gameID: String	Body	...	matchID: String, num-berOfRounds: int	initiate a new match
/matches/{matchID}	GET	-	Query	...		retrieve all information of a match
/matches/{matchID}	PATCH	roundsPlayed: int, ...	Body	...	...	change state of a running match

/cards endpoint

Mapping	Method	Parameter	Parameter Type	Status Code	Response	Description
/cards/distribute	GET	gameID: String, num-berOfCards: int	Body	...	list of playerIDs + cards	get (distribute) cards to players in a game

Mapping	Method	Parameter	Parameter Type	Status Code	Response	Description
/cards/draw	GET	playerID: String	Body	...	card	get (draw) one card to one player
/cards/{gameID}	GET	gameID: String	Query	...	...	get a players current cards collection
/cards/{collectionID}	DELETE	cards: Card	Body	...	...	remove a card of cards collection
/cards/{collectionID}	PUT/POST	cards: Card	Body	...	...	add a card to cards collection

/players endpoint

Mapping	Method	Parameter	Parameter Type	Status Code	Response	Description
/players	POST	playerName: String	Body	201409	Playerduplicate playerName	create a new player
/players/{gameID}	GET	gameID: String	Query	200404	list of playersno such game or no players found	retrieve a list of players in a game
/players/{playerID}	GET	userID: long	Query	200404	playerplayer not found	retrieve a player by ID
/players/{playerID}	PUT	currentScore: int	Body	204404	player not found	change players score during game

/users endpoint

Mapping	Method	Parameter	Parameter Type	Status Code	Response	Description
/users	POST	userName: String, password: String	Body	...	...	register a new user
/players/{playerID}	GET	userID: long	Query	200404	playerplayer not found	retrieve a player by ID
/users/{userID}	GET	userID: String	Query	200404	useruser not found	retrieve a user by ID
/users/{username}	GET	userName: String	Query	200404	useruser not found	retrieve a user by their username
/users/{userID}	PUT	newGameScore: int	Body			

other endpoints

Mapping	Method	Parameter	Parameter Type	Status Code	Response	Description
/login/	POST	userName: String, password: String	Body	...	useruser not found	login with username and password
/logout/	POST	?	Body	?	?	terminate user session by logging out

Detailed Interface Specification

Game

Interface Name	Fieldname	Type	Description
GameGetDTO	gameID	String	Unique identifier of the game
	players	PlayersGetDTO[]	List of players that participate in that game

Match

Interface Name	Fieldname	Type	Description
MatchPostDTO	gameID	String	IDs of the game this match belongs
MatchGetDTO	matchID	String	Unique identifier of the match
	noOfRounds	int	Number of rounds (i.e. cards per player) in this match
	noOfTricksPerPlayer	int	Number of tricks per player in this match
MatchGetDTO	gameID	String	ID of the game this match belongs

Cards

Interface Name	Fieldname	Type	Description
CardGetDTO	cardID	String	Unique identifier of card
	rank	int	Rank of a card
	name	String	Name of a card
CardsGetDTO	cardsCollectionID	String	Unique identifier of the cards collection
	cards	CardGetDTO[]	List of cards
	playerID	String	String of cards holding player
CardsPostDTO	cardID	String	ID of a card

Player

Interface Name	Fieldname	Type	Description
PlayerPostDTO	playersName	String	Name of the player (must be unique)
PlayerGetDTO	playerID	String	Players unique identifier
	playerid	String	Unique identifier of player
	playersName	String	Name of the player

Interface Name	Fieldname	Type	Description
	score	int	Players score in a running game
	gameID	String	Unique identifier of game, a player is (or was?) participating

User

Login, Logout

Interface Name	Fieldname	Type	Description
LoginPostDTO	userName	String	User's name (must be unique)
	password	String	User's password
LogoutPostDTO	userSessionID ?	String	ID of the user login session ?