API Reference

Robot Rally Game logic engine

API Version: 0.1.0

This api controlls the flow of a game and provides it's data. It is desiged to be RESTfull so the structure works simmilar as file system.

The service will run and only work in a local network, game . host is the IP of the Computer hosting the game and will be found via a IP scan

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Security and Authentication

SECURITY SCHEMES

KEY	TYPE	DESCRIPTION
admin- access	apiKey	This is a static key needed for administrative operations like creating games and can only be obtained inside the servers runtime.
player- auth	apiKey	Players need a token to join a lobby/game. If the host sets a password the player needs the password to get the token

API

1. EVENTHANDLING

Recive and react to events

1.1 GET /games/{game_id}/events/movement

Get next / last movement event

Returns the next unfetched event of the movement type.

If the event is not of the movement type you will get a 400 status and the event stays unfetched

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32	
	between 0 and 2048	

RESPONSE

STATUS CODE - 200: OK

NAME	TYPE	DESCRIPTION	
OBJECT WITH BELOW STR	OBJECT WITH BELOW STRUCTURE		
entity	integer	>=0	
		The unique identification of this entity. *!!!* This is not the id of the player This value will be autogenerated by the api and is read only	
direction	enum	DEFAULT:up	
		ALLOWED:up, down, left, right	
		Defines a direction in a 2D system. the X and Y values can be defined by the client.	
movement-ammount	integer	between 0 and 50	
		How far (in tiles) the movement was executed	
rotation	enum	DEFAULT:left	
		ALLOWED:left, right	
		Defines wether to turn left or right	
rotation-times	integer	between 0 and 2	
		The number of times (90�) the robot turns	
from	object		
X*	integer	multiple of 1	
		The X cordinate	
у*	integer	multiple of 1	
-		Position on the Y axis (top-down on screen)	
to	object		
X*	integer	multiple of 1	
		The X cordinate	
y*	integer	multiple of 1	
-		Position on the Y axis (top-down on screen)	

1.2 GET /games/{game_id}/events/damage

Get next / last damage event

Returns the next unfetched event of the damage type.

If the event is not of the damage type you will get a 400 status and the event stays unfetched

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32	
	between 0 and 2048	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITI	H BELOW STR	UCTURE
entity	integer	>=0
		The unique identification of this entity. *!!!* This is not the id of the player br> This value will be autogenerated by the api and is read only
ammount	integer	between 0 and 5
		The number of damage points

STATUS CODE - 404: No unfetched event

STATUS CODE - 417: The next event is not a movement event

1.3 GET /games/{game_id}/events/lazer-hit

Get next / last Lazer hit event

Returns the next unfetched event of the lazer hit type.

If the event is not of the lazer hit type you will get a 400 status and the event stays unfetched

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32	
-	between 0 and 2048	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJEC	T WITH BE	LOW STRUCTURE
id	strin]

STATUS CODE - 404: No unfetched event

STATUS CODE - 417: The next event is not a movement event

1.4 GET /games/{game_id}/events/map

Get next / last map event

Returns the next unfetched event of the Map Event type. Map Events activeata all active components of a type at once

If the event is not of the map event type you will get a 400 status and the event stays unfetched

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32	
	between 0 and 2048	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

BJECT WITH B	ELOW STRUCTURE
ype enum	ALLOWED: lazer, rotator, conveyor-belts, stomper, hole, hole-trap, pusher, flamethrower, portal, toggle-ramps, repair The event that occurs if the active map elements are activated

STATUS CODE - 404: No unfetched event

STATUS CODE - 417: The next event is not a movement event

1.5 GET /games/{game_id}/events/push

Get next / last push event

Returns the next unfetched event of the push type.

If the event is not of the push type you will get a 400 status and the event stays unfetched

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32	
	between 0 and 2048	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION			
OBJECT WITH BEI	OBJECT WITH BELOW STRUCTURE				
<pre>pusher-id integer >=0</pre>		>=0			
		The unique identification of this entity. *!!!* This is not the id of the player This value will be autogenerated by the api and is read only			
ammount	integer	>=1			
		The number of tiles the pushed entity is pushed			
push-directon	enum	DEFAULT:up ALLOWED:up, down, left, right Defines a direction in a 2D system the Y and Y values can be defined by the elient			
pushed-id	integer	Defines a direction in a 2D system. the X and Y values can be defined by the client >=0			
		The unique identification of this entity. *!!!* This is not the id of the player This value will be autogenerated by the api and is read only			

STATUS CODE - 404: No unfetched event

STATUS CODE - 417: The next event is not a movement event

1.6 GET /games/{game_id}/events/shoot

Get next / last shoot event

Returns the next unfetched event of the movement type.

If the event is not of the movement type you will get a 400 status and the event stays unfetched

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32	
-	between 0 and 2048	

RESPONSE

STATUS CODE - 200: OK

NAME	TYPE	DESCRIPTION			
OBJECT WIT	OBJECT WITH BELOW STRUCTURE				
shooter	integer	>=0			
		The unique identification of this entity. *!!!* This is not the id of the player br> This value will be autogenerated by the api and is read only			
direction	enum	DEFAULT:up ALLOWED:up, down, left, right Defines a direction in a 2D system. the X and Y values can be defined by the client.			
to	object				

NAME	TYPE	DESCRIPTION
Х*	integer	multiple of 1 The X cordinate
у*	integer	multiple of 1 Position on the Y axis (top-down on screen)
hit-entity	s array	

STATUS CODE - 404: No unfetched event

STATUS CODE - 417: The next event is not a movement event

1.7 GET /games/{game_id}/events/shutdown

Get next / last shutdown event

Returns the next unfetched event of the movement type.

If the event is not of the movement type you will get a 400 status and the event stays unfetched

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32	
-	between 0 and 2048	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION		
OBJECT	OBJECT WITH BELOW STRUCTURE			
entity	integer	>=0		
		The unique identification of this entity. *!!!* This is not the id of the player This value will be autogenerated by the api and is read only		

STATUS CODE - 404: No unfetched event

STATUS CODE - 417: The next event is not a movement event

1.8 GET /games/{game_id}/events/type

trace event

All events needed by the client are accessible here. (Usefull for animations)

More about this function is found in the [regarding Github Issue](https://github.com/FactoryRally/game-controller/issues/6)

This function only returns the type of the event you need to fetch the data seperately

Read more at [api-usage.md](https://github.com/FactoryRally/game-controller/blob/master/documentation/rest/api-usage.md#events-updates)

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32	
	between 0 and 2048	

QUERY PARAMETERS

NAME	TYPE	DESCRIPTION
batch	boolean	If true you will get all past events at once
wait	boolean	If true the server will not responde until a event is added to the queue
		Rrequires less traffic but might impacts the servers performance or cause timeouts at the client

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION			
OBJECT WITH BELOW STRUCTURE					
event- type	enum	ALLOWED:movement, upgrade purchase, fill register, activate upgrade, lazer shot, game start, clear shop, fill shop, register clear, programming timer start, programming timer stop, random card distribution, take card event, activate checkpoint, game_phase_changed, game_round_phase_changed Describes what the event is about			

STATUS CODE - 404: Not Found

NAME	TYPE	DESCRIPTION	
OBJECT WITH BELOW STRUCTURE			
message*	* string A short message describing what happened in human w		
error	string	The error/exception	

2. GAME

All actions needed to interact with the game itself and mostly to get information

2.1 GET /games/

Get all games

Returns a list of all hosted games

REQUEST

QUERY PARAMETERS

NAME	TYPE	DESCRIPTION	
joinable boolean		true: only return joinable games	
unprotected boolean		true: only display games with no password set	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

2.2 POST /games/

Create Game

Creates a random game by your defined rules

REQUEST

REQUEST BODY - application/json

NAME	TYPE	DESCRIPTION
player-names-visible	boolean	DEFAULT: true If true players can see the name of the player controlling a robot
max-players	integer	between 1 and 10 DEFAULT:4 The maximum ammount of players able to join the game
name*	string	3 to 50 chars The visible name of the game
robots-per-player	integer	between 1 and 3 Defines the number of robots per player
password	string	4 to 18 chars The password of a game
fill-with-bots	boolean	If true emply player slots are going to be filled up with AI enemys

RESPONSE

STATUS CODE - 200: OK

2.3 GET /games/{game_id}/status

Get game status

Returns the status of a game

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32	
	between 0 and 2048	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH BELOW	STRUCTURE	
passed-time*	integer	>=-1
		DEFAULT:-1
		The time passed since the game started in secconds. If the game is not started it will be `0`
state*	enum	ALLOWED:LOBBY, PLANNING, PLAYING, FINISHED, BREAK
		The phase the game is currently in * `Lobby`: Players are able to join, Bots able to be added. Host can decide to start the game and leave the phase * `Planning`: **[BETA - Not in game]** Players can choose their type of robot/bots bots autopick * `Playing`: The game is running and the players can do interactions * `Break`: The game is paused by the host. Players can still do interactions but they wont be executed as long as the break lasts * `Finished`: The game is over and there is a winner. This is the time to save the game for a replay
hardware- compatible*	boolean	Not every game can be connected to hardware (for example to many bots)
		If this is true it means you can use this game with hardware
hardware- attached*	boolean	Is a hardware boead connected
player-on-turn*	integer	between 0 and 8
		This id uniquely identifys the player (in a game).
		Not to be confused with the `uid` which is used for authentication

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH BELOW STRUCTURE		
message*	string	A short message describing what happened in human words
error	string	The error/exception

2.4 GET /games/{game_id}/actions

Get games actions

Get all (not robot related) actions comitted to this game.

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION	
------	------	-------------	--

NAME	TYPE	DESCRIPTION
*game_id	int32	
-	between 0 and 2048	

QUERY PARAMETERS

NAME	TYPE	DESCRIPTION
mode	enum	Defines wich entries to return
	ALLOWED: PENDING, EXECUTED, ALL	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION	
ARRAY OF O	ARRAY OF OBJECT WITH BELOW STRUCTURE		
index	integer	The queue index of the action	
type	enum	ALLOWED: PAUSE, UNPAUSE, START_GAME Defines what an action will do	
executed	boolean	true if the action was allready executed	
requestor	integer	The index of the player this instruction came from	

STATUS CODE - 201: Created

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION	
OBJECT WITH BELOW STRUCTURE			
message*	string	A short message describing what happened in human words	
error	string	The error/exception	

2.5 PUT /games/{game_id}/actions

Commit Action

Queues an action to be executed

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32	
	between 0 and 2048	

QUERY PARAMETERS

NAME	ТҮРЕ	DESCRIPTION
*action	enum	
	ALLOWED: PAUSE, UNPAUSE, START_GAME	

RESPONSE

STATUS CODE - 200: OK

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH BELOW STRUCTURE		
message*	string	A short message describing what happened in human words
error	string	The error/exception

STATUS CODE - 409: Conflict

NAME	TYPE	DESCRIPTION
OBJECT WITH BELOW STRUCTURE		
message*	string	A short message describing what happened in human words
error	string	The error/exception

3. MAP

Iterct with the the map

3.1 GET /games/ $\{game_id\}/map/tiles/\{x\}/\{y\}$

Get tile

Inspect a tile of the map

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	
* X	string	
∗ y	string	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION			
OBJECT WITH	DBJECT WITH BELOW STRUCTURE				
type*	enum	ALLOWED:normal, rotator, wall, prio_core, conveyor, trap-door, stomper, radioactive, repair site, Button, One Way Wall, Puddle, pit, Ramp The type defines the function of a tile and how it is displayed. The behaviour is unknown to the client			
empty	boolean	If there is no player at the tile this is true			
direction	enum	DEFAULT:up ALLOWED:up, down, left, right Defines a direction in a 2D system. the X and Y values can be defined by the client.			
rotator- direction	enum	DEFAULT:left ALLOWED:left, right Defines wether to turn left or right			
level	integer	between 1 and 3 DEFAULT:1 The height of the tile. 1 = default			

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH BELOW STRUCTURE		
message*	string	A short message describing what happened in human words
error	string	The error/exception

3.2 GET /games/{game_id}/map/info

Get Map info

Get meta information abouzt the map of the game

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32	
-	between 0 and 2048	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH	BELOW STRUC	CTURE
width	integer	between 4 and 500
height	integer	between 4 and 500
prioBeacon	object	
X*	integer	multiple of 1 The X cordinate
у*	integer	multiple of 1 Position on the Y axis (top-down on screen)
name	string	3 to 13 chars PATTERN: [A-Za-z]+[A-Za-z0-9]+ The default rule for names in the game

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION	
OBJECT WITH BELOW STRUCTURE			
message*	string	A short message describing what happened in human words	
error	string	The error/exception	

3.3 GET /games/{game_id}/map

Get Map

Returns the map of this specific game including the tiles (data)

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	string	

RESPONSE

STATUS CODE - 200: OK

NAME	TYPE	DESCRIPTION	
OBJECT WITH BELO	OW STRUCTURE		
info	object		
width	integer	between 4 and 500	
height	integer	between 4 and 500	
prioBeacon	object		
X*	integer	multiple of 1 The X cordinate	
у*	integer	multiple of 1 Position on the Y axis (top-down on screen)	
name	string	3 to 13 chars PATTERN: [A-Za-z]+[A-Za-z0-9]+ The default rule for names in the game	
rows	array		
::props	object		
type*	enum	ALLOWED:normal, rotator, wall, prio_core, conveyor, trap-door, stomper, radioactive, repair site, Button, One Way Wall, Puddle, pit, Ramp The type defines the function of a tile and how it is displayed. The behaviour is unknown to the client	
empty	boolean	If there is no player at the tile this is true	
direction	enum	DEFAULT:up ALLOWED:up, down, left, right Defines a direction in a 2D system. the X and Y values can be defined by the client.	
rotator- direction	enum	DEFAULT:left ALLOWED:left, right Defines wether to turn left or right	
level	integer	between 1 and 3 DEFAULT: 1 The height of the tile. 1 = default	

STATUS CODE - 404: Not Found

STATUS CODE - 500: Internal Server Error

4. MAP REPO

4.1 GET /maps/

Get Map Names

Returns a list of all map names

REQUEST

No request parameters

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

4.2 POST /maps/

Save Map

Saves a map to the repository

REQUEST

REQUEST BODY - application/json

NAME	TYPE	DESCRIPTION	
info	object		
width	integer	between 4 and 500	
height	integer	between 4 and 500	
prioBeacon	object		
X*	integer	multiple of 1 The X cordinate	
у*	integer	multiple of 1 Position on the Y axis (top-down on screen)	
name	string	3 to 13 chars PATTERN: [A-Za-z]+[A-Za-z0-9]+ The default rule for names in the game	
rows	array		
::props	object		
type*	enum	ALLOWED:normal, rotator, wall, prio_core, conveyor, trap-door, stomper, radioactive, repair site, Button, One Way Wall, Puddle, pit, Ramp The type defines the function of a tile and how it is displayed. The behaviour is unknown to the client	
empty	boolean	If there is no player at the tile this is true	
direction	enum	DEFAULT:up ALLOWED:up, down, left, right Defines a direction in a 2D system. the X and Y values can be defined by the client.	
rotator- direction	enum	DEFAULT:left ALLOWED:left, right Defines wether to turn left or right	
level	integer	between 1 and 3	

NAME	TYPE	DESCRIPTION
		DEFAULT:1
		The height of the tile. 1 = default

RESPONSE

STATUS CODE - 200: OK

4.3 GET /maps/{map_name}

Get map

Get a map by its name

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*map_name	string	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION			
OBJECT WITH	OBJECT WITH BELOW STRUCTURE				
width	integer	between 4 and 500			
height	integer	between 4 and 500			
prioBeacon	object				
X*	integer	multiple of 1 The X cordinate			
у*	integer	multiple of 1 Position on the Y axis (top-down on screen)			
name	string	3 to 13 chars PATTERN: [A-Za-z]+[A-Za-z0-9]+ The default rule for names in the game			

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH	H BELOW ST	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

STATUS CODE - 500: Internal Server Error

NAME	TYPE	DESCRIPTION
OBJECT WITH	I BELOW ST	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

4.4 DELETE /maps/{map_name}

Delete Map

Delete a map by its name

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*map_name	string	

RESPONSE

STATUS CODE - 204: Deleted

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH	BELOW ST	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

STATUS CODE - 500: Internal Server Error

NAME	TYPE	DESCRIPTION
OBJECT WITH	I BELOW STI	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

5. PLAYERS

All actions needed to interact with players.

str>Keep in mid that a player is *not* a robot

5.1 GET /games/{game_id}/players/

Get all players

Returns the index of all players

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32	
-	between 0 and 2048	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH	I BELOW ST	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

5.2 POST /games/{game_id}/players/

Join game

Join the given game.

You will get your ID by doing this, if you already in the game you can get your ID again if you lost it.

The id is neccessary for any further API calls

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32	
-	between 0 and 2048	

QUERY PARAMETERS

NAME	TYPE	DESCRIPTION
password	string	The password of the game if the lobby is password protected

RESPONSE

STATUS CODE - 200: Joined

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION	
OBJEC	OBJECT WITH BELOW STRUCTURE		
id*	integer	between 0 and 8 This id uniquely identifys the player (in a game).	
		Not to be confused with the `uid` which is used for authentication	
pat*	integer	between 9999 and 99999999 The uid is the key for the joined player. You need this key for authentication	

STATUS CODE - 401: Wrong/No password

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH	BELOW ST	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH	BELOW ST	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

STATUS CODE - 409: Not Joinable

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH	I BELOW ST	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

5.3 GET /games/{game_id}/players/{player_id}

Get player

Get closer information about the player

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	
*player_id	integer between 0 and 8	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH BELOW ST	RUCTURE	
id*	integer	between 0 and 8
		This id uniquely identifys the player (in a game).
		Not to be confused with the `uid` which is used for authentication
controlled_entities*	array	
on-turn	boolean	♦f this is true rhe player is able to interact at the moment
active	boolean	DEFAULT:true
		Defines if the player is actively playing. If this is false the player does random moves. This is only false if the player disconnects

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH	H BELOW ST	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

5.4 DELETE /games/{game_id}/players/{player_id}

Remove Player

Removes a player from the game. This can be done by the player itsself or by the host.

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	
*player_id	integer between 0 and 8	

RESPONSE

STATUS CODE - 200: OK

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH BELOW STRUCTURE		
message*	string	A short message describing what happened in human words
error	string	The error/exception

5.5 PATCH /games/{game_id}/players/{player_id}

Set Robots

DEPRECATET

This feature is useless in this version. It will be usefull in newer versions Sets the type of robot(s) the player is controlling

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	
*player_id	integer between 0 and 8	

REQUEST BODY - application/json

RESPONSE

STATUS CODE - 200: OK

STATUS CODE - 404: Not Found

NAME	TYPE	DESCRIPTION
OBJECT WITH	H BELOW ST	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

6. ROBOTS

All actions directly done with the robots and other robot related actions

6.1 GET /games/{game_id}/entitys/robots/{robot_id}/registers

Get register information

Returns the content of the registers

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	
*robot_id	int32 >=0	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
ARRAY OF OBJ	ECT WITH BEL	OW STRUCTURE
type*	enum	ALLOWED:move, rotate
		Defines what a command will do
parameters	array	
name*	string	min:1 chars
		The name the value is bound to
value	integer	The value behind the name. Can be null
description	string	max:300 chars
		A description about the effect of the command. Variables are using the format `{name}` where *name* refers to the names in `values`.
name	string	2 to 27 chars
		The ame to display for this Command. ***Not*** unique (identifying)
times	integer	between 1 and 10
		DEFAULT:1
		Describes how often this command is going to be executed

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH	I BELOW STI	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

6.2 DELETE /games/{game_id}/entitys/robots/{robot_id}/registers

clear registers

Emptys all register of the robot

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	
*robot_id	int32 >=0	

RESPONSE

STATUS CODE - 200: OK

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH	I BELOW STI	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

6.3 PATCH /games/{game_id}/entitys/robots/{robot_id}/registers

change register content

Updates the card in a register

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	
*robot_id	int32 >=0	

RESPONSE

STATUS CODE - 200: OK

6.4 GET /games/{game_id}/entitys/robots/{robot_id}/upgrades

Get Robot Upgrades

Returns the upgrades installed on the robot

REQUEST

PATH PARAMETERS

NAME TYPE

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	
*robot_id	int32 >=0	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH	BELOW ST	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

6.5 DELETE /games/{game_id}/entitys/robots/{robot_id}/upgrades

Clear Robot Upgrades

Removes all upgrades from a robot

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	
*robot_id	int32 >=0	

RESPONSE

STATUS CODE - 200: OK

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH	BELOW ST	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

6.6 PATCH /games/{game_id}/entitys/robots/{robot_id}/upgrades

Remove Upgrade

Removes a paticular upgrade from the robot

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	
*robot_id	int32 >=0	

QUERY PARAMETERS

NAME T	YPE	DESCRIPTION
upgrade i	integer between 0 and 10000	

RESPONSE

STATUS CODE - 200: OK

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH BELOW STRUCTURE		
message*	string	A short message describing what happened in human words
error	string	The error/exception

6.7 GET /games/{game_id}/entitys/robots/

Get all robots

Returns a list of all robot IDs in this game.

A robot is not a player as a player is able to controll multiple robots

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

STATUS CODE - 404: Not Found

NAME	TYPE	DESCRIPTION
OBJECT WITH	H BELOW ST	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

6.8 GET /games/{game_id}/entitys/robots/{robot_id}/actions/avinable

Get Aviable actions

Returns a list of EntityActionTypes which are possible to be executed at the moment.

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	
*robot_id	string	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

		11 7	
NAME	TYPE	DESCRIPTION	
ARRAY C	OF OBJECT WIT	TH BELOW STRUCTURE	
type	enum	DEFAULT:none ALLOWED:reboot, use upgrade, spider_jump, Cache, register-refresh, storage-swap, jumper, teleporter, magnet-ray, pushray, rotation, sidekick Defines the action itsselft (what the action is doing)	
time- left	integer	>=1 The time in ms left to do this action	
end- time	integer	>=0 The in most languages avinable system time in MS as of which the action cant be committed any more	

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH BELOW STRUCTURE		
message*	string	A short message describing what happened in human words
error	string	The error/exception

6.9 GET /games/{game_id}/entitys/robots/{robot_id}/actions/stack/

Get Robot action stack

Retuns a list od all actions in the stack

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	
*robot_id	string	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
ARRAY C	F OBJEC	T WITH BELOW STRUCTURE
phase	phase enum ALLOWED:pre_register, after_register The moment at which a entity action can be performed	
type	enum	DEFAULT:none ALLOWED:reboot, use upgrade, spider_jump, Cache, register-refresh, storage-swap, jumper, teleporter, magnet-ray, pushray, rotation, sidekick Defines the action itsselft (what the action is doing)

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH	BELOW ST	RUCTURE
message*	string	A short message describing what happened in human words
error	string	The error/exception

6.10 POST /games/{game_id}/entitys/robots/{robot_id}/actions/stack/

Add Entity Action to stack

Adds an action to the stack. The stack is processed using *first in first out*

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	
*robot_id	string	

REQUEST BODY - application/json

NAME	TYPE	DESCRIPTION	
phase	enum	ALLOWED:pre_register, after_register	
		The moment at which a entity action can be performed	
type	enum	DEFAULT:none	
		ALLOWED:reboot, use upgrade, spider_jump, Cache, register-refresh, storage-	
		swap, jumper, teleporter, magnet-ray, pushray, rotation, sidekick	
		Defines the action itsselft (what the action is doing)	

RESPONSE

STATUS CODE - 200: OK

STATUS CODE - 404: Not Found

NAME	TYPE	DESCRIPTION
OBJECT WIT	H BELOW ST	RUCTURE
message*	string	A short message describing what happened in human words

NAME	TYPE	DESCRIPTION
error	string	The error/exception

6.11 GET /games/{game_id}/entitys/robots/{robot_id}/info

Get Robot Informations

Returns the status and info about the robot

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	
*robot_id	string	

RESPONSE

STATUS CODE - 200: OK

NAME	TYPE	DESCRIPTION
OBJECT WITH BE	LOW STRUCT	URE
direction*	enum	DEFAULT:up ALLOWED:up, down, left, right Defines a direction in a 2D system. the X and Y values can be defined by the client.
name*	string	3 to 13 chars PATTERN: [A-Za-z]+[A-Za-z0-9]+ The default rule for names in the game
id	integer	>=1 The unique identification of this entity. *!!!* This is not the id of the player This value will be autogenerated by the api and is read only
location*	object	
X*	integer	multiple of 1 The X cordinate
у*	integer	multiple of 1 Position on the Y axis (top-down on screen)
energy-cubes	integer	between 0 and 20 DEFAULT:3 The number of avainable energy cubes
health	integer	between 1 and 10 DEFAULT:10 The remaining health points
active	boolean	DEFAULT: true True if the robot is not in rebooting mode
virtual	boolean	If the robot is in virtual mode
priority	integer	between 1 and 8 The priority of this player. Higher is more priority. 1 = lowest. max = number of players
on-turn	boolean	True if the robot is currently active (executing a register)

NAME	TYPE	DESCRIPTION
hand-cards	integer	between 0 and 9 The cards in the hand of the robot
attitude	integer	between 0 and 4 DEFAULT:0 The height level of the robot
type	enum	ALLOWED:dicer, tank

STATUS CODE - 404: Not Found

NAME	TYPE	DESCRIPTION
OBJECT WITH BELOW STRUCTURE		
message*	string	A short message describing what happened in human words
error	string	The error/exception

7. UPGRADES

Buying and reading upgrades

7.1 GET /games/{game_id}/upgrades/shop

Get upgrade shop

Retuns a list of all cards in the upgrade shop

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32	
-	between 0 and 2048	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH E	BELOW STRUC	TURE
upgrades	array	
information	object	
open	boolean	DEFAULT:true
		if true you can buy uprades

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH BELOW STRUCTURE		
message*	string	A short message describing what happened in human words
error	string	The error/exception

7.2 PATCH /games/{game_id}/upgrades/shop

Buy Upgrade

Buy this Upgrade from the shop.

Note

If your robot allready owns 3 Upgrades you have to use the exchange parameter. This is the ID of the Upgrade to replace with the bought one

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32	
	between 0 and 2048	

QUERY PARAMETERS

NAME	TYPE	DESCRIPTION
*upgrade	integer between 0 and 10000	
exchange	integer between 0 and 10000	

RESPONSE

STATUS CODE - 200: OK

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION
OBJECT WITH BELOW STRUCTURE		
message*	string	A short message describing what happened in human words
error	string	The error/exception

7.3 GET /games/{game_id}/upgrades/{upgrade_id}

Get upgrade information

Get detailed information about the Upgrade

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	
*upgrade_id	integer between 0 and 10000	

RESPONSE

STATUS CODE - 200: OK

NAME	TYPE	DESCRIPTION
OBJECT WITH	BELOW STRU	CTURE
cost*	integer	between 0 and 5 DEFAULT:2 The energy cost to buy this upgrade
name*	string	2 to 27 chars The ame to display for this Upgrade. ***Not*** unique (identifying)
permanent	boolean	DEFAULT: true if true the card belongs to the player for the rest of the game
description	string	max:300 chars A description about the effect of the card. Variables are using the format `{name}` where *name* refers to the names in `values`.

NAME	TYPE	DESCRIPTION	
rounds	integer	between 1 and 10	
		If the Upgrade is not permanent this variable defines the number of rounds this Upgrade works	
values	array		
name*	string	min:1 chars	
		The name the value is bound to	
value	integer	The value behind the name. Can be null	
type*	enum	max:300 chars	
		ALLOWED:generator	
		Defines the type (the code/actions) this card will have *`generator`: Generates *x* energy every round	
id	integer	between 0 and 10000	
		The id of an upgrade. **Unique**	

STATUS CODE - 404: Not Found

RESPONSE MODEL - application/json

NAME	TYPE	DESCRIPTION	
OBJECT WITH	OBJECT WITH BELOW STRUCTURE		
message*	string	A short message describing what happened in human words	
error	string	The error/exception	

7.4 GET /games/{game_id}/upgrades/

get all Upgrades

Returns a list of all Upgrade IDs

REQUEST

PATH PARAMETERS

NAME	TYPE	DESCRIPTION
*game_id	int32 between 0 and 2048	

RESPONSE

STATUS CODE - 200: OK

RESPONSE MODEL - application/json

STATUS CODE - 404: Not Found

NAME	TYPE	DESCRIPTION	
OBJECT WITH BELOW STRUCTURE			
message*	string	A short message describing what happened in human words	
error	string	The error/exception	

API List

EventHandling

Recive and react to events

METHOD	API
get	/games/{game_id}/events/movement Get next / last movement event
get	/games/{game_id}/events/damage Get next / last damage event
get	/games/{game_id}/events/lazer-hit Get next/last Lazer hit event
get	/games/{game_id}/events/map Get next / last map event
get	/games/{game_id}/events/push Get next / last push event
get	/games/{game_id}/events/shoot Get next / last shoot event
get	/games/{game_id}/events/shutdown Get next / last shutdown event
get	/games/{game_id}/events/type trace event

EventHandling

METHOD API

METHOD	API
get	/games/ Get all games
post	/games/ Create Game
get	/games/{game_id}/status Get game status
get	/games/{game_id}/actions Get games actions
put	/games/{game_id}/actions Commit Action

METHOD API

METHOD	API
get	<pre>/games/{game_id}/map/tiles/{x}/{y} Get tile</pre>
get	/games/{game_id}/map/info Get Map info
get	/games/{game_id}/map Get Map

Map

METHOD API

METHOD API

METHOD API

METHOD API

METHOD API

METHOD API

METHOD API

METHOD API

METHOD API

METHOD API

METHOD API

METHOD API

Map Repo

METHOD	API
get	/maps/ Get Map Names
post	/maps/ Save Map
get	/maps/{map_name} Get map
delete	/maps/{map_name} Delete Map

METHOD	API
get	/games/{game_id}/players/ Get all players
post	/games/{game_id}/players/ Join game
get	/games/{game_id}/players/{player_id} Get player
delete	/games/{game_id}/players/{player_id} Remove Player
patch	/games/{game_id}/players/{player_id} Set Robots

METHOD API

Robots

METHOD	API
get	/games/{game_id}/entitys/robots/{robot_id}/registers Get register information
delete	<pre>/games/{game_id}/entitys/robots/{robot_id}/registers clear registers</pre>
patch	<pre>/games/{game_id}/entitys/robots/{robot_id}/registers change register content</pre>
get	<pre>/games/{game_id}/entitys/robots/{robot_id}/upgrades Get Robot Upgrades</pre>
delete	<pre>/games/{game_id}/entitys/robots/{robot_id}/upgrades Clear Robot Upgrades</pre>
patch	<pre>/games/{game_id}/entitys/robots/{robot_id}/upgrades Remove Upgrade</pre>
get	/games/{game_id}/entitys/robots/ Get all robots
get	<pre>/games/{game_id}/entitys/robots/{robot_id}/actions/avinable Get Aviable actions</pre>
get	<pre>/games/{game_id}/entitys/robots/{robot_id}/actions/stack/ Get Robot action stack</pre>
post	/games/{game_id}/entitys/robots/{robot_id}/actions/stack/ Add Entity Action to stack
get	<pre>/games/{game_id}/entitys/robots/{robot_id}/info Get Robot Informations</pre>

METHOD API

METHOD	API
get	/games/{game_id}/upgrades/shop Get upgrade shop
patch	/games/{game_id}/upgrades/shop Buy Upgrade
get	<pre>/games/{game_id}/upgrades/{upgrade_id} Get upgrade information</pre>
get	/games/{game_id}/upgrades/ get all Upgrades

METHOD API

METHOD API

METHOD API