

Zappy AI

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Chapter 1

Hierarchical Index

1.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

API.API	5
Exception	
IError.IError	8
IError	
APIException.APIException	8
ArgsException.ArgsException	8

Chapter 2

Class Index

2.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

API.API	5
APIException.APIException	8
ArgsException.ArgsException	8
IError.IError	8

Chapter 3

Class Documentation

3.1 API.API Class Reference

Public Member Functions

- def [__init__](#) (self, str host, int port)
- def [connect](#) (self)
- def [sendData](#) (self, str data, int timeout=None)
- def [receiveData](#) (self, int timeout=None)
- def [initConnection](#) (self, str teamName)
- def [close](#) (self)

3.1.1 Detailed Description

```
API class
A class to communicate with the server

Attributes :
    host : str
        the host of the server
    port : int
        the port of the server
    inputs : list
        the list of inputs
    outputs : list
        the list of outputs
    sock : socket
        the socket to communicate with the server

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Methods :
    sendData(data : str, timeout : int = None)
        send data to the server
    receiveData(timeout : int = None)
        receive data from the server
    connect(team_name : str)
        connect to the server
    close()
        close the connection
```

3.1.2 Constructor & Destructor Documentation

3.1.2.1 `__init__()`

```
def API.API.__init__ (
    self,
    str host,
    int port )
```

Constructor of the API class

Assign the host and the port of the server
Create the socket to communicate with the server
Connect to the server and add the socket to the inputs and outputs lists

Parameters :

- host : str
the host of the server
- port : int
the port of the server

3.1.3 Member Function Documentation

3.1.3.1 `close()`

```
def API.API.close (
    self )
```

Close the connection with the server

3.1.3.2 `connect()`

```
def API.API.connect (
    self )
```

Connect to the server
Add the socket to the inputs and outputs lists

3.1.3.3 initConnection()

```
def API.API.initConnection (
    self,
    str teamName )
```

Function to do the first exchange with the server

Send the team name to the server
Receive the client number and the map size from the server
Print the client number and the map size

Parameters :
 team_name : str
 the name of the team

Returns :
 client_num : int
 the client number
 x : int
 the x size of the map
 y : int
 the y size of the map

3.1.3.4 receiveData()

```
def API.API.receiveData (
    self,
    int timeout = None )
```

Receive data from the server

Parameters :
 timeout : int
 the timeout to wait for the server to send data
 (default is None which means no timeout)

3.1.3.5 sendData()

```
def API.API.sendData (
    self,
    str data,
    int timeout = None )
```

Send data to the server

Parameters :
 data : str
 the data to send
 timeout : int
 the timeout to wait for the server to be ready to receive data
 (default is None which means no timeout)

The documentation for this class was generated from the following file:

- /home/tjerome-rocher/Desktop/Tek2/Zappy/ai/src/Network/API.py

3.2 APIException.APIException Class Reference

Inheritance diagram for APIException.APIException:

3.3 ArgsException.ArgsException Class Reference

Inheritance diagram for ArgsException.ArgsException:

Collaboration diagram for ArgsException.ArgsException:

Public Member Functions

- `def __init__ (self, message)`

3.3.1 Detailed Description

ArgsException class

A class to handle exceptions that can occur in the Args
The ArgsException class inherits from the IError class

Attributes :
 message : str
 the message of the exception

3.3.2 Constructor & Destructor Documentation

3.3.2.1 `__init__()`

```
def ArgsException.ArgsException.__init__ (  
    self,  
    message )
```

Constructor of the ArgsException class

The documentation for this class was generated from the following file:

- `/home/tjerome-rocher/Desktop/Tek2/Zappy/ai/src/Errors/ArgsException.py`

3.4 IError.IError Class Reference

Inheritance diagram for IError.IError:

Collaboration diagram for IError.IError:

Public Member Functions

- def `__init__` (self, message)
- def `__str__` (self)
- def `__repr__` (self)

Public Attributes

- `message`

3.4.1 Detailed Description

IError class

A class to handle errors that can occur in the project

Attributes :

 message : str
 the message of the error

Methods :

 __str__()
 return the message of the error
 __repr__()
 return the message of the error

3.4.2 Constructor & Destructor Documentation

3.4.2.1 `__init__`()

```
def IError.IError.__init__ (  
    self,  
    message )
```

Constructor of the IError class

Assign the message of the error

Parameters :

 message : str
 the message of the error

3.4.3 Member Function Documentation

3.4.3.1 `__repr__()`

```
def IError.IError.__repr__ (
    self )
```

Return the message of the error

3.4.3.2 `__str__()`

```
def IError.IError.__str__ (
    self )
```

Return the message of the error

The documentation for this class was generated from the following file:

- `/home/tjerome-rocher/Desktop/Tek2/Zappy/ai/src/Errors/IError.py`

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