StellariumLG

Developer Documentation

StellariumMasterActivity.java

Location:
StellariumLG/InteractiveSpaces/stellarium.master/src/main/java/stellarium/master/

Public Methods

onActivitySetup ( )

Defines the socket for communication with Stellarium instance. Also defines ***stellariumListener*** thread.

onActivityStartup ( )

Launces Stellarium instance based on ***space.nativeapplication.executable*** and ***space.nativeapplication.executable.flags***. Launch the ***stellariumListener*** thread.

onActivityShutdown ( )

Unbind the sockets and shutdown the Stellarium instance.

Private Methods

Thread stellariumListener

Listens to the stellarium instance on the socket and forwards the received message as a JSON message to all clients instances listening on a channel.

StellariumClientActivity.java

Location:
StellariumLG/InteractiveSpaces/stellarium.client/src/main/java/stellarium/client/

Public Methods

onActivitySetup ( )

Defines the socket for communication with Stellarium instance. Also defines ***stellariumListener*** thread.

onActivityStartup ( )

Launces Stellarium instance based on ***space.nativeapplication.executable*** and ***space.nativeapplication.executable.flags***. Launch the ***stellariumListener*** thread.

onNewInputJson (String , Map)

Receives message from master activity on the input channel and forwards the message to the client Stellarium instance.

onActivityShutdown ( )

Unbind the sockets and shutdown the Stellarium instance.

LGCommunicate

File: *StellariumLG/Stellarium/src/core/LGCommunicate.hpp*

Public Methods

LGCommunicate (StelCore* , StelMovementMgr* , MODE m, int _offset, string _port)

write (Vec3d viewdirection)

Store the ***viewdirection*** to be sent to clients.

write (double fov)

Store the ***fov*** to be sent to clients.

send ( )

Send the ***viewdirection*** and ***fov*** to the clients.

listen ( )

Receive, parse and process the data received from the master.

read ( )

Retrieve the stored ***viewdirection*** and ***fov*** and create the viewing matrix.

Slots

sendTimeRate (double rate)

Send the time rate to the clients. Connected to SIGNAL ***timeRateChanged (rate)****.*

sendTimeReset ( )

Send time reset signal to the clients. Connected to SIGNAL ***timeReset****.*
StelCore::setTimeNow emits ***timeReset*** *signal.*

Public Enumerator

```
enum MODE {

        NONE,

        SERVER,

        CLIENT

}
```

LG mode for Stellarium.

Private Attributes

bool viewchanged

True, when new ***viewdirection*** and ***fov*** have been received.
False, when viewing matrix is in sync with ***viewdirection*** and ***fov***.

LGListenerThread

File: *StellariumLG/Stellarium/src/core/LGCommunicate.hpp*
Create a listener thread which executes ***LGCommunicate::listen***

StelCore

File: *StellariumLG/Stellarium/src/core/StelCore.hpp*

lookAtJ2000 (const Vec3d& pos, const Vec3d& aup, int offset)

Compute the view matrix based on ***offset***. ***pos*** is rotated about ***aup*** vector by (***offset*** * ***fov***) degrees for each client.