ErrorQuery object (implementing IQuery)
with satelliteId
+ reference to stationSyste, to replyto

queryError(satelliteId) -
generating error query object

tell(query) - passing error query object to dispatcherSystem

processing the query

Dispatcher

DispatcherActor
(AbstractBehavior<IQuery>))

getStatus(satelliteId) -
requesting info about satellite's status

SatelliteAPI

returning info about satellite's status

Query object (implementing IQuery)
with generated queryID:
(queryId, firstSatelliteId, range, timeout)
+ currentTime (queryStartTime)
+ reference to stationSystem to repty to

tell(query) - passing query object to dispatcherSystem

dispatcherSystem
(ActorSystem<IQuery>)

returning info
about satellite's errors

getErrors(satelliteId) -
requesting info about satellite's errors

query
(firstSatelliteId, range, timeout) -
generating query object

generating response object

Response object (implementing IResponse)
with generated errorSatelliteMap:
(queryId, errorSatelliteMap, notOverdueResponsePercent)
+ queryStartTime
+ reference to query object

DBConnector

SQLite
database

Station

StationActor
(AbstractBehavior<IResponse>)

tell(response) - passing response object to stationSystem

stationSystem
(ActorSystem<IResponse>)

processing the response

generating error response object

tell(response) - passing error response object to stationSystem

ErrorResponse object (implementing IResponse)
with information about satellite's errors

Legend

connections showing the communication process (not related to database)

connections showing when one object has a reference to another object (in a process not related to database)

connections showing the communication process (related to database)

connections showing when one object has a reference to another object (in a process related to database)