Package fr.rphstudio.codingdojo.game.functions.status

Interface ShipStatusFunctions

`public interface` **`ShipStatusFunctions`**

STATUS (own ship).

This module gathers all functions needed to get information about the player ship movements. You can get the position (X or Y), the direction angle, the speed magnitude or the speed vector components (X or Y). You can also get the Boost and Battery level values.

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Method Summary

All Methods **Instance Methods** **Abstract Methods**

Modifier and Type	Method	Description
`float`	`getShipAngle()`	Gets the current ship orientation.
`float`	`getShipBatteryLevel()`	Gets the level of the ship battery.
`float`	`getShipBoostLevel()`	Gets the boost charge level.
`float`	`getShipPositionX()`	Gets the X-axis position for the current ship.
`float`	`getShipPositionY()`	Gets the Y-axis position for the current ship.
`float`	`getShipSpeed()`	Gets the speed magnitude for the current ship.
`float`	`getShipSpeedX()`	Gets the X-axis component of the current ship speed vector.
`float`	`getShipSpeedY()`	Gets the Y-axis component of the current ship speed vector.

Method Detail

getShipPositionX

```
float getShipPositionX()
```

Gets the X-axis position for the current ship. Remember the Left edge of the screen is the X=0 position, and the X increases toward the Right edge. This function is useable with any code level.

Returns:

a floating value for the X position.

getShipPositionY

```
float getShipPositionY()
```

Gets the Y-axis position for the current ship. Remember the Top edge of the screen is the Y=0 position, and the Y increases toward the Bottom edge. This function is useable with any code level.

Returns:

a floating value for the Y position.

getShipAngle

```
float getShipAngle()
```

Gets the current ship orientation. The angle is in degrees. 0 means the ship goes toward the Right edge of the screen, along the X-axis. +90.0 means the ship goes toward the Bottom edge of the screen, along the Y-axis. -90.0 means the ship goes toward the To edge of the screen, along the Y-axis. +180.0 or 180.0 means the ship goes toward the Left edge of the screen, along the X-axis. This function is useable with any code level.

Returns:

a floating value between -180.0 and +180.0

getShipSpeed

```
float getShipSpeed()
```

Gets the speed magnitude for the current ship. This function is useable with any code level.

Returns:

a floating value for the speed magnitude.

getShipSpeedX

```
float getShipSpeedX()
```

Gets the X-axis component of the current ship speed vector. Remember a positive value means the vector points toward the Right edge of the screen. This function is useable with any code level.

Returns:

a floating value for the X-axis speed vector component.

getShipSpeedY

```
float getShipSpeedY()
```

Gets the Y-axis component of the current ship speed vector. Remember a positive value means the vector points toward the Bottom edge of the screen. This function is useable with any code level.

Returns:

a floating value for the Y-axis speed vector component.

getShipBoostLevel

```
float getShipBoostLevel()
```

Gets the boost charge level. The boost is a feature that allows to briefly increase your ship speed without any energy consumption. In order to use the boost feature, the boost level must be 'full'. To activate the boost, just call the `ShipActionFunctions.useBoost()` function. This function is useable with any code level.

Returns:

a floating value between 0.0 (no charge at all) and 100.0 (full charge, boost is ready).

getShipBatteryLevel

```
float getShipBatteryLevel()
```

Gets the level of the ship battery. Depending on the race mode, the energy consumption can be enabled, and you must take care of your battery level. Some checkpoints have a 'charging' ability, use them in order to recharge your battery. In order to recharge your battery, just place your ship over the 'charging' checkpoint and wait for charge to be complete. This function is useable with any code level.

Returns:

a floating value of the remaining battery level between 0.0 (no more energy, the race is finished) and 100.0 (full energy).