ICP Project 2023/2024 1.0

Generated by Doxygen 1.9.8

1 File Documentation 1

1 File Documentation	1
1.1 src/autorobot.cpp File Reference	1
1.1.1 Detailed Description	1
1.2 src/checkablebutton.cpp File Reference	2
1.2.1 Detailed Description	2
1.3 src/expbutton.cpp File Reference	2
1.3.1 Detailed Description	2
1.4 src/expbuttonwidget.cpp File Reference	2
1.4.1 Detailed Description	3
1.5 src/mainwindow.cpp File Reference	3
1.5.1 Detailed Description	3
1.6 src/obstacle.cpp File Reference	3
1.6.1 Detailed Description	4
1.7 src/overlaywidget.cpp File Reference	4
1.7.1 Detailed Description	4
1.8 src/paramwidget.cpp File Reference	4
1.8.1 Detailed Description	4
1.9 src/popupsavewindow.cpp File Reference	5
1.9.1 Detailed Description	5
1.10 src/robot.cpp File Reference	5
1.10.1 Detailed Description	5
1.11 src/simulationengine.cpp File Reference	5
1.11.1 Detailed Description	6
Index	7

# 1 File Documentation

# 1.1 src/autorobot.cpp File Reference

This file contains the implementation of the AutoRobot class.

```
#include "autorobot.hpp"
```

## 1.1.1 Detailed Description

This file contains the implementation of the  $\mbox{\it AutoRobot}$  class.

It is a subclass of the Robot class and represents an autonomous robot.

Authors

Tomáš Hobza, Jakub Všetečka

Date

02.05.2024

## 1.2 src/checkablebutton.cpp File Reference

This file contains the implementation of the CheckableButton class.

```
#include "checkablebutton.hpp"
```

#### 1.2.1 Detailed Description

This file contains the implementation of the CheckableButton class.

It is a subclass of the QPushButton class and represents a checkable button.

**Authors** 

Tomáš Hobza, Jakub Všetečka

Date

02.05.2024

## 1.3 src/expbutton.cpp File Reference

This file contains the implementation of the ExpButton class.

```
#include "expbutton.hpp"
```

#### 1.3.1 Detailed Description

This file contains the implementation of the ExpButton class.

It is a subclass of the QPushButton class and represents an expandable button.

**Authors** 

Tomáš Hobza, Jakub Všetečka

Date

02.05.2024

# 1.4 src/expbuttonwidget.cpp File Reference

This file contains the implementation of the ExpandableButtonWidget class.

```
#include "expbuttonwidget.hpp"
```

### 1.4.1 Detailed Description

This file contains the implementation of the ExpandableButtonWidget class.

It is a subclass of the QWidget class and represents a widget with expandable buttons.

**Authors** 

Tomáš Hobza, Jakub Všetečka

Date

02.05.2024

### 1.5 src/mainwindow.cpp File Reference

This file contains the implementation of the MainWindow class.

```
#include "mainwindow.h"
#include "obstacle.hpp"
#include "ui_mainwindow.h"
#include <QKeyEvent>
#include <qdir.h>
```

## 1.5.1 Detailed Description

This file contains the implementation of the MainWindow class.

It is a subclass of the QMainWindow class and represents the main window of the application.

**Authors** 

Tomáš Hobza, Jakub Všetečka

Date

02.05.2024

## 1.6 src/obstacle.cpp File Reference

This file contains the implementation of the Obstacle class.

```
#include "obstacle.hpp"
```

### 1.6.1 Detailed Description

This file contains the implementation of the Obstacle class.

It is a subclass of the QGraphicsRectItem class and represents an obstacle in the game.

**Authors** 

Tomáš Hobza, Jakub Všetečka

Date

02.05.2024

## 1.7 src/overlaywidget.cpp File Reference

This file contains the implementation of the OverlayWidget class.

```
#include "overlaywidget.hpp"
```

### 1.7.1 Detailed Description

This file contains the implementation of the OverlayWidget class.

It is a subclass of the QWidget class and represents an overlay widget for the QGraphicsView.

**Authors** 

Tomáš Hobza, Jakub Všetečka

Date

02.05.2024

# 1.8 src/paramwidget.cpp File Reference

This file contains the implementation of the ParamWidget class.

```
#include "paramwidget.hpp"
```

### 1.8.1 Detailed Description

This file contains the implementation of the ParamWidget class.

It is a subclass of the QWidget class and represents a widget for editing parameters of game objects.

Authors

Tomáš Hobza, Jakub Všetečka

Date

03.05.2024

## 1.9 src/popupsavewindow.cpp File Reference

This file contains the implementation of the PopupSaveWindow class.

```
#include "popupsavewindow.h"
```

#### 1.9.1 Detailed Description

This file contains the implementation of the PopupSaveWindow class.

It is a subclass of the QDialog class and represents a popup save window.

**Authors** 

Tomáš Hobza, Jakub Všetečka

Date

02.05.2024

## 1.10 src/robot.cpp File Reference

This file contains the implementation of the Robot class.

```
#include "robot.hpp"
```

## 1.10.1 Detailed Description

This file contains the implementation of the Robot class.

It is a subclass of the QGraphicsEllipseltem class and represents a robot in the simulation.

**Authors** 

Tomáš Hobza, Jakub Všetečka

Date

02.05.2024

### 1.11 src/simulationengine.cpp File Reference

This file contains the implementation of the SimulationEngine class.

```
#include "simulationengine.hpp"
#include "obstacle.hpp"
#include <QGraphicsSceneMouseEvent>
#include <qdir.h>
```

## 1.11.1 Detailed Description

This file contains the implementation of the SimulationEngine class.

It is a subclass of the QGraphicsScene class and represents the simulation engine for the game.

**Authors** 

Tomáš Hobza, Jakub Všetečka

Date

02.05.2024

# Index

```
src/autorobot.cpp, 1
src/checkablebutton.cpp, 2
src/expbutton.cpp, 2
src/expbuttonwidget.cpp, 2
src/mainwindow.cpp, 3
src/obstacle.cpp, 3
src/overlaywidget.cpp, 4
src/paramwidget.cpp, 4
src/popupsavewindow.cpp, 5
src/robot.cpp, 5
src/simulationengine.cpp, 5
```