ICP Project 2023/2024 1.0

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# **Chapter 1**

# File Index

## 1.1 File List

Here is a list of all documented files with brief descriptions:

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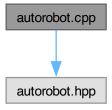
## **Chapter 2**

## **File Documentation**

## 2.1 autorobot.cpp File Reference

This file contains the implementation of the AutoRobot class.

#include "autorobot.hpp"
Include dependency graph for autorobot.cpp:



#### 2.1.1 Detailed Description

This file contains the implementation of the AutoRobot class.

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

**Authors** 

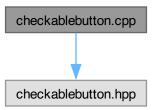
Tomáš Hobza, Jakub Všetečka

Date

## 2.2 checkablebutton.cpp File Reference

This file contains the implementation of the CheckableButton class.

#include "checkablebutton.hpp"
Include dependency graph for checkablebutton.cpp:



#### 2.2.1 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

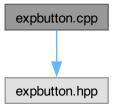
Date

02.05.2024

## 2.3 expbutton.cpp File Reference

This file contains the implementation of the ExpButton class.

#include "expbutton.hpp"
Include dependency graph for expbutton.cpp:



#### 2.3.1 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

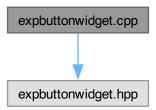
Date

02.05.2024

### 2.4 expbuttonwidget.cpp File Reference

This file contains the implementation of the ExpandableButtonWidget class.

#include "expbuttonwidget.hpp"
Include dependency graph for expbuttonwidget.cpp:



#### 2.4.1 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

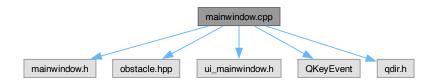
Date

## 2.5 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>
```

Include dependency graph for mainwindow.cpp:



#### 2.5.1 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

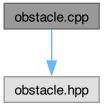
Date

02.05.2024

## 2.6 obstacle.cpp File Reference

This file contains the implementation of the Obstacle class.

```
#include "obstacle.hpp"
Include dependency graph for obstacle.cpp:
```



#### 2.6.1 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

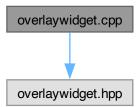
Date

02.05.2024

### 2.7 overlaywidget.cpp File Reference

This file contains the implementation of the OverlayWidget class.

#include "overlaywidget.hpp"
Include dependency graph for overlaywidget.cpp:



#### 2.7.1 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** 

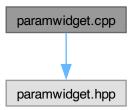
Tomáš Hobza, Jakub Všetečka

Date

## 2.8 paramwidget.cpp File Reference

This file contains the implementation of the ParamWidget class.

#include "paramwidget.hpp"
Include dependency graph for paramwidget.cpp:



#### 2.8.1 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

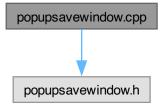
Date

03.05.2024

## 2.9 popupsavewindow.cpp File Reference

This file contains the implementation of the PopupSaveWindow class.

#include "popupsavewindow.h"
Include dependency graph for popupsavewindow.cpp:



#### 2.9.1 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

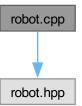
Date

02.05.2024

### 2.10 robot.cpp File Reference

This file contains the implementation of the Robot class.

```
#include "robot.hpp"
Include dependency graph for robot.cpp:
```



#### 2.10.1 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** 

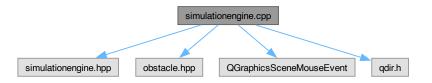
Tomáš Hobza, Jakub Všetečka

Date

## 2.11 simulationengine.cpp File Reference

This file contains the implementation of the SimulationEngine class.

```
#include "simulationengine.hpp"
#include "obstacle.hpp"
#include <QGraphicsSceneMouseEvent>
#include <qdir.h>
Include dependency graph for simulationengine.cpp:
```



#### 2.11.1 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

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