

### BlockManager

```
+ rows: int
+ columns: int
+ imgWidth: int
+ imgHeight: int
- threadsCount: int
- cutDimension: int
- values: double*
- blockSize: int
- workers: std::thread**
- dctPlan: fftw_plan
- idctPlan: fftw_plan
- dctPlanLastRow: fftw_plan
- idctPlanLastRow: fftw_plan
- dctPlanLastColumn: fftw_plan
- idctPlanLastColumn: fftw_plan
- dctPlanLastElement: fftw_plan
- idctPlanLastElement: fftw_plan

+ BlockManager(const QImage *image, int blockSize, int cutDimension);
+ ~BlockManager();
+ getBlock(int row, int column): double*
+ setCutDimension(int dimension): void
+ compress(): QImage*
+ updateImage(const QImage &image): void
- getBlockWidth(int i, int j) const: int {query}
- getBlockHeight(int i, int j) const: int {query}
- selectDctPlan(int i, int j): fftw_plan
- selectIdctPlan(int i, int j): fftw_plan
- cutValues(int row, int column): void
- parallelTask(const std::function<void(int, int)> &function, bool wait = true): void
```

### Address

```
+ MainWindow(QWidget *parent = nullptr);
+ ~MainWindow()
- ui:Ui::MainWindow *
- qualityFactor: int
- blockSize: int
- buffer: QBuffer *
- image: QImage*
- imageCompressed: QImage *
- blockManager: BlockManager *
- scaleFactor: double
- horizontalScrollValue: long int
- verticalScrollValue: long int
- currentPixmapSize: QSize *

- resizeEvent(QResizeEvent *event): void
- startCompression(): void
- updateMaximalValues(): void
- updateImageSize(double scaleFactor): void
- updateScrollBar(): void
```

