View Javadoc

```java
package model.element.mobile;

import java.awt.Image;
import java.io.IOException;

import javax.imageio.ImageIO;

import contract.ElementType;
import contract.IElement;
import contract.ILevelMap;
import model.element.LevelMap;

/**
 * The Class Diamond.
 *
 * @author Group 5
 */
public class Rock implements IElement {

    /** The score */
    private int score = 0;

    /** The exist boolean */
    private boolean exist = true;

    /** The elementType */
    private ElementType elementType = ElementType.ROCK;

    /** The x */
    private int x;

    /** The y */
    private int y;

    /** The levelmap */
    private ILevelMap levelmap;

    /** The image */
    private static Image image;

    /** The imageName */
    private String imageName = "Rocher";

    /**
     * constructor to build and place Rock
     *
     * @param x
     *              The x.
     * @param y
     *              The y.
     * @param levelMap
     *              The levelMap.
     *
     */
    public Rock(final int x, final int y, LevelMap levelMap) {
            this.setX(x);
            this.setY(y);
            this.setImageName(imageName);
            this.loadImage();
            this.setLevelmap(levelMap);

    }

    /**
     * Get x position of Rock
     *
     * @return x
     *
     */
    @Override
    public int getX() {

            return this.x;
    }

    /**
     * Set x position of Rock
     *
     * @param x
     *              The x.
     *
     */
    @Override
    public void setX(int x) {

            this.x = x;
    }

    /**
     * Get y position of Rock
     *
```

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         * @return y
         *
         */
        @Override
        public int getY() {

                return this.y;
        }

        /**
         * Set y position of Rock
         *
         * @param y
         *              The y.
         *
         */
        @Override
        public void setY(int y) {

                this.y = y;
        }

        /**
         * Move up the player when up key are pressed
         */
        @Override
        public void moveUp() {

                this.setY(this.getY() - 1);

                this.levelmap.setElement(this.getX(), this.getY(), this);
                this.levelmap.removeElement(getX(), getY()+1);

        }

        /**
         * Move down the player when down key are pressed
         *
         */
        @Override
        public void moveDown() {
                this.setY(this.getY() + 1);

                this.levelmap.setElement(this.getX(), this.getY(), this);
                this.levelmap.removeElement(getX(), getY()-1);
        }

        /**
         * Move left the player when left key are pressed
         *
         */
        public void moveLeft() {
                this.setX(this.getX() - 1);

                this.levelmap.setElement(this.getX(), this.getY(), this);
                this.levelmap.removeElement(getX()+1, getY());
        }
        /**
         * Move right the player when right key are pressed
         *
         */
        @Override
        public void moveRight() {
                this.setX(this.getX() + 1);

                this.levelmap.setElement(this.getX(), this.getY(), this);
                this.levelmap.removeElement(getX()-1, getY());
        }

        /**
         * do nothing the player when player don't move
         *
         */
        @Override
        public void doNothing() {
                this.setY(this.getY());

                this.levelmap.setElement(this.getX(), this.getY(), this);
        }

        /**
         * Get image of Rock
         *
         * @return image
         *
         */
        @Override
        public Image getImage() {

                return Rock.image;
        }

        /**
```

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     * Set image of Rock
     *
     * @param image
     *                      The image.
     *
     */
    @Override
    public void setImage(Image image) {

            Rock.image = image;
    }

    /**
     * Load image of Rock
     *
     */
    @Override
    public void loadImage() {

            Image img = null;
            try {
                    img = ImageIO.read(getClass().getClassLoader().getResourceAsStream("images/" + this.getImageName() + ".png"));
            }
            catch(IOException e) {
                    e.printStackTrace();
            }
            this.setImage(img);
    }

    /**
     * Get image name of Rock
     *
     * @return imgaName
     *
     */
    @Override
    public String getImageName() {

            return this.imageName;
    }

    /**
     * Set image name of Rock
     *
     * @param imageName
     *                              The image name.
     *
     */
    @Override
    public void setImageName(String imageName) {

            this.imageName = imageName;
    }

    /**
     * check existing of Rock
     *
     * @return exist
     *
     */
    @Override
    public boolean isExist() {

            return this.exist;
    }

    /**
     * set exist verification of Rock
     *
     * @param exist
     *                      The exist state.
     *
     */
    @Override
    public void setExist(boolean exist) {
            this.exist = exist;
    }

    /**
     * Get level
     *
     * @return level map
     *
     */
    public ILevelMap getLevelmap() {
            return levelmap;
    }

    /**
     * Set level
     *
     * @param levelmap
     *                      The levelMap.
     *
     */
    public void setLevelmap(ILevelMap levelmap) {
            this.levelmap = levelmap;
    }

    /**
     * Get score of collected diamond
     *
     * @return score
     *
     */
    @Override
    public int getScore() {
            return score;
    }

    /**
     * Set score of collected diamond
     *
     * @param score
     *                       The score.
     *
     */
    @Override
    public void setScore(int score) {
            this.score = score;
    }

    /**
     * Get element type of Rock
     *
     * @return element type
     *
     */
    @Override
    public ElementType getElementType() {
            return elementType;
    }

    /**
     * Set element type of Rock
     *
     * @param elementType
     *                               The elementType.
     *
     */
    @Override
    public void setElementType(ElementType elementType) {
            this.elementType = elementType;
    }

}
```