View Javadoc

```java
package view;

import java.awt.Color;
import java.awt.Graphics;
import java.awt.Graphics2D;
import java.awt.Image;
import java.io.IOException;
import java.util.Observable;
import java.util.Observer;

import javax.imageio.ImageIO;
import javax.swing.JPanel;

import contract.IElement;
import contract.IModel;

/**
 * The Class ViewPanel.
 *
 * @author Group 5
 */
class ViewPanel extends JPanel implements Observer {

    /** The view frame. */
    private ViewFrame                       viewFrame;

    /** The Constant serialVersionUID. */
    private static final long       serialVersionUID        = -998294702363713521L;

    /** the background icon. */
    private Image icoFond;

    /** the background image. */
    private Image imgFond;

    /** the model. */
    private IModel model;

    /**
     * Instantiates a new view panel.
     *
     * @param viewFrame
     *          the view frame
     */
    public ViewPanel(final ViewFrame viewFrame) {
            this.setViewFrame(viewFrame);
            viewFrame.getModel().getLevelMap().getObservable().addObserver(this);

            try {
                    icoFond = ImageIO.read(getClass().getClassLoader().getResourceAsStream("images/Background.png"));
            }
            catch(IOException e) {
                    e.printStackTrace();
            }
            this.imgFond = this.icoFond;

            this.model = this.viewFrame.getModel();
    }

    /**
     * Gets the view frame.
     *
     * @return the view frame
     */
    private ViewFrame getViewFrame() {
            return this.viewFrame;
    }

    /**
     * Sets the view frame.
     *
     * @param viewFrame
     *          the new view frame
     */
    private void setViewFrame(final ViewFrame viewFrame) {
            this.viewFrame = viewFrame;
    }

    /*
     * (non-Javadoc)
     *
     * @see java.util.Observer#update(java.util.Observable, java.lang.Object)
     */
    public void update(final Observable arg0, final Object arg1) {
            this.repaint();
    }

    /*
     * (non-Javadoc)
     *
     * @see javax.swing.JComponent#paintComponent(java.awt.Graphics)
     */
    protected void paintComponent(final Graphics graphics) {

            graphics.clearRect(0, 0, this.getWidth(), this.getHeight());
            graphics.drawImage(imgFond, 0, 0, null);

            Graphics2D g = (Graphics2D)graphics;
            g.scale(2,  2);
            g.translate(-this.model.getLevelMap().getPlayer().getX()*16+5*16, -this.getViewFrame().getModel().getLevelMap().getPlayer().getY()*16-


            for(int x=0; x<40; x++) {
                    for(int y=0; y<22; y++) {

                            IElement el = this.model.getLevelMap().getElement(x, y);

                            if(el instanceof IElement) {
                                    graphics.drawImage(el.getImage(), el.getX()*16, el.getY()*16, null);
                            }
                    }
            }

            g.setColor(Color.WHITE);
            g.drawString("Score : " +String.valueOf(this.model.getLevelMap().getPlayer().getScore()), this.model.getLevelMap().getPlayer().getX()

            this.repaint();
    }

}
```