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Lecturer Name:	Gemma Deery				
Assignment Title:	Personal Report for Review 2				
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Signed: Lucas Rodrigues Crema Date: 18/04/2025

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For review 2, I added a store to the game and an inventory, the player can interact with the store to sell the items that they currently have in the store and turn them from blocks to points.

On the GameManager Class, I initialized an instance of store:

```
store = new Store("bank.png", Constants.SCREEN_WIDTH/2, Constants.GROUND_HEIGHT, Constants.STORE_WIDTH, Constants.STORE_HEIGHT);
```

Followed similar logic to draw store as the one to blocks and players:

```
//Draw store
graphics.drawImage(store.getImage(), store.getX(), store.getY(), store.getWidth(), store.getHeight(), panel);
```

Added checkStoreProximity method to update so it constantly checks if player are trying to access the store:

```
public void update()
{
    player.update();
    player2.update();

    checkStoreProximity(player);
    checkStoreProximity(player2);
    //onomy.update();
```

Main method that checks if player's position is the same as store's and then checks if specified button is being pressed:

```
//Method checks if either player is close to the store and pressing their designated button
public void checkStoreProximity(Player player)

{

int storeX = store.getX();

int storeY = store.getWidth();

int storeWidth = store.getWidth();

int storeHeight = store.getHeight();

//If in the same position, check if pressing button
if (player.getX() >= storeX - storeWidth / 2 && player.getX() <= storeX + storeWidth / 2 && player.getY() >= storeY - storeHeight / 2 &&
player.getY() <= storeY + storeHeight / 2 )

//If pressing button, call method to sell inventory
if (activeKeys.contains(Constants.STORE_SELL_P1) || activeKeys.contains(Constants.STORE_SELL_P2))

{
    player.sellInventory();
}

player.sellInventory();
}

}
```

Added values related to store on Constants:

```
//Store
public final static int STORE_WIDTH = 70;
public final static int STORE_HEIGHT = 70;

public final static int STORE_SELL_P1 = 86;
public final static int STORE_SELL_P2 = 77;
```

Added getters and setters for variables under Blocks (still need to be properly implemented):

```
//Getters and Setters
public double getHardness()
{
    return hardness;
}

public void setHardness(double hardness)
{
    this.hardness = hardness;
}

public double getValue()
{
    return value;
}

public void setValue(double value)
{
    this.value = value;
}
```

ArrayList under player class that holds blocks:

```
private List<Block> inventory = new ArrayList<>();
```

collectBlock add any blocks to the inventory and sellInventory adds value of blocks to score and empties inventory after doing so:

```
//Adds blocks to inventory to be sold
public void collectBlock(Block block)
{
    inventory.add(block);
}

//"Selling" inventory by adding values to score and then clearing inventory
public void sellInventory()
{
    for (Block block : inventory)
    {
        score += block.getValue();
    }
    inventory.clear();
}
```

Ended up not using any external links.

Main challenge I encountered was getting checkStoreProximity() to work as intended, but ultimately just had to compare the X,Y, width and height values of player to store and then check if specified button was being pressed or not.