

# Oral presentation of LP24

## Project : Minesweeper Game

LP24 - Introduction to object conception and programming

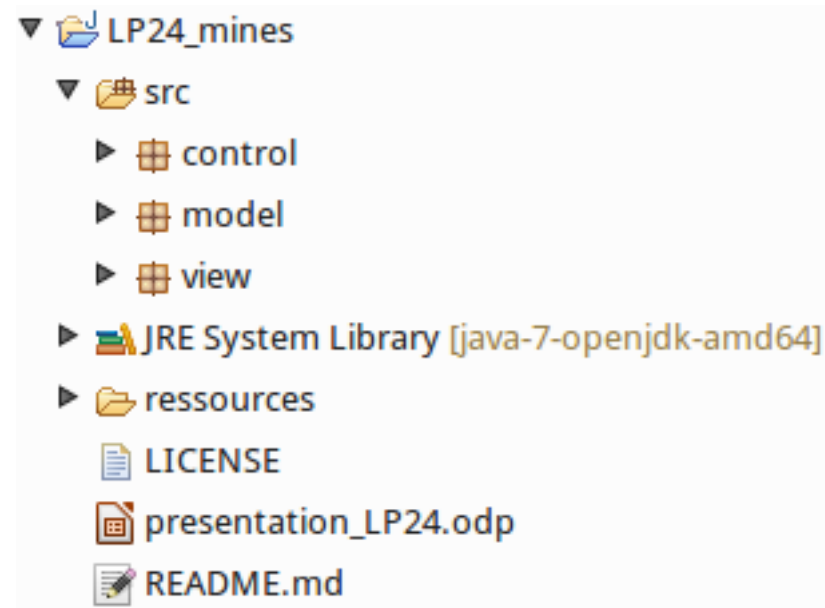
**Antoine LAMIELLE - TC04**  
**Vincent MÉRAT - TC04**

## SUMMARY

- Presentation of the global structure
- Model
- View
- Control
- Demonstration

## PRESENTATION OF THE GLOBAL STRUCTURE

- Use of the MVC model



## MODEL

- 4 classes :
  - Case.java
  - Chrono.java
  - Chunk.java
  - Score.java
- Core of the program

Case
Case()
Case()
Case()
getState()
getContent()
setState()
setContent()

Chunk
cases
sizeX
sizeY
nbBombs
seed
multiChunk
nbOpen
Chunk()
Chunk()
getSeed()
generateChunk()
revealing()
revealingAround()
revealingAllBomb()
flagging()
getState()
getContent()

Score
al
tree
array
Reading()
AddingScore()
CreateIfNotCreated()
getSizeTreeHumanReadable()
TreeHumanReadable()
HumanReadableToFilePath()

Chrono
startTime
savedTime
running
timer
actionPerformed()
Chrono()
addActionListener()
start()
pause()
stop()
getTime()
getTimeMillis()

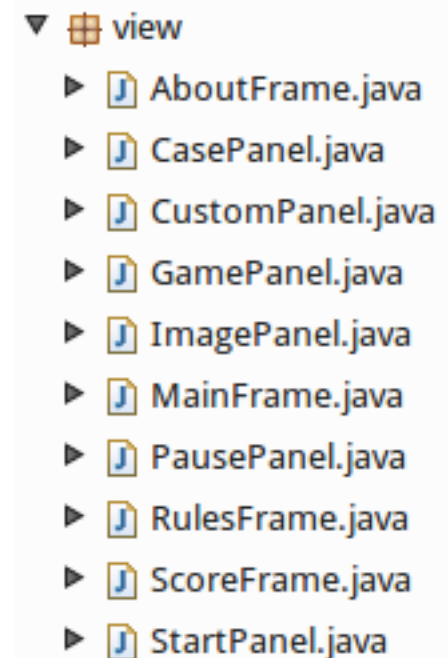
## MODEL

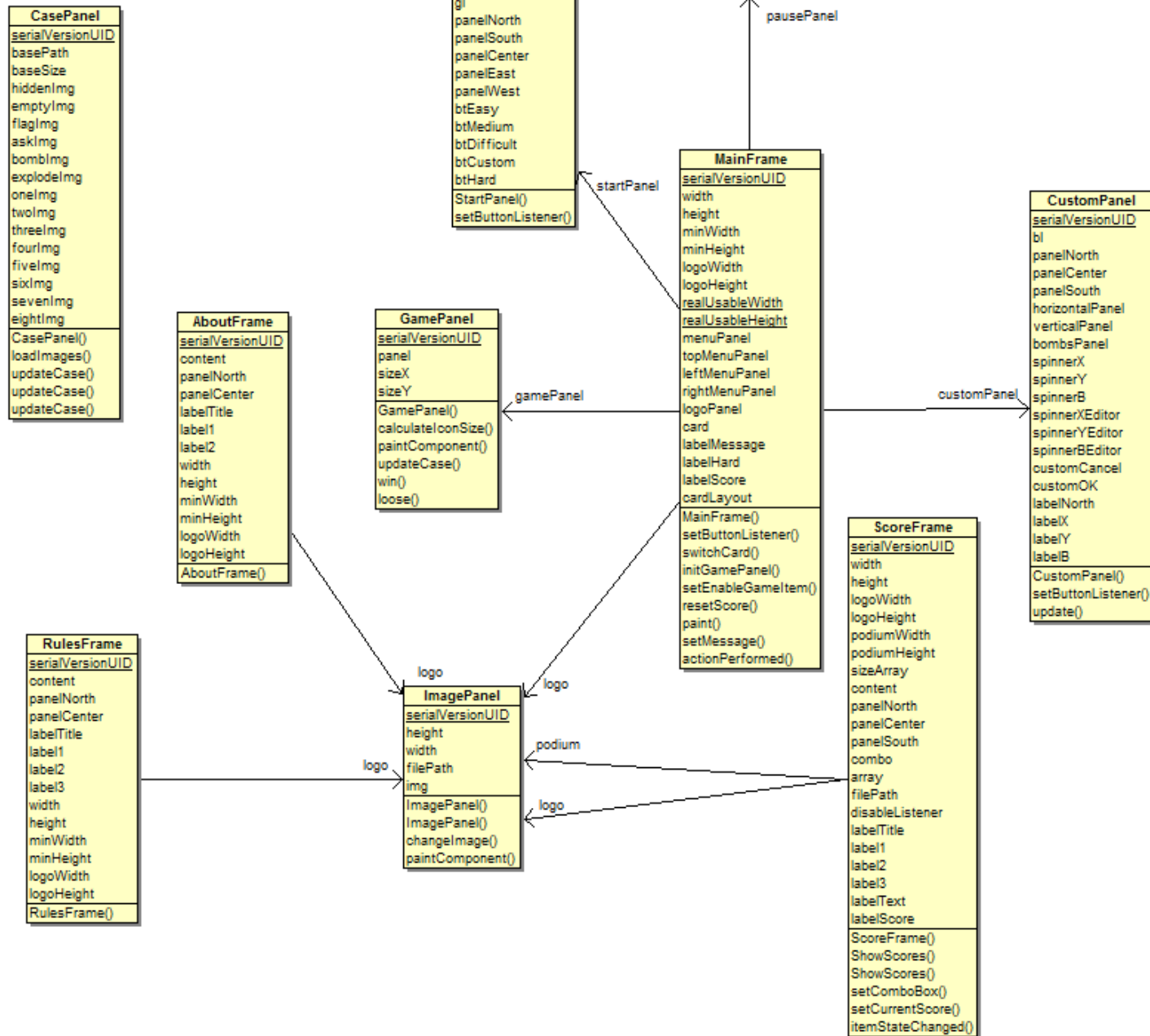
- Example of the class Case.java
  - Represents the state and the content of a case during the game
  - There is getters and setters in order to know if a case is a bomb or to open one

```
/* Enumerations */  
public enum State {  
    hidden,  
    open,  
    flag,  
    ask  
}  
  
public enum Content {  
    empty,  
    one,  
    two,  
    three,  
    four,  
    five,  
    six,  
    seven,  
    eight,  
    bomb,  
    explode  
}
```

## VIEW

- All the classes for the panels and frames
- Main class : MainFrame.java
  - The frame used by a lot of panels





## VIEW

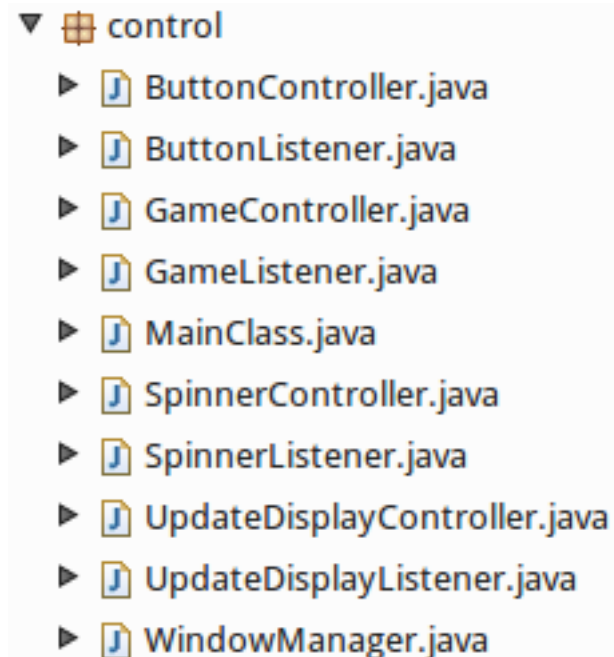
- Example of the class StartPanel.java
  - Use of layouts, labels, buttons

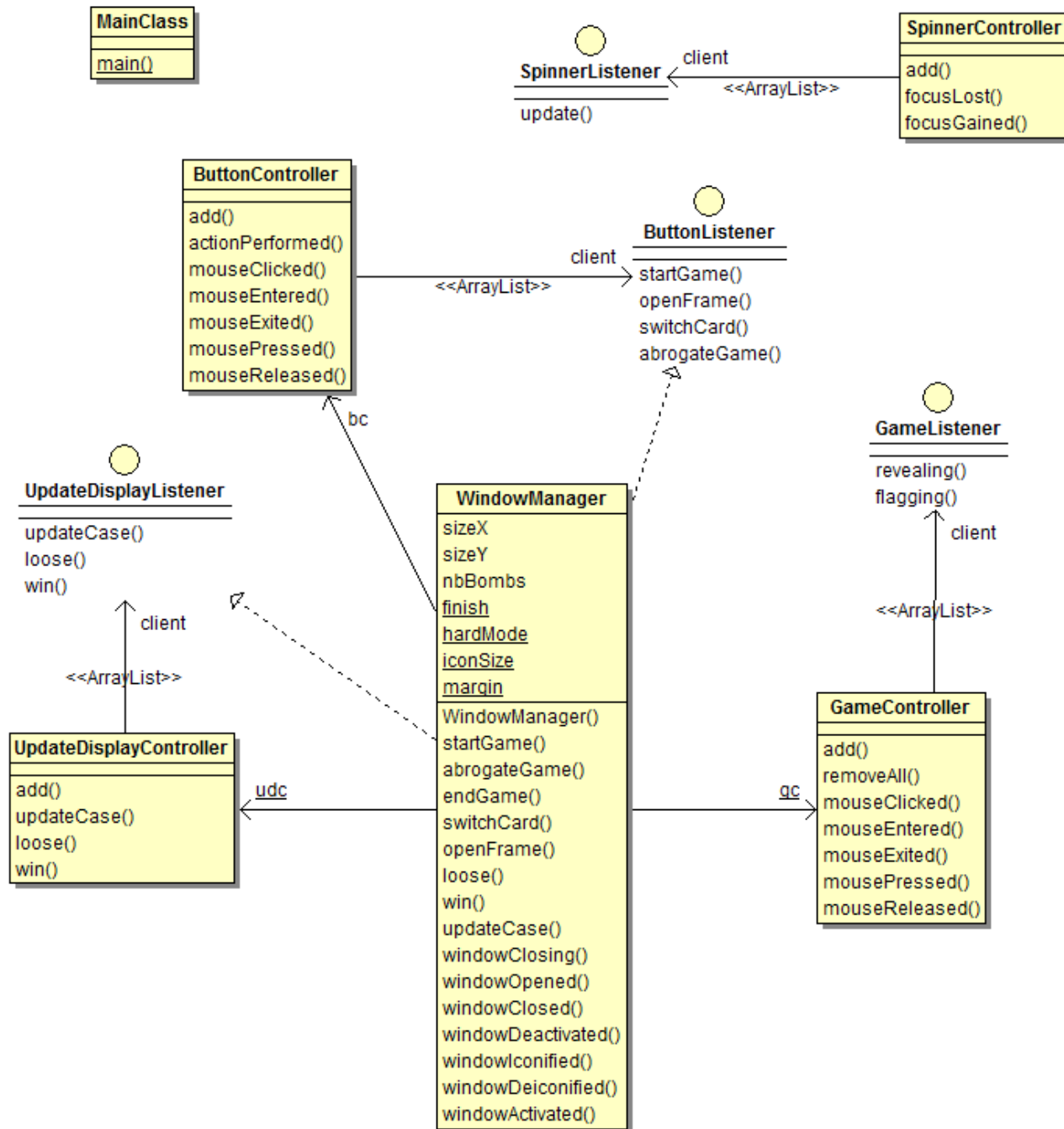




## CONTROL

- All the classes which are controllers and listeners





## CONTROL

- Example of the classes ButtonController.java and ButtonListener.java



## DEMONSTRATION

- For more practicals explanations, let's do a little demonstration