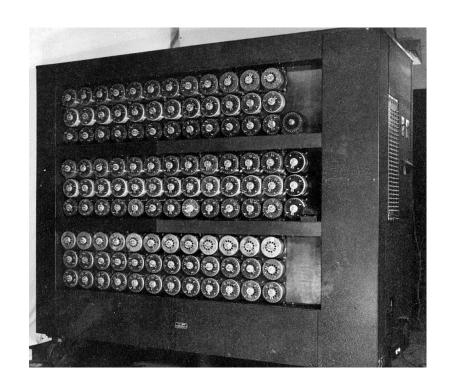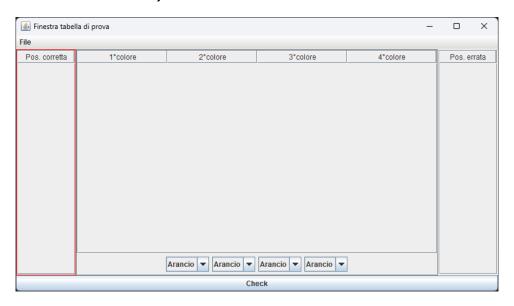# MASTERMIND

DECODIFICA

Enigma

decifratore

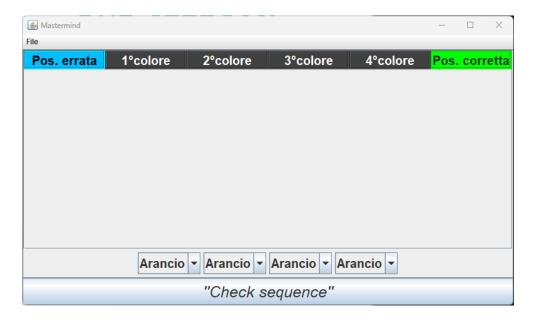Sorgente immagini: https://www.sciencemuseum.org.uk/

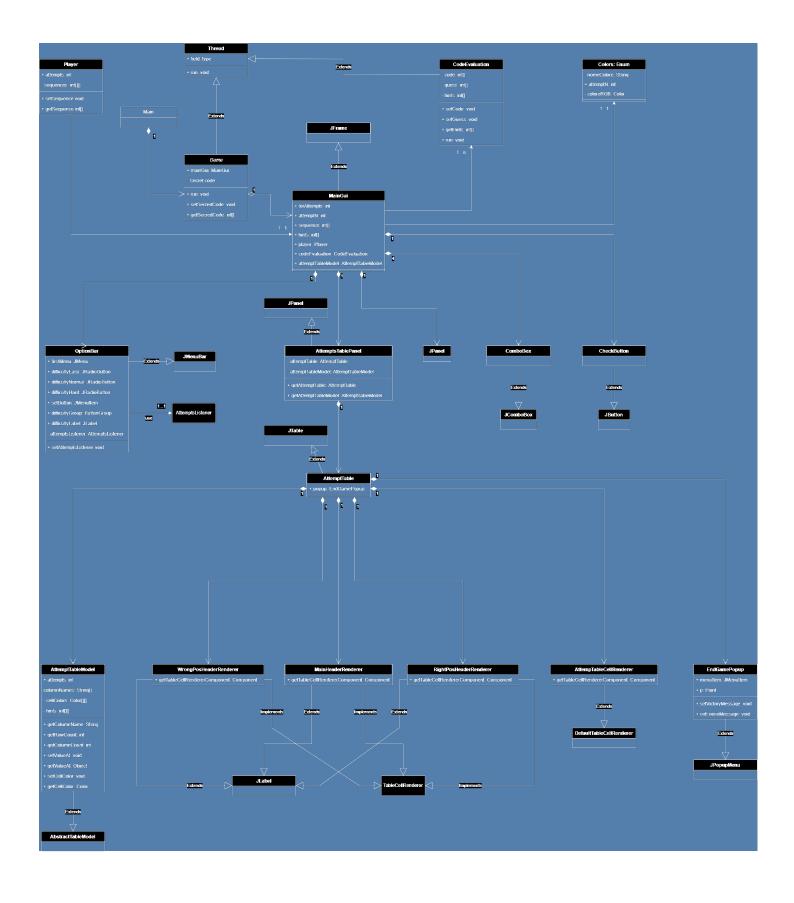# INTERFACCIA: DUE APPROCCI

1) TABELLE DIVISE

2) TABELLA UNIFICATA

PROGETTAZIONE

Thread
- + field: type
- + run: void

Player
- + attempts: int
- sequences: int[][]
- + setSequence: void
- + getSequence: int[]

Main

Game
- + mainGui: MainGui
- Secret code
- + run: void
- + setSecredCode: void
- + getSecredCode: int[]

JFrame

CodeEvaluation
- code: int[]
- guess: int[]
- hints: int[]
- + setCode: void
- + setGuess: void
- + getHints: int[]
- + run: void

Colors: Enum
- nomeColore: String
- + attemptN: int
- - coloreRGB: Color

MainGui
- + totAttempts: int
- + attemptN: int
- + sequence: int[]
- + hints: int[]
- + player: Player
- + codeEvaluation: CodeEvaluation
- + attemptTableModel: AttemptTableModel

JPanel

OptionBar
- + firstMenu: JMenu
- + difficultyEasy: JRadioButton
- + difficultyNormal: JRadioButton
- + difficultyHard: JRadioButton
- + setButton: JMenuItem
- - difficultyGroup: ButtonGroup
- + difficultyLabel: JLabel
- attemptsListener: AttemptsListener
- + setAttemptsListener: void

JMenuBar

AttemptsListener

AttemptsTablePanel
- - attemptTable: AttemptTable
- - attemptTableModel: AttemptTableModel
- + getAttemptTable: AttemptTable
- + getAttemptTableModel: AttemptTableModel

JPanel

ComboBox

CheckButton

JComboBox

JButton

JTable

AttemptTable
- + popup: EndGamePopup

AttemptTableModel
- + attempts: int
- columnNames: String[]
- - cellColors: Color[][]
- - hints: int[][]
- + getColumnName: String
- + getRowCount: int
- + getColumnCount: int
- + setValueAt: void
- + getValueAt: Object
- + setCellColor: void
- + getCellColor: Color

WrongPosHeaderRenderer
- + getTableCellRendererComponent: Component

MainHeaderRenderer
- + getTableCellRendererComponent: Component

RightPosHeaderRenderer
- + getTableCellRendererComponent: Component

AttemptTableCellRenderer
- + getTableCellRendererComponent: Component

EndGamePopup
- + menuItem: JMenuItem
- + p: Point
- + setVictoryMessage: void
- + setLoseMessage: void

DefaultTableCellRenderer

JPopupMenu

JLabel

TableCellRenderer

AbstractTableModel

DECISIONI PROGETTUALI

- IMPIEGO DI THREAD

- DEFINIZIONE SOTTO-
  CLASSI DI JAVA.SWING

- INTERFACCIA
  "PONTE"

- OPERAZIONI
  DELL'INTERFACCIA
  PRINCIPALE

TEST

```java
package logic;

import ...

public class CodeGenerationTest {  ± TeoDLL

    private Game game;   3 usages

    @BeforeEach  ± TeoDLL
    public void setUp() { game = new Game(); }

    @Test  ± TeoDLL
    public void testSetSecretCode() {...}
}
```

```java
package logic;

import ...

public class CodeEvaluationTest {  ± TeoDLL

    private Game game;   5 usages
    private CodeEvaluation codeEvaluation;   8 usages

    @BeforeEach  ± TeoDLL
    public void setUp() {...}

    @Test  ± TeoDLL
    public void testEvaluation() {...}
}
```