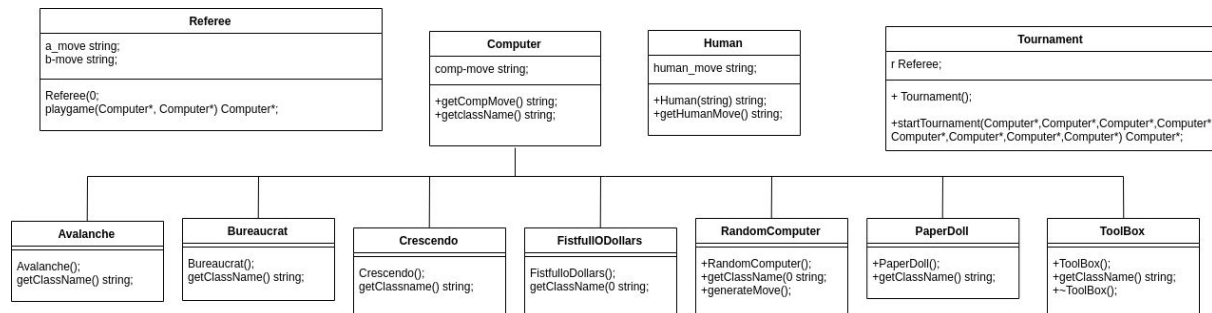


Prac3

UML



Description

Referee class; play as referee role

playGame(Computer* a_player, Computer* b_player): use two competitors as input, return the winner name as output.

Human class:

Human(string): set human input as human choices

getHumanMove(): return human choices;

Tournament class:

startTournament(Computer* Player1, Computer* Player2, Computer* Player3, Computer* Player4, Computer* Player5, Computer* Player6, Computer* Player7, Computer* Player8): set 8 competitors as 8 candidates, then simulate a tournament, out put the final winner.

Computer Class;

getCompMove(): return computer choices: "RRRRR".

getClassname(): pure virtual function, implemented in child classes.

- **Avalanche class:** Avalanche always chooses Rock.

- getClassname(): return Avalanche class name: "Avalanche";
- **Bureaucrat class**; Bureaucrat always chooses Paper.
 - getClassname(): return Bureaucrat class name: "Bureaucrat";
- **Crescendo class**; Crescendo moves in the following order: Paper, Scissors, Rock.
 - getClassname(): return Crescendo class name: "Crescendo";
- **fistfullODollars class**; FistfullODollars moves in the following order: Rock, Paper, Paper.
 - getClassname(): return fistfullODollars class name: "fistfullODollars ";
- **PaperDoll class**; Paper doll moves in the following order: Paper, Scissors, Scissors.
 - PaperDoll(): create object PaperDoll and set "PSSPS" as default choices.
 - getClassname(): return PaperDoll class name: "PaperDoll";
- **RandomComputer**; RandomComputer returns a random move.
 - RandomComputer(): create RandomComputer object and set "RRRRR" as default choices.
 - getClassname(): return RandomComputer class name: "RandomComputer";
 - generateMove(); generate choices for RandomComputer.
- **ToolBox class**; Toolbox always chooses Scissors.
 - getClassname(): return ToolBox class name: "ToolBox ";

Main Function

User input 8 candidate names, the computer automatically process the input, assign values to each pointer. The main function will return the final winner in the terminal.

Test Cases

Test Input: PaperDoll fistfullODollars Bureaucrat Toolbox Avalanche Toolbox PaperDoll Crescendo

Expected output: PaperDoll

Test Input: PaperDoll PaperDoll Bureaucrat Toolbox Toolbox Toolbox Toolbox Crescendo

Expected output: Toolbox

Test Input: fistfullODollars fistfullODollars fistfullODollars fistfullODollars Bureaucrat Toolbox Avalanche Toolbox

Expected output: Avalanche