

CMPT 399 - Monopoly

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Solo Classes

Monopoly Package:

1. GameMaster
2. Die
3. Player
4. TradeDeal

GUI Package:

1. InfoFormatter
2. Main
3. GameBoardUtil

Parent Classes

Monopoly Package:

1. Card
2. TradeDialog
3. RespondDialog
4. Cell
5. GameBoard
6. MonopolyGui

GUI Package:

1. JDialog
2. JPanel
3. CellInfoFormatter
4. JFrame

Implementing Classes

Monopoly Package:

- n/a

GUI Package:

1. MainWindow (MonopolyGui)
2. GUIRespondDialog (TradeDialog)
3. GUITradeDialog (TradeDialog)

Design

- Classes extend a parent class and are prefixed with the parents' name
- Tests are combined within the package contents
- Using old java utilities that have been deprecated

The game implements MVC pattern:

- Model: GameBoard
- View: GUI Package
- Controller: GameMaster

Card Class

Deals with the Cards from the Monopoly Game

- ❖ JailCard
 - “Go to Jail” Card
- ❖ MoneyCard
 - “Give a player money” Card
- ❖ MovePlayerCard
 - “Move a player” Card



Cell Class

Represents the different Cells on the Monopoly Board that a Player can land on

- ❖ UtilityCell
- ❖ CardCell
- ❖ RailRoadCell
- ❖ PropertyCell
- ❖ JailCell
- ❖ FreeParkingCell
- ❖ GoCell
- ❖ GoToJailCell
- ❖ PropertyCell



GameBoard Class

The model for the Monopoly game that sets up the board to be used

- ❖ GameBoard14
- ❖ GameBoardFreeParking
- ❖ SimpleGameBoard
- ❖ GameBoardCC LoseMoney
- ❖ GameBoardCC GainMoney
- ❖ GameBoardCC Jail
- ❖ GameBoardCC MovePlayer
- ❖ GameBoardUtil
- ❖ GameBoardRailRoad
- ❖ GameBoardJail
- ❖ GameBoardFull



Bad Smells

- GameMaster class is doing too much
 - Deals with dice logic, player movements, trades, gui logic
 - Some functions have multiple definitions (e.g. movePlayer is defined twice)
- Long methods
- Inconsistent / poor naming conventions
- Old libraries are used
- Unused variable declarations
- Duplicated Code
- Message Chains (this.that.something.next(...))
- Lack of documentation



Conclusion

1. Start with fixing the test packages
2. Remove all the warnings and convert to current Java libraries
3. Simplify the GameMaster Class
4. See where we go from there





See you next
presentation!