

### playGame

- + int screen
- + PImage img
- + BoardTile[][] board
- + Player player1
- + Player player2
- + Player currentPlayer
- + Tile adding
- + int numBackground
- + Tile dictionary
- + ArrayList<Tile> letters
- + void setup()
- + void draw()
- + void startScreen()
- + void gameScreen()
- + void gameOverScreen()
- + void mousePressed()
- + void startGame()

### Pass

- + int passwidth
- + int passheight
- + int passx
- + int passy
- + void initPass()
- + boolean overpass()
- + void pass()

ADAMNAnimalHoax - Max C., Manahai T., Donia T.  
APCS2 pdl  
HW48 -- on target  
2017-06-07

### OK

```

+ boolean active
+ int okxcor
+ int okycor
+ final color activeButton
+ final color inactiveButton
+ string word
+ void initOKButton()
+ boolean valid(int, int, int, int)
+ boolean containsword(string)
+ boolean overOK()
+ void ok()
    
```

### option

```

+ int optionswidth
+ int optionheight
+ int optionsx
+ int optionsy
+ void initoptions()
+ boolean overoptions()
+ void optionspage()
    
```

### Player

```

+ string name
+ ArrayList<Tile> hand
+ ArrayList<Tile> current
+ int firstX, firstY, lastX, lastY
+ int score
+ Player()
+ Player(string)
+ void give(Tile)
+ void addcurrent(Tile)
+ ArrayList<Tile> getHand()
+ ArrayList<Tile> getcurrent()
+ void addToscore(int)
+ int currentsum()
+ string getscore()
+ string getName()
+ void remove()
+ void setup()
+ void string()
    
```

### Tile

```

+ string letter
- int pointVal
- boolean endofword
+ int fill
+ Tile()
+ Tile(string)
+ string getLetter()
+ int getValue()
+ boolean isThisTheEnd()
+ void setEnd(boolean)
+ void display(int, int)
    
```

### Trie

```

- Node root
+ final char[] alphabet
+ Trie()
+ Trie(ArrayList<string>)
+ void addword(string)
+ void addword(char[])
+ boolean containsPrefix(string)
+ boolean containsword(string)
+ Node getword(string)
+ Node getPrefix(string)
+ boolean contains(char[], boolean)
- Node getNode(char[], boolean)
+ string toString()
+ int sizeof()
+ int sizeof(char[], Node)
    
```

### Words

```

+ Trie createDictionary()
    
```

## BoardTile

```

+      int      multVal
+      boolean   filled
+      String    letter
+      String    type
+      int       xpos
+      int       ypos
+      boolean   clicked
+ final color   PINK
+ final color   DEFAULT
+ final color   DARK_BLUE
+ final color   LIGHT_BLUE
+ final color   RED
+ BoardTile(String, int, int)
+ void full()
+ void tempfill()
+ int  getX()
+ int  getY()
+ void setLetter(Tile)
+ void remove()
+ int  getMult()
+ boolean isFull()
+ String getLetter()
+ void display()
+ void draw()

```

## Node

```

- character letter
- String    value
- ArrayList<Node> children
- boolean   isEnd
+      Node()
+      Node(char, string)
+ boolean addChild
      (character, string)
+ char getLetter()
+ String getValue()
+ Node getChild(char)

```

## InitGrid

```

+ void initGrid()

```

## InitLetters

```

+ void initLetters()

```

## Instruction

```

+ int  instructionwidth
+ int  instructionHeight
+ int  instructionX
+ int  instructionY
+ boolean overInstructions()
+ void initInstructionButton()
+ void initInstructionsPage()

```

## MovingTiles

```

+ int[][] tileLocations
+ int boardX()
+ void addTiles()
+ int boardY()
+ boolean over1()
+ boolean over2()
+ boolean over3()
+ boolean over4()
+ boolean over5()
+ boolean over6()
+ boolean over7()

```

## Node (continued)

```

+ boolean containsChild
      (char)
+ boolean equals(Node,
      char[])
+ boolean isWord()
+ void setIsWord(boolean)
+ String toString()
+ ArrayList<Node>
      getChildren()

```