View

### <u>Tile</u>

public Tile(String letter, int row, int col)

public Tile(String letter)

public void setNeutralState()

public void setYellowState()

public void setGreenState() public void setBlueState()

public int getRow()

public int getCol()

public String getData()

public String getCurrentState()

#### <u>WordHuntMenuItem</u>

public WordHuntMenuItem(String menuItemName) public void setOnAction(Runnable action)

### **WordHuntMenuTitle**

public WordHuntMenuTitle(String titleName)

public double getTitleWidth()

public double getTitleHeight()

### **WordHuntBoardView**

public WordHuntBoardView()

public WordHuntBoardView(String file, WordHuntScoreView scoreview, WordHuntWordsFoundView wordsfound)

private void initializeBoard()

private void initializeBoard(String file)

public int getNumPossibleWords()

private void createAndAddTile(String letter, int row, int col)

private void handleMouseClick(Tile tile)

private void handleMouseReleased(Tile tile)

private void handleMouseUndragged(Tile tile)

public Boolean checkWin()

private class ButtonDragListener implements javafx.event.EventHandler<MouseEvent>

# <u>WordHuntGameMain</u>

public static void main(String[] args)

@Override public void start(Stage primaryStage)

private void startNewGame()

private void loadGame()

### **WordHuntNewGame**

public WordHuntNewGame(String filePath) public void initializeComponents(String filePath) public void setupLayout()

### <u>WordHuntGameMenuView</u>

public WordHuntInGameMenuView(WordHuntInGameMenuViewModel viewmodel, WordHuntNewGame newGame)

private ToggleButton createMenuToggleButton(String imagePath)

private void handleMenuButtonClicked()

private void addButtonWithTransition(String text, EventHandler<ActionEvent> eventHandler)

private void handleNewGame(ActionEvent event)

private void handleSaveGame(ActionEvent event)

private void handleQuitGame(ActionEvent event)

private Background getCoolColorPattern()

# **WordHuntMenu**

public WordHuntMenu(WordHuntMenuViewModel menuViewModel)

private void addLine(double x, double y)

private void startAnimation()

private void addMenu(double x, double y)

private void addTitle()

# <u>WordHuntWordsFoundView</u>

public WordHuntWordsFoundView()

public void animateWordAddition()

public void animateWordList()

public void update(ObservableList<String> updatedList)

public Text createStyledText(String text) public Text bonusStyledText(String text)

# <u>WordHuntScoreView</u>

public WordHuntScoreView()

public void bindTotalWordsFound(IntegerProperty totalWordsFoundProperty) public void bindTotalPossibleWords(IntegerProperty totalPossibleWordsProperty)

public void incrementTotalWordsFound()

public void initilaizeScores(int possibleWords)

public int getTotalWordsFound()

public int getPossibleWords()

#### View Model

# **WordHuntBoardViewModel**

public WordHuntBoardViewModel()

public ArrayList<ArrayList<String» initializeBoard(Boolean load, String txtFile)

public Tile getLastClicked()

public void wipeTiles()

public void toggleTileState(Tile tile)

public Tile getButton(int row, int col)

public void addButton(Tile tile, int row, int col)

public void setLastClickedTile(Tile tile)

public boolean isAdjacent(Tile tile1, Tile tile2, Stack<Tile> selectedTilesStack)

public void handleWord(Stack<Tile> stack, WordHuntScoreView scoreView, WordHuntWordsFoundView wordsFound) public Boolean checkWin(WordHuntScoreView scoreView, WordHuntWordsFoundView wordsFound)

public int getNumPossibleWords()

public void setWin()

public void saveGame(String file)

## <u>WordHuntCurrentWordViewModel</u>

public StringProperty currentWordProperty()

public String getCurrentWord()

public void updateCurrentWord(String newWord)

## <u>WordHuntInGameMenuViewModel</u>

public void saveGame()

public void newGame(WordHuntNewGame newGame)

public void quitGame()

public void saveGame(String saveFile)

### <u>WordHuntMenuViewModel</u>

public SimpleBooleanProperty startNewGameRequestedProperty()

public SimpleBooleanProperty loadGameRequestedProperty()

public void requestStartNewGame()

public void resetStartNewGameRequest()

public void requestLoadGame()

public void resetLoadGameRequest()

# WordHuntScoreViewModel

public Label getTotalWordsFoundLabel()

public Label getPossibleWordsLabel()

public int getPossibleWords()

public int getTotalWordsFound()

public void incrementTotalWordsFound()

public void setTotalWordsFound(int totalWordsFound) public void setTotalPossibleWords(int possibleWords)

# **WordHuntGame**

Model

public void generateRandomBoard()

public void tearDown()

public ArrayList<ArrayList<String» getBoard()</pre>

public void loadBoard(String filePath)

public void saveBoard(String filePath)

public boolean isValidMove(int prevRow, int prevCol, int nextRow, int nextCol)

public ArrayList<String> getFoundWords()

public ArrayList<String> getFoundBonusWords()

public int isValidWord(String word)

public void addFoundWord(Boolean bonus, String word)

public ArrayList<String> getPossibleWords()

# <u>WordHuntScore</u>

public int getNumFoundWords() public ArrayList<String> getFoundWords() public void tearDown()

#### **WordHuntWords**

public void findWords()

private void findWordsHelper(int row, int col, String word, int length,

ArrayList<ArrayList<String» grid, ArrayList<Pair<Integer, Integer» visited)

private void addPossibleWord(String word)

public void initializeWordLists() public ArrayList<String> getPossibleWords()

public int isValidWord(String word)

public void addFoundWord(Boolean bonus, String word) public int getNumFoundWords()

public ArrayList<String> getFoundWords()

| public ArrayList<String> getFoundBonusWords() public void tearDown()