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| GUI | | | |
| **Variables** | | | |
| **Variable Name** | **Type** | **Description** | |
| mazeGenerator | MazeGenerator | The object used for maze generation | |
| mazeSolver | MazeSolver | The object used for maze solving | |
| maze | Maze | The current maze being displayed to the user | |
| layer | int | The current layer of the maze being displayed | |
| **Methods** | | | |
| **Method Name** | **Return Type** | **Parameters** | **Description** |
| GUI | GUI | None | The constructor. Initializes the generator and solver. |
| generateActionPreformed | void | ActionEvent evt | Is called when the user presses the “Generate!” button. Uses the mazeGenerator object to create a new maze. |
| solveActionPreformed | void | ActionEvent evt | Is called when the user presses the “Solve!” button. Uses the mazeSolver object to solve the current maze. |
| animateGenStateChanged | void | ChangeEvent evt | Updates the maze generator on whether or not to animate the generation depending on the state of the checkbox. |
| animateSolveStateChanged | void | ChangeEvent evt | Updates the maze solver on whether or not to animate the solving depending on the state of the checkbox. |
| speedGenStateChanged | void | ChangeEvent evt | Tells the maze generator how fast to animate the generation. |
| speedSolveStateChanged | void | ChangeEvent evt | Tells the maze solver how fast to animate the solving. |
| canvasMouseClicked | void | MouseEvent evt | Updates the maze’s start and end position to the cell the user clicked on based on which mouse button was used. |
| CanvasMouseWheelMoved | void | MouseWheelEvent evt | Updates the current layer of the maze being displayed based on which direction the mouse wheel was moved. |

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| **Methods** | | | |
| **Method Name** | **Return Type** | **Parameters** | **Description** |
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