

# Model Package

## MazeGenerator

- Initialize Maze with walls
- Generate maze using DFS
- Create cycles by removing walls to add more paths

Cell

## Mouse

- Manage Mouse's location
- Provide Mouse's information

## Cat

- Manage Cat's location
- Determine valid next move
- Get cat's next move

Cell  
MazeGenerator

## Cheese

- Track cheese collected
- Manage cheese location
- Determine validity of random placement of cheese

Cell  
Mouse  
MazeGenerator

## GameController

- Handle entity movements
- Manage game state/logic
- Build Maze
- Reveal already visited path and reveal cells adjacent to Mouse

MazeGenerator  
Mouse  
Cat  
Cheese  
Cell

## Cell

- Store row & column of specific location

# View Package

## Menu

- |   |                                   |
|---|-----------------------------------|
| <ul style="list-style-type: none"><li>• Display game instructions</li><li>• Display Maze (only the visited paths)</li><li>• Handle user input</li><li>• Reveal entire Maze after game is finished</li></ul> | <p>GameController</p> <p>Cell</p> |
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