

# MINESWEEPER3D

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# OUTLINE

- ▶ Cube prefab which is instantiated NxNxN on run time
- ▶ Text prefab which is placed in the space after the blast and changes color depending on the neighbor mine count
- ▶ Cube controller that handles the interaction

# CUBE CONTROLLER STRUCTURE

- ▶ Cube controller has three dimensional ( $N \times N \times N$ ) space array that holds Cube objects.
- ▶ Cube object consist of,
  - ▶ Point3D
  - ▶ GameObject (visual representation in the space)
  - ▶ isBlasted
  - ▶ hasMine
  - ▶ neighborMineCount

# CUBE CONTROLLER FUNCTIONS

- ▶ A function that randomly places  $M$  mines depending on the game difficulty
- ▶ Click listener that uses ray casting which handles which cube is interacted
- ▶ A function that marks the cube as potential mine
- ▶ A recursive function that blasts mine/s by following the game logic.
- ▶ And more helper functions...

# DIFFICULTIES

- ▶ Easy:
  - ▶ 5x5x5 space and 10 mines
- ▶ Medium:
  - ▶ 7x7x7 space and 33 mines
- ▶ Hard:
  - ▶ 10x10x10 space and 99 mines

# SCREENSHOTS - 1





# SCREENSHOTS - 2

