Sample Game

This game about our hero (PC Man) which search in dessert for the magical diamond

## Game Scenario

We have our hero who can walk one step at a time in any direction inside our map which is 2d consists of NxM cells like the figure below the cell may contain an enemy or a treasure box user need keys to open box.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| (PC Hero) |  |  |  |  |  |  |
|  | Golden key |  |  |  |  |  |
|  |  |  |  |  | Golden Treasure |  |
|  |  |  |  |  |  |  |
|  |  |  | Enemy (h=100 , w =40) |  |  | magical diamond |
|  |  |  |  |  |  |  |

Each type of the boxes has its type of keys we have three type of keys and three types of boxes:

### Gold

* Increase health by 50 points
* Increase weapon by 10

### Bronze

* Increase health by 20 points

### Silver

* Increase weapon by 10
* Increase health by 40

If player enters cell contain an enemy his health will be affected by this equation ( Player health – enemy weapon)

Map is loaded through text file which each item will contain description and position (in which cell) as json formatted

We need to design a class diagram for this game