

Crazy Doom Dungeon

What is CDD?

Crazy **D**oom **D**ungeon is a dungeon crawler game with **procedurally generated** dungeons. The **player** - a finely dressed capsule - is given a task to rid the dungeon of **box-bears** that inhabit it as fast as possible. The map can be reset at any time which will result in a totally **new and unique** dungeon.



Generating the map by Diana & Marko

Using **depth-first** search, we try to find a dungeon floorplan that has no overlaps between dungeon parts. To prevent endless dungeons, a maximum recursion depth is set.

Dungeon is constructed from 10 premade dungeon parts (5 rooms, 3 corridors, 2 junctions). One of the three corridors allows vertical movement creating dungeons with multiple floors. 3 rules are defined to control how the dungeon parts are connected:

- room → corridor
- corridor → room or junction
- junction → corridor

Dungeon parts have exit locations that are used to connect them.



Navigation Mesh by Marko

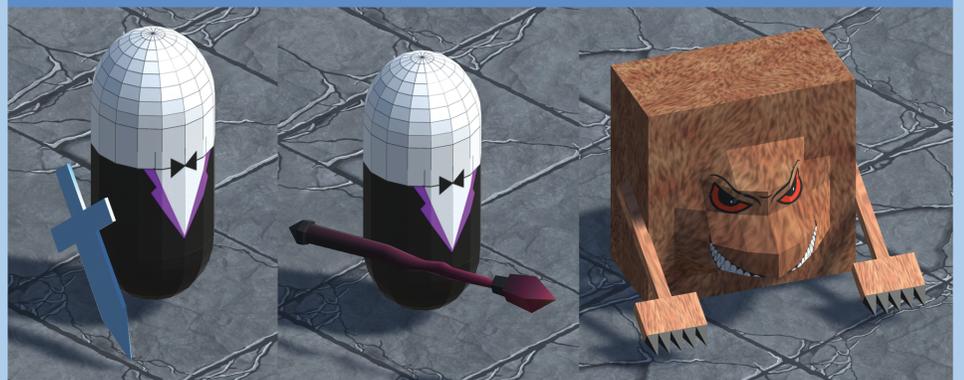
Since Unity 5.6 there is a new NavMesh currently in beta that supports runtime NavMesh generation. We are using this NavMesh to make moving around in the dungeon possible and to keep the player and bears from walking off the edge. NavMesh is created after the dungeon is generated and before the player and bears are placed into the dungeon.

Mechanics & AI by Diana

Player can **move and attack** using the left mouse button.

Bears have a view cone with a certain range. They will follow and attack the player if they see him. When a bear is hit but doesn't see the player, it will turn around searching for him.

The player is armed with a **sword** and a **magic wand** and can switch weapons by pressing 'Q'.



Future of CDD

The development of Crazy Doom Dungeon continues. CDD will have a well developed story and a clear design theme.

We will further improve the dungeon generator and introduce new enemies and different weapons. The dungeon will also have various elements placed in it like lamps and chests.

The player will be able to collect various items from the dungeon and later sell them and buy new items when not inside a dungeon.

Right now CDD supports PC, Mac and Linux and we are planning to add support for Android.

code: <https://github.com/markotaht/CrazyDoomDungeon>
releases: <http://kodu.ut.ee/~marko93/DoomDungeon>



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