Team Composition and Roles

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| --- | --- | --- | --- | --- |
| Hall  Flashlight  E,S | Storage  Crowbar  W,S | Blocked  Tunnel | Blocked  Tunnel | Blocked  tunnel |
| Blocked  tunnel | Control Battery  N,E,S | Bunks  Medkit  W,S | Blocked  Tunnel | Blocked  Tunnel |
| Blocked  Tunnel | Shaft  NPC:  Survivor  N,E | Kitchen  Toolkit  N,W,S | Blocked  Tunnel | Blocked  Tunnel |
| Blocked  Tunnel | Blocked  Tunnel | Hazard  Radiation:Haz  N,E | Armory  Radio  (Crowbar) | Blocked  Tunnel  W,S |
| Blocked  Tunnel | Blocked  Tunnel | Blocked  Tunnel | Blocked  Tunnel | Exit  Radio  N |

**Legend**

* Locations: 9 visitable rooms (Hall, Storage, Control, Bunks, Shaft, Kitchen, Hazard, Armory, Exit).
* Items: Flashlight, Crowbar, Battery, Medkit, Toolkit, Radio (requires Crowbar in Armory).
* NPC: Survivor in Shaft (clue: "Radio’s in the Armory, need to break a crate.").
* Hazard: Radiation in Hazard (requires hazmat suit).
* Exits: N (North), S (South), E (East), W (West) indicate valid movements.
* Blocked Tunnel: Inaccessible cells to fill 5x5 grid.

**Bunker Escape Game Map**

**Map Overview**

The game is set in a 5x5 grid representing an underground bunker. It includes 9 visitable locations with simple names, each with unique descriptions, items, or interactions. The objective is to find a Radio in the Armory and use it at the Exit to send a distress signal. Other cells are blocked tunnels to maintain the grid structure.

**Locations**

1. [0,0] Hall:

* Description: "A dim hall with rusty walls. A flashlight sits on a table." (After pickup: "A dim hall with rusty walls.")
* Item: Flashlight
* Connections: East ([0,1]), South ([1,1])

1. 2[0,1] Storage:

* Description: "A messy room with shelves. A crowbar is by a crate." (After pickup: "A messy room with shelves.")
* Item: Crowbar
* Connections: West ([0,0]), South ([1,1])

1. [1,1] Control:

* Description: "A room with flickering monitors. A battery is on a desk." (After pickup: "A room with flickering monitors.")
* Item: Battery
* Connections: North ([0,0], [0,1]), East ([1,2]), South ([2,1])

1. [1,2] Bunks:

* Description: "Old bunk beds, empty. A medkit is under a pillow." (After pickup: "Old bunk beds, empty.")
* Item: Medkit
* Connections: West ([1,1]), South ([2,2])

1. [2,1] Shaft:

* Description: "A tight shaft with wires. A survivor mutters about a radio." (After interaction: "A tight shaft with wires. The survivor is quiet, done talking.")
* NPC: Survivor (clue: "Radio’s in the Armory, need to break a crate.")
* Connections: North ([1,1]), East ([2,2])

1. [2,2] Kitchen:

* Description: "A messy dining area. A toolkit is on a counter." (After pickup: "A messy dining area.")
* Item: Toolkit
* Connections: North ([1,2]), West ([2,1]), South ([3,2])

1. [3,2] Hazard:

* Description: "Signs warn of radiation. You’ll die without a hazmat suit."
* Hazard: Radiation (game-over unless mitigated, assumed hazmat suit for simplicity)
* Connections: North ([2,2]), East ([3,3])

1. [3,3] Armory:

* Description: "A locked room with racks. A radio is in a crate (needs crowbar)." (After crowbar use: "A locked room with racks. The crate is broken, empty.")
* Item: Radio (requires Crowbar)
* Connections: West ([3,2]), South ([4,4])

1. [4,4] Exit:

* Description: "A communication station with an antenna. Use the radio to signal for help." (After radio use: "You sent a distress signal! You win!")
* Objective: Use Radio to win
* Connections: North ([3,3])

**Inaccessible Locations**

* All other cells (e.g., [0,2], [1,0], [2,0], etc.) are described as: "Blocked tunnel, you can’t pass."
* These ensure the 5x5 grid structure but are not counted as visitable locations.

**Gameplay Instructions**:

* Navigate the bunker using compass directions: North (n), South (s), East (e), West (w).
* Use commands: “pickup” to collect items, “inventory” to list items, “interact” to talk to the NPC, “use” to activate the Radio at the Exit.
* Collect items to solve puzzles (e.g., Crowbar to open a crate in Armory to get the Radio). Other items (Flashlight, Battery, Medkit, Toolkit) enhance the narrative but are not required.
* Interact with the Survivor NPC in Shaft [2,1] for a clue about the Radio’s location.
* “Use the Radio at Exit [4,4] to send a distress signal and win the game.”
* Avoid the radiation hazard in Hazard [3,2] to reach the Exit. For simplicity, assume you have a hazmat suit to pass safely; without it, you die (game-over).

Source Code

See the folder that contains this one, for the .java source files. Additionally, see README.md for instructions on how to run the game (compile all files first then run Main). The GitHub repository can be found here: <https://github.com/indiebreath/Group5_FinalProject>

Bug Reports

See BugReport.md for list of all found bugs.