Report - Phase 4

Game's Overview:

Red Corridor is a grid based survival and exploration game where the player takes on the role of a captured pilot trying to escape an enemy ship. The main goal is to collect all hidden key fragments scattered across the map and then reach the exit point to escape. Along the way, the player must avoid danger from drones and traps while maintaining their health. The game is played on a 15×15 tile map, which gives more room for doors, hidden items, traps, and moving drones to be placed across the map. The game provides live information such as health, fragments collected, medkits, and time taken, which keeps the player aware of their progress during gameplay. When the game ends, it also displays the final statistics and reveals the full map, including any hidden items that were behind unopened doors.

Changes From the Original Plan:

While our original plan included entering/leaving rooms using a specific key and manually picking up items, the final version of the game works more smoothly and automatically. Now, when the player walks up to a door, it opens automatically and reveals what was hidden inside, such as a medkit, key fragment, drone, or trap. Items are collected automatically as the player enters the room, and a message appears on the game screen to confirm what was found, such as "A medkit found. Press E to use" or "You found a fragment." We also expanded the movement system beyond the simple four direction movement we planned in Phase 1. In the final version, the player can even move diagonally when two directional keys are pressed simultaneously, allowing the player to run away from drones/traps in multiple ways, for example, pressing up + right keys at same time moves the player northeast by one box on the grid. Another major change is that we no longer use the fog or blanket - initially planned in phase 1 to hide the map. Instead of hiding the map, now the entire map is visible throughout the game. This allows the player to clearly see their surroundings, including doors, traps, drones, and the final escape point, which helps them plan safer routes as they play. Making the full map visible helped reduce unnecessary frustration and made the gameplay clearer, more strategic, and more enjoyable for the player.

Game Modes and Difficulty Levels:

One of the biggest improvements from our original design is the addition of different difficulty modes like easy, medium, hard, and extreme. These modes change the number of fragments, medkits, empty rooms, drones and traps placed on the map. This was not part of the original plan, but we added it to make the game more replayable and challenging. Players can now

return to play our game multiple times and try to beat harder levels as they improve. This feature made the game more interesting and gave it more long term value instead of only being playable once.

User Interface Improvements:

Some parts of the interface were already planned from the beginning, such as the help Menu, but in the final version we implemented a much more detailed and useful version of it. Instead of only showing basic controls, the updated help menu now clearly displays all important game elements, including icons, interactions and movement keys. It visually explains what each symbol on the map represents, which makes the game much easier to understand for first time players. In addition to improving the help menu, we also added a description screen, which can be opened by pressing the “D” key in the lobby. This screen explains the story of the game and the player’s objective. The lobby page itself was also enhanced, it now displays the full world configuration (number of fragments, drones, traps, and medkits) for each mode so that a player has a better idea before starting a game. These changes were not in the original plan but were added later to make the game clearer, more complete, and more professional.

Lessons Learned:

Through this project, we learned that game development often changes as new ideas come up from the team and better solutions are discovered. Even though we started with a clear design in Phase 1, the game evolved a lot as we tested it and thought more about the player experience. We realized that simple, automatic interactions, such as opening doors and collecting items without extra button presses, make the game feel more smoother. We also learned the importance of thinking about how users might interact with the game in unexpected ways and addressing those situations early on to make the gameplay more intuitive and enjoyable. Adding multiple difficulty levels and keeping the full map visible throughout the game made the final product more complete, strategic, and replayable. Overall, the final version of our game Red Corridor is more engaging, clearer to play, and much closer to a real game compared to our original design.

Tutorial Video Link:

https://drive.google.com/file/d/10E-K-Jd5Qw11IhDcKS6pJzEomj2RDH3x/view?usp=sharing