ASTER

A Game Concept by Regina Fabio

Overview:

1. Concept
    a. City escape
2. Paradigm
    a. Path finding
3. Features
    a. Leave arrows to mark the path out
    b. Avoid obstacles and collect objectives
    c. Increasing difficulty
4. Mechanics
    a. "Daytime" for placing markers and "nighttime" for automatically following them.
    b. New obstacles (physical and otherwise) added as player progresses.
    c. Added objectives to collect on the way out.
    d. Paths require increasing number of markers.
    e. Change speed: can pause progress. Some people will move more slowly.
    f. Factions: government or rebellion.
    g. Special missions: harder, but with increased reward. May unlock new areas (or obstacles).
5. Interface
    a. Navigate the map with mouse or arrow keys
    b. Click to select a direction and leave a mark
    c. Click to wait until nightfall
    d. Menu allows restart, exit to world map, save
    e. Space or click to pause progress at night
    f. Screens:
        i. Local/city map
        ii. World map
        iii. Journal/inventory
        iv. Mission screen
        v. HQ
        vi. P.O.
        vii. Message board
        viii. Prison/holding cell
        ix. Aster

Concept, Paradigm, and Narrative

Beginning

Aster is a puzzle game about escaping a city. The puzzles are built on finding paths through maze-like maps. The narrative setup is as follows: the player character lives in a dystopia with their friends. When the Rebellion starts a civil war, they escape to a safehouse as planned, but none of their friends also made it out. They decide to sneak back in and help them escape; since they can't go undetected in the middle of the day, they have to sneak out at night, and need to leave markers visible only with a blacklight to show the way. The game begins with a tutorial level in which the player rescues these friends. The PC and friends then found a new city, Aster. A friend suggests helping more people escape the cities, leading into the rest of the game.

Middle

Besides Aster, there are ten cities with around twenty puzzles each. Every city belongs to a faction: Rebellion, or Government. Aster is neutral and has no available puzzles (until endgame). By rescuing significantly more people from one faction than the other, the player can ally themselves with either one. This will affect the number of puzzles available to the player in a given city: a Rebellion-allied player may be able to do all twenty puzzles in a Rebellion city, but only a handful in a Government city, if any. An unallied player will have access to around fifteen puzzles in each city.

When the player reaches their puzzle limit for a given city, it will be deemed "unsafe" to attempt more rescues, and the city will be blocked off. Doing too many puzzles in a row in one city may result in increased obstacles (police, for example) in that city, though if the player faction matches the city faction some of these police may be friendly. An encounter with an unfriendly NPC will block off the city temporarily and may result in "jail time" or some other punishment.

When all but one city has been permanently blocked off for an unallied PC, or all cities of the chosen faction have been permanently blocked off for an allied PC, entering a new city will trigger endgame.

Endgame

The PC is caught by the authorities upon entry to a city according to the above conditions. They are questioned about their activities and admit to helping people escape the cities; they are then imprisoned. If the PC is unallied, they have the option to bribe their guard by promising to rescue the guards' family; otherwise they must escape themselves. Either way they must make it out of the city, much like in previous puzzles, but this time without any markers as guides.

Upon returning to Aster, which has been surrounded by Rebellion forces if the PC is Government-allied and Government forces otherwise, the PC must now complete a series of puzzles to lead people out of the city. The people that the PC does not directly save will follow the same paths off-screen to prevent the player from repeating the same puzzle multiple times. Also to maintain interest, the puzzles will be split into two different areas of the city and two safehouses along the way. The game ends with the PC leading the residents of Aster to a new area, founding a new city, and dubbing it Iris.

Features and Mechanics

The basic mechanical premise of the game is marking a path through a maze-like map with arrows. As the player progresses through the game, the difficulty would increase by introducing new obstacles—some of which may be mobile—and other objectives to complete along the way. These extra objectives may be optional but beneficial, or necessary for puzzle completion.

NPCs include:

- Police: might be friendly; unfriendly encounters have bad results
- Tattletales: always unfriendly; will attempt to summon police
- Informants: always friendly; will offer tips and bonus or extra objectives

Non-NPC obstacles include:

- Buildings: if the player's path runs into one, they must "wait until tomorrow" to fix the path and try again; after a limited number of tries the puzzle is failed and cannot be attempted again
- Roads: traversable; too conspicuous to leave markers
- Roadblocks: same as buildings, except that there are more likely to be NPCs nearby
- No Man's Land: actually an area of abandoned buildings and roads; boundaries are patrolled by NPCs and afford only one exit out of the city

Other objectives include:

- Wanted Posters: tearing enough down may offset the danger of doing too many puzzles in a row
- Supplies: required for story reasons, or optional for bonus points
- Fake Papers: a "Get Out of Jail Free" card in case unfriendly NPCs are unavoidable

- Other Rescues: helping two people or families at once is more efficient but may slow the PC down, making them more likely to get caught by NPCs

This can be divided further: the game would have a "daytime" wherein the player places the arrows, and a "nighttime" for following them. Upon the introduction of moving obstacles, a new type of arrow, a "wait arrow", would also become available. This would allow the player to pause progress on their automated route during nighttime in order to avoid these new obstacles. However, only a few of these would be available, forcing the player to be strategic about where they want to stop. In addition to this speed control, some rescues may move more slowly than others, requiring careful timing. All of these factors will increase the number of arrows needed to complete a puzzle, which serves as a benchmark for difficulty.

Besides these things, the faction each rescue belongs to may affect what puzzles are available later. Furthermore, "special" missions would advance the plot and/or unlock new cities or obstacles. The player would be scored with a point system. Rescues and extra objectives will add points while getting caught by an NPC will subtract them.
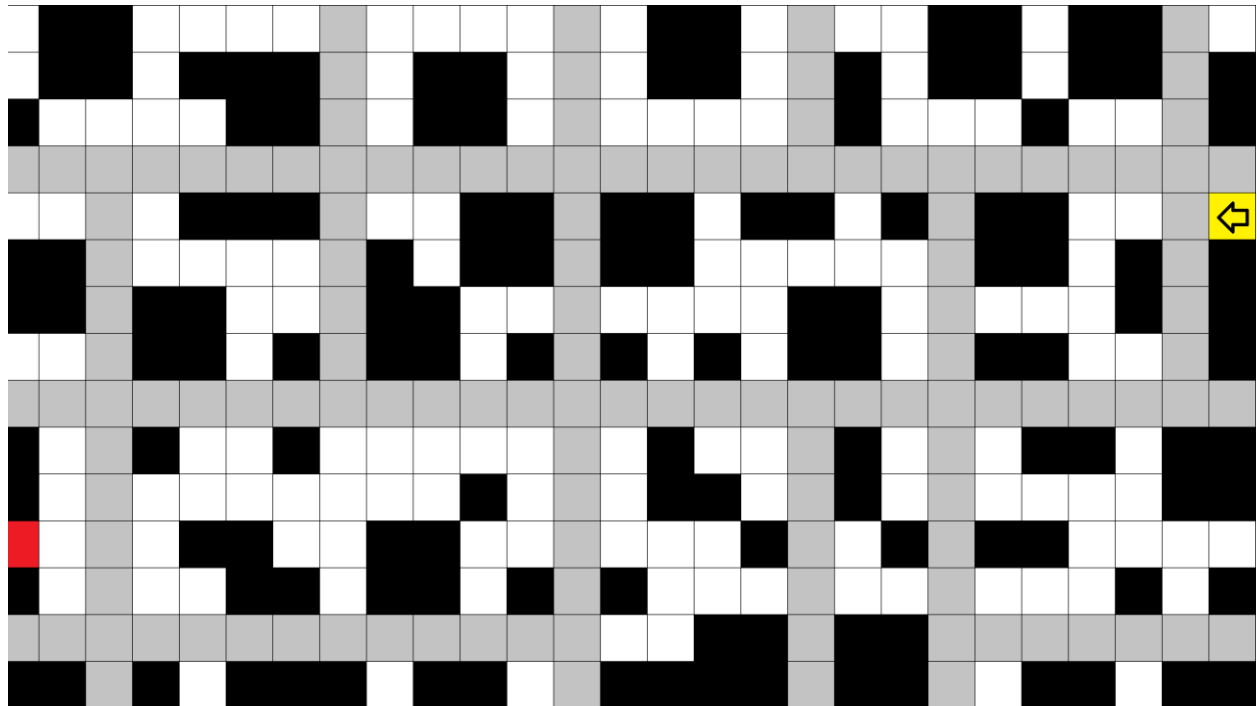
Testing

Figure 1: Test "Map"

I asked ten people to attempt to solve this map. The rules are as follows:

- You must get from the yellow square to the red.
- You may walk on the white and grey squares but not the black.
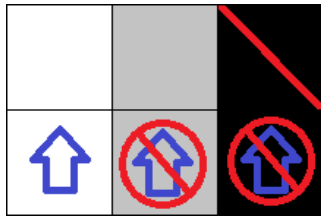- You must mark your path with twenty or fewer arrows.

Figure 2: Rules Key

- Arrows can only be placed on white squares, not grey.
- Walking into a black square or off the map is game over.
- Once you have placed your arrows you can only follow that path.

I asked my testers if this was easy or difficult, and if it was interesting. Answers ranged from "too easy" to "not too hard", though some needed clarification on the rules. I created the key to the left to visually describe the rules, which helped those who were confused.
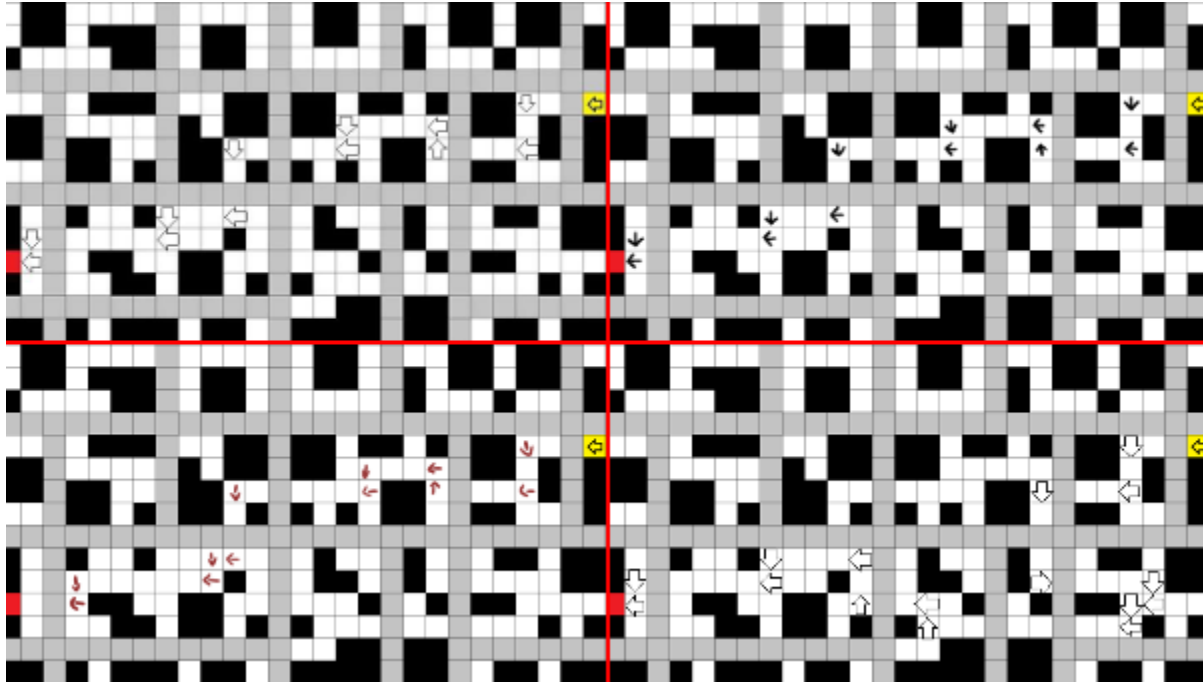

Figure 3: A Selection of Solutions.

Most were able to finish the puzzle using twelve arrows, though one tester used sixteen. I did not explain the narrative premise until afterwards, as I was looking for feedback purely on the puzzle feature itself. I also gave examples of how the puzzle might become more difficult.

Responses included "it is incredibly simple but a fun idea for a puzzle" and "I didn't think it was too hard. Your directions were pretty clear, and the idea is interesting. I also like the idea of having objects to collect along the way, like for bonus points or something. I would play a puzzle game like this."

A few testers also suggested adding more grey squares to increase the difficulty; due to the narrative function of the grey squares as roads, this would be tricky and is something to consider moving through the project.
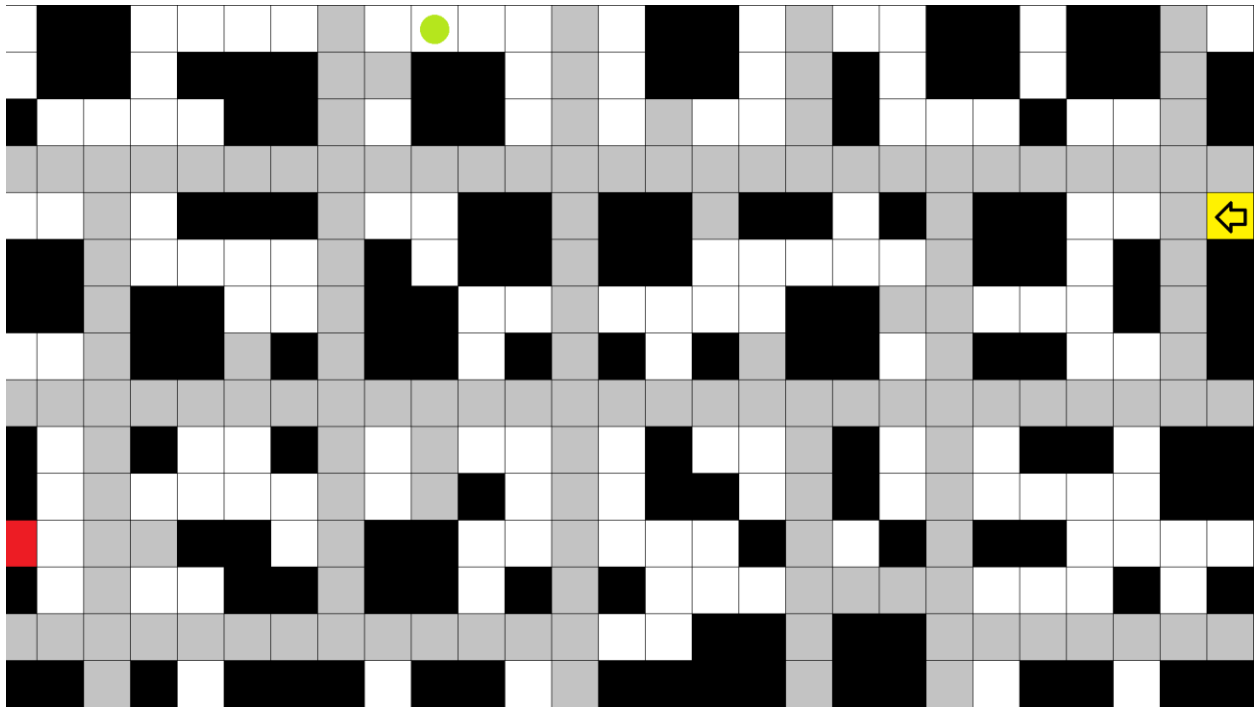
Figure 4: Test Map 2

With this feedback in mind, I modified the map, with the addition of the green circle as an extra objective. I also added more grey squares, as had been suggested. I asked a previous tester and a new tester to try and solve the new puzzle.
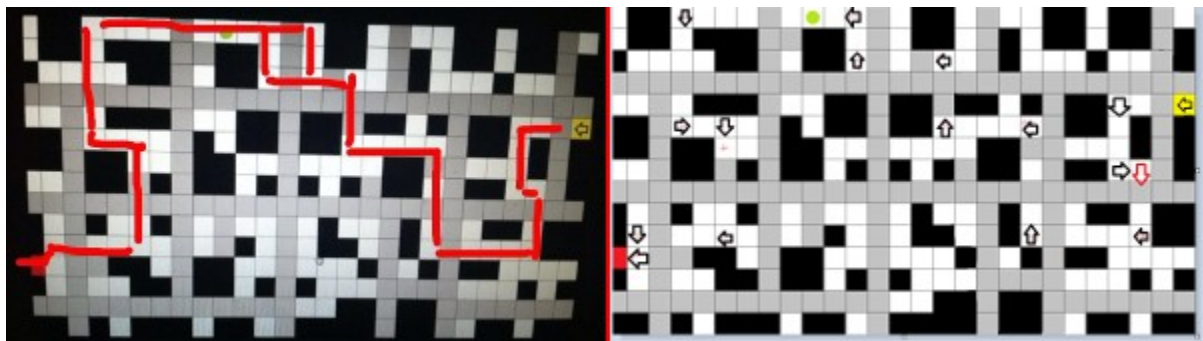

Figure 5: Second Round Solutions

The first solution is from the previous tester, and the second from the new tester. As you can see, though the previous tester was able to find two almost identical routes to the goal, the new tester was also able to complete the puzzle.

The new tester commented, "the directions weren't super clear to me at first, but I poked around and saw one that had been done earlier and that helped clarify it a lot…It was interesting though, and if it was in a game I would totally be okay with more puzzles like it."

Interface

The game would include multiple different screens for different purposes:
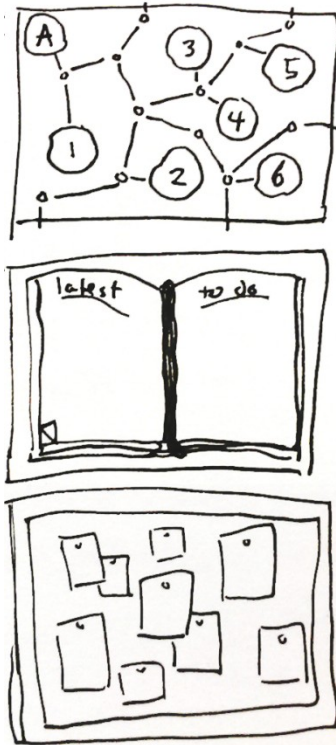
- City maps for each city with puzzles (including Aster and the endgame safehouses)
- World map for navigating between cities
- Journal and inventory to keep track of objectives
- Mission screen to accept or decline missions
- Prison/holding cell for when the PC is caught
- Aster, which would function as a hub for a number of other areas:
  - Headquarters/Home: advice, special missions, and game statistics, with journal access
  - Post Office: special missions, plot advancement and flavor, mission rewards
  - Message board: advice, regular missions, flavor

The game would be navigated primarily with the mouse, though city maps could also be explored with the arrow keys. Placing arrows would be done with a click bringing up a directional menu, or by hitting spacebar and selecting the appropriate arrow key. Similarly, pausing progress while escaping (see above explanation in mechanics) could be done with a click or the spacebar.

Figure 6: World Map, Journal, and Message Board

The UI would be minimal. City and world maps would display the player's current score, as well as a menu button. The menu allows the player to save their game and view their journal. On the city map, the menu would also include an option to restart the mission or exit to the world map. The UI of the city map would also include the number of attempts at solving the current puzzle, and during the daytime there would be a button to wait until nightfall.
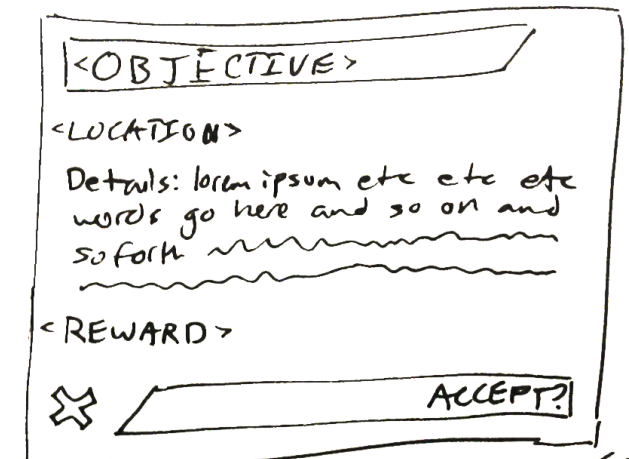

Figure 7: Aster

Figure 8: Mission screen