These are instructions on how the play the game. To navigate the world, use the arrows on the keyboard. Green dots are mini games which have been finished successfully, white dots have not been finished. The player cannot move Alice forward until they've finished the mini game at their dot.

## 1 Logic Minigame

The story behind this game is that Stark has messed up all the tubes that carry the smallest robots from one part of the computer to another. These robots are called bits, and the computer can't do anything without them. Alice can fix the tubes, but she needs to figure out where the transformers go.

## Instructions

The left wall shows the sequence of robots that will be sent, and the right wall shows the sequence of robots that are needed. You need to connect the two walls and make sure the correct robots make it to the wall on the right.

Along the bottom of the screen are piles of transforming machines. These turn one or two robots into a different robot. You will need to use these machines to change the robots coming from the left side so they match the robots needed on the right side.

To place a transformer, click and drag from the piles to one of the dots in the middle of the screen. Connect it with tubes by dragging from the hole on the left to the machine, and then dragging from the machine to the hole on the right. You can also connect one transformer to another.

To send the bits and test your setup, press the green button. The robots will come out and move through the tubes. If your machines don't work, press the green button again to reset the puzzle. If you need to start over, press the red button to remove all the machines you have placed.

## Types of Transformers

## Reverser:

A reverser takes one bit in, and turns it into the other kind of bit.

## Green Smoosher:

A smoosher takes two bits in and smooshes them together into a single bit. If both bits are the same type, that's the type that comes out. If there is one of one type and one of the other, the green smoosher makes a green bit.

Blue Smoosher: Like the green smoosher, the blue smoosher turns two bits into one. However, it turns a green and a blue into a blue.

## 2 Robot Maze Minigame

The point of this game is to program the robot to successfully navigate the maze in the number of commands allowed.

## Instructions

The game starts out in the programming phase, where the player can program the robot by dragging commands from their piles over to the slots in the program. The maze that they are traversing will be displayed on the back of the robots head, at the top of the screen. There will be an entrance, an image of where the robot is starting, indications of walls, and where pits and low arches are. The robot must jump avoid walls, jump over pits, and duck under low arches.

The up arrow is the move forward one space command.
The right arrow is the turn right 90 degrees command.
The left arrow is the turn left 90 degress command.
The button with the robot jumping over a pit is the jump command and will have the robot leap over a pit, moving 2 spaces total.

The button with the robot ducking under a low arch is the duck command, and will have the robot duck under a low arch, moving 2 spaces total.

Once the player is satisfied with the program, they hit the green go button, and the robot will attempt to complete the maze using the given program. If the robot fails, then the player can keep trying to correct the program until the robot succeeds.

In later levels, the player must use a subroutine, which is a process which can be written once, and represented by the subroutine button, but only counts as one command in the program.

The pink "S" button represents the subroutine, so whenever the "S" appears in the main program, it will be replaced with the commands that are in the subroutine area when the robot executes the program.

## Tips

The robot moves and turns relative to itself, not to any fixed direction. So think about where the robot is and what direction it is pointing at the time that it executes the command.

The subroutine can help the player reduce the number of commands they use.
In the higher levels, the player must use the subroutine. If it is available, it is necessary to complete the maze.

## 3 Memory Matching Minigame

In each world, Alice will need to find the blueprints for some kind of robot or machine that will help her complete the world. The blueprints she needs are stored in Gladys' memory system, and Alice must extract them by matching pairs of blueprint data.

## Instructions

Each blueprint is made of of six different pieces. For each piece, there will be a data pair in memory that Alice must match. Depending on which world Alice is in, a number of the pieces will have already been found, and she must find only the remaining pairs. The number of pairs remaining for Alice to find increases as she moves farther within the computer and the game becomes more difficult. The display screen in the bottom-right corner of the game area shows the player the pairs of blueprint data they have found, and how many they have left to find.

| World: | Pairs to find: |
| :---: | :---: |
| Power Supply | 3 |
| Robot Factory | 4 |
| Hard Disk | 5 |
| Motherboard | 6 |
| Golden Chip | 6 |

In each world, Alice must extract these data pairs from three levels of memory: the Hard Drive, the Cache, then the CPU Register. The display screen in the bottom-left corner of the game area shows the player what level of memory they are in. In each level of memory, there is a different number of data slots, and the player faces different levels of competition from Stark.

## Hard Drive

The Hard Drive is the largest level of memory, and contains the largest number of data slots. The data slots in this level can contain three different types of data. The blueprint data that the player wants to find is blue, corrupt blueprint data that Stark is trying find is red, and blank data is white. The player takes turns with Stark to try to match pieces of blueprint data. The player must match all pairs of blueprint data before Stark matches all pairs of the corrupt blueprint data to advance to the Cache.

## Cache

The Cache is smaller than the Hard Drive, and contains fewer data slots. In this level, the data slots can only contain blueprint data, and blank data. Since Stark no longer has data to match, he will be switching pieces of data around to try to confuse the player. The player must match all pairs of blueprint data to advance to the CPU Register.

## CPU Register

The CPU Register is the smallest level of memory and contains only a small number of data slots. Stark has stopped trying to interfere and there are no blank data pieces. The player can quickly match the pairs of blueprint data to finish the game.

## Gameplay hints from Gladys

As the game progresses, Gladys, the sentient AI, will be helping out by telling the player what kind of data they have found, and maybe even where to find it's match. These messages are displayed in the center display screen in the bottom of the game area.

## 4 Binary Minigame

Stark has been breaking things in the computer. Fortunately, there are robots available to fix the damage. Unfortunately, Stark broke the machine that sorts the repair-bots, so its up to you to send them out to get everything working again.

## Instructions

In the upper left there is a message telling you how many robots are needed, and how close you are to reaching your goal. There are four barrels, each of which can hold a certain number of robots. Click on a barrel to add a robot to it. Once you have filled the barrels with the correct number of robots, click the green button to send them out. If you make
a mistake, you can click the red button to empty all the barrels and try again.
The trick is that traveling in a barrel can be a little dangerous, if youre not wellprepared. To ensure the safety of the robots, the lid of the barrel must be closed, and there cant be any room for the robots to shake loose in transit. Therefore, a barrel can only be either completely full or completely empty for it to be accepted.

As the game progresses, eventually your goal will be given in terms of 0 s and 1 s . The 0 s represent empty barrels, and the 1s represent filled barrels. So if the goal is 0011, you should fill the right two barrels, rather than giving eleven robots.

## Tips

Dont get frustrated. If you fill up one of the smaller barrels and still need more room, try filling a larger barrel first.

## 5 Robot Building Minigame

In each world, Stark has broken something that need special robots to fix. In order to create these robots, Alice must input commands into a robot building machine to create a robot to match the blue print she is given.

## Instructions

In the upper right, there is a robot being displayed. The player must drag commands from the holders in the bottom into the boxes in the builder to build the robot. The color of each holder matches the color of the boxes the instructions it holds can go into. A command in the blue holder, for example, can only go into a blue box in the builder. After the player has finished dragging commands, he or she must click the green button on the right to build a robot. A robot will either be built or a message will display under the blue print stating what went wrong.

In the earlier stages, the player has little flexibility in what commands they can input. As difficulty progresses, more commands are available and more flexibility is given. The first box in any row will always be an "action command" these are the commands in the blue holder.

## Action Commands:

Set Shape Command: This is the command which looks like multiple shapes. This is the action command used to determine the shape of the object.

Paint Command: This is the command that looks like a paint brush. This is the action
command used to paint an object some color.
Loop Command: This is the command that looks like an arrow going around a circle. This is the action used to start a loop.

End Loop Command: This is the command that looks like a curved arrow that is stopped. This is the action used to end a loop.

The second box in any row will either be a "part command" or "material command". The part commands are used to determine which part to set the shape of or to paint. They are the head, arms, body, and later on, antenna. The material command, in the orange holder, determines which material to loop over after a loop command is selected. Once there is no more of that material left, the builder will finish the loop and move to the next one. The third box will either be a color command or shape command, depending on whether the paint command or the set shape command is chosen.

## Tips

A part must have its shape set before it can be painted.
If the robot isn't being built, then there is something wrong with the commands in the builder. There message under the blue print will tell you what is wrong. If there aren't enough rows in the builder to build the robot, try using a loop.

