*Aron, Momo, Sean, Sujin*

Multiplication Game CS 2340

User Manual**

Table of Contents

**What is the Multiplication Game..........................................................2**

**System Requirements.............................................................................2**

**Installation...............................................................................................3**

**Controls....................................................................................................3**

**Trouble Shooting.....................................................................................4**

**Customer Service....................................................................................4**

What is the Multiplication Game

The multiplication game is a fun and challenging way to practice your math skills. The goal of the game is to get four numbers in a line on a 6x6 grid using multiplication. You can choose any number from 1 to 9 on a number line at the bottom of the screen. There are two arrows, one above and one below the number line, that indicate the two numbers that you will multiply together. You can move either arrow to the left or right on your turn. The product of the two numbers will be the number that you can claim on the grid. For example, if the arrows point to 3 and 4, you can claim 12 on the grid. You can only claim an empty spot. You cannot claim a spot that has your opponent’s sign. To win the game, you need to claim four spots in a row, either horizontally, vertically, or diagonally. The first player to do so wins the game. If the grid is full and no one has four in a row, the game is a draw.

System Requirements

## **Minimum System Requirements**

## OS: Windows 10 or Mac OS X 10.7 or higher

## CPU: Any CPU with Java J2SE 1.4.2 (or later) SDK installed on your computer.

## RAM: 256 MB or more

## Hard Disk Space: 10 MB or more

Installation

1. Download the **MARS 4.5** software from this website.
2. Extract the MARS 4.5 zip file to a folder of your choice.
3. Run the MARS.jar file with Java by double-clicking it or using the command java -jar MARS.jar in the terminal.
4. Download our ZIP file with all our game files.
5. Extract all the files from the ZIP and open the assembly file in MARS 4.5
6. Once the file has been opened, press the assemble button which looks like a wrench and screwdriver on the top of the screen.
7. Once the code has been assembled, start the program using the start button which looks like a circle drawn around an arrow pointing to the right. You do not need to click on the buttons that have the number one to the bottom left of the start button, nor the button that is the inverse of the start button.

Controls

To control our game, you simply need to first select either the top or bottom slider. Once a slider has been selected, you need to input a number from 1-9 to select a number that you will move that slider to. If your move is invalid because you selected a digit greater than 9 or less than 1, you will be prompted for another digit. If your move is invalid because the space is already occupied, you will be prompted for both the slider and the digit.

Trouble Shooting

If the code is not working as intended, try these common trouble shooting steps to fix the program.

1. Ensure you are using MARS 4.5 to run the game, different versions of MARS might cause the game to run incorrectly, or not display correctly.
2. Try restarting MARS and opening the code again in MARS.
3. Try redownloading the ZIP file and extracting again to ensure to corruption occurred.
4. Restart your computer and try running the program again.

If these steps have not fixed the program, please feel free to contact our support team below to help you.

Customer Service

|  |  |  |
| --- | --- | --- |
| Sean | – | [spm210001@utdallas.edu](mailto:spm210001@utdallas.edu) |
| Momo | – | [mfq210000@utdallas.edu](mailto:mfq210000@utdallas.edu) |
| Sujin | – | [sxl230036@utdallas.edu](mailto:sxl230036@utdallas.edu) |
| Aaron | – | [adn220001@utdallas.edu](mailto:adn220001@utdallas.edu) |