GRAND PRIX RACING

DISK SOFTWARE - UCSD PASCAL

Maneuver your two-car team to win the Constructors' Championship by scoring the most points during a 24-circuit racing season.
The cars are maneuvered by playing cards either by moving them forward or backward in position.

Programmed by Walid Maalouli
2024

Quick Reference Guide

System Requirements
TI 99/4A Computer
Peripheral Expansion Box
32K RAM Expansion
Floppy Disk Controller
Pcode Card
Single Floppy Disk Drive

Game Startup
1. Place the game disk in the disk drive
2. Turn the Pcode card switch to ON
3. Turn the computer display ON
4. Power ON the Peripheral Expansion Box
5. Switch the TI 99/4A computer ON
6. The Pcode system will boot and the game will automatically load and run.

Game Keys
<SPACE>   Moves the selection arrow to the next available item
<ENTER>   Confirms the selection pointed to by the arrow
[LETTER]   Pressing the bracketed letter on game menus selects the corresponding option

GRAND PRIX RACING

Acquire a Formula 1 racing team and take it to the ultimate victory over a 24-race World Constructor's Championship. Cars are maneuvered by playing cards, with cunning, strategy and luck determining your final standing. *Vroooom!*

Programmed by:	Walid Maalouli - 2024
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INTRODUCTION

The objective of the game is to maneuver your two-car Formula 1 team to win the Constructor's Championship, by scoring the most points over a 24-race season.

The cars change position in relationship to each other and are maneuvered by playing cards from a deck. Each card affects one or two cars - though not necessarily yours - either by moving forward or backward in position, or even crashing!

GETTING STARTED

When the game first loads, you will be presented with a splash screen with credits. Press any key to move on and load the main game which will take a couple of minutes on real hardware.

PLAYING THE GAME

The playing field is divided into several sections:

Track and Lap Information

Current Team and Action Card

Current Player Card Deck
Game Menus
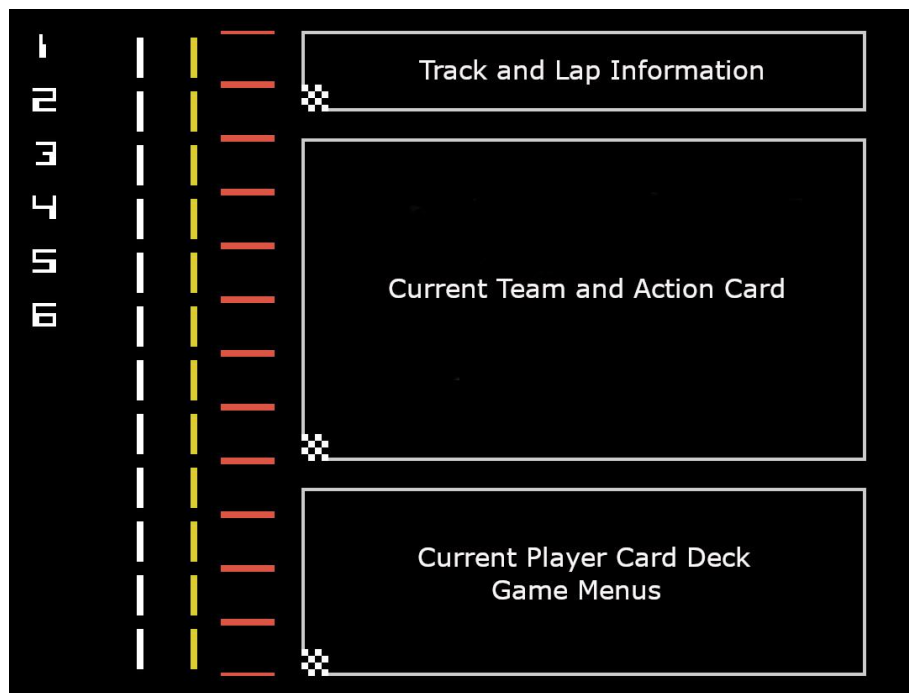
- The **numbers** on the leftmost of the field represent the 6 *topmost* positions on the race grid. The race grid is the **black strip** to the right of the numbers column
- The **white interrupted line** is the passing lane
- The **yellow interrupted line** is the slow-down or crash lane
- The **red vertical grid** has a pit slot for each car taken out of the race
- The track and lap information are displayed in the top box
- The current team in play and the selected action card are displayed in the middle box along with any outcomes information
- The bottom box will display the current team's card deck as well as various in-game menus

Initial Game Options

At game start, you will have the option to start a new game or load a previously saved one. Loading an existing game will start the gameplay at the beginning of the last saved race.

If you start a new game, you will need to select the number of human players between 0 and 6. Selecting 0 will have the computer select and control all 6 teams without human intervention. Otherwise, you will need to select a team for each human player by moving the arrow to the desired team and pressing the <ENTER> key to select. Repeat the process for each human player. Obviously, you cannot assign a team to more than one player.

Available Formula 1 Teams

There are 6 Formula 1 teams to choose from. Each is assigned a specific color and 2 cars with the corresponding color.

There is no advantage in picking one team over another other than personal preference.

Starting the Race

Once all human players have picked a team, then the first circuit in the Formula 1 Championship will be displayed in the top box along with the lap number. There are a total of 24 different circuits based the 2024 line up, each consisting of 5 laps:

Bahrain	**Hungary**
Jeddah	**Spa**
Melbourne	**Zandvoort**
Suzuka	**Monza**
Shanghai	**Baku**
Miami	**Marina Bay**
Imola	**Austin**
Monte Carlo	**Mexico**
Montreal	**Sao Paulo**
Barcelona	**Las Vegas**
Spielburg	**Qatar**
Britain	**Abu Dhabi**

The race will switch to the next circuit in the table at the end of the previous race. Once all the circuits have been raced, then the Championship, and the game, will be over.

Qualifying

If it is the first race of the Championship, then the 12 formula cars (2 per team) will be randomly placed on the grid. Since there are 2 cars per team, the car that is first randomly selected for the first grid position will have its counterpart placed at the bottom of the grid. The next car taking the second grid position will have its counterpart occupy the second to last grid position, and so on and so forth until all the cars are placed on the starting grid.

After the first race, the lineup at the end of the last race will be used for the new race. If there are crashed cars in the pits from the previous race, these cars will then occupy the same position on the starting grid as that of their pit.

Deck Shuffling

There are 54 Action Cards in the playing deck, and the latter will be shuffled at the beginning of each race. Each team will receive 5 cards and the remaining cards will be kept in a draw pile. Below is a description of the Action Cards and their effect. The cards that have a colored square to the left of their title can only be used on cars of that color. Cards with a checkered square can be used on any car. Below is a description of the Action Cards and their effect:

- **OVERTAKE +2, +3, +4**
  Choose one car of the appropriate color AND the car directly behind it (in its slipstream) and move them forward the number of places indicated by the number. If the selected car is in the last grid position, then it will be the only one to move. If the chosen car reaches first place, the additional places it would have gained will be ignored. If the selected car is already in the first position then the card will have no effect.

- **WRONG LINE -1**
- **OFF CIRCUIT -2**
- **LOSE CONTROL -3**
  Choose any car and move it back the number of places indicated by the number. If the car reaches the last grid position then the rest of the movement will be ignored. This has no effect if used on the last car on the grid.

- **PIT STOP**
  A die roll (d12) will occur:
    - 1-6: The chosen car moves back the number of places equal to the die roll. If the car reaches the last grid position, ignore the rest of the movement.
    - 7-12: The chosen car does not pit and remains in its current position.

- **TAILENDER TURBO**
  Choose one of the last 3 cars on the grid and it will be moved forward 3 places.

- **CHARGE LOSE GEARS**
- **CHARGE ENGINE BLOWS**

  A die roll (d12) will occur:
    - 1-9: The chosen car (alone) moves forward 1 place.
    - 10-12:
        - ENGINE BLOWS: The chosen car has blown its engine and is out of the race!
        - LOSE GEARS: The chosen car moves to the last place.

- **SPIN OUT**
- **SPIN LAST**

  A die roll (d12) will occur which will determine which car is affected based on its grid position. If the roll points to an empty grid position, then the card has no effect. Otherwise, SPIN OUT will cause the affected car to be retired from the race, and SPIN LAST will drop it to the last grid position.

- **CRASH**

  A die roll (d12) will occur to determine which car is affected based on its grid position. If the roll points to an empty grid position, then the card has no effect. Otherwise, the affected car will crash and be retired from the race. Furthermore, the car either immediately in front or immediately behind the affected car will be randomly selected and retired as well! It's quite obvious then that this card can be particularly risky to play since it could potentially affect the player's own cars.

Running a Race

The order in which each team plays its move is determined by the their respective grid position at the beginning of each race and will remain the same for the duration of the race.

The current team name and color will be displayed in the middle window and, *for the human players only*, the cards in their deck will be listed in the bottom window. Select the card you wish to play using the <SPACE> key to move the selection arrow and the <ENTER> key to select the card pointed to by the arrow. It will then be displayed in the middle window. If that card requires that a target car be selected on the grid, then a selection arrow will appear to the left of the racing grid allowing you to select a specific car using the same <SPACE> and <ENTER> combination.

For the computer-controlled teams, the deck cards will not be displayed, and only the desired Action Card will show up in the middle window.

Once a card is played, its effect will be animated on the racing grid, resulting in a shuffling of the cars' positions. Subsequently, the played card will be discarded, and the team's deck will receive a replacement card from the draw pile. The only exception to this will be during the last lap where no replacement card will be available.

Once all the teams have played their Action Card for the lap, then the lap counter will be incremented, and the next round will start.

Race End

The race will end when 5 laps have been completed, at which point the current team standings will be displayed as well as options to move on to the next race, save the race or quit the game.

When continuing with the race, the next circuit in the lineup will be displayed, the lap counter zeroed out, the car line up restored on the racing grid and the Action Cards deck re-shuffled. Once the last circuit has been completed, then the game will end with the final Championship team standings displayed.

If the Save Game option is selected, then the game will be saved on the current disk under the name of GPSAVE.DATA. When loading a saved game, the program will look for that specific filename. You can however rename that filename and/or store it in a different location for archival purposes, as long as you remember to rename it back to GPSAVE.DATA and place it on the main game disk prior to loading.

How to Win

Points are awarded at the end of each race to the cars in the first six positions as follows:

- **First:**   **10 points**
- **Second:**   **6 points**
- **Third:**   **4 points**
- **Fourth:**   **3 points**
- **Fifth:**   **2 points**
- **Sixth:**   **1 point**

For each car in one of the top 6 grid positions, points will be awarded to its respective Constructor Team accordingly, so it is possible for a particular team to be awarded two sets of points should it have its 2 cars in the top grid positions.

All team points are cumulative from one race to the other, and the final tally at the end of the last circuit will determine the overall Championship winner.

Designer Notes

This game is a close adaptation of the card game ***FORMULA MOTOR RACING*** created by Reiner Knizia and published by GMT Games.

This game uses nearly all the TI-specific units that come with the UCSD Pascal package for the TI 99/4A, and in that respect will serve as a good demonstration of their functionality. This is particularly useful given the fact that UCSD Pascal games on the TI are a rarity at best. Furthermore, additional functionality has been grafted to the system using assembly language support routines which was never originally intended by the designers of UCSD Pascal, such as bitmap graphics.

The whole project was coded entirely within the UCSD Pascal environment using the integrated Editor, Compiler, Assembler, Linker, Filer and Utilities, albeit in emulated form with the Classic 99 emulator to speed up the disk access and compilation process. All source files are included on the distribution diskette.

Acknowledgements

Many thanks are extended to Anders Persson, the TI community's resident UCSD Pascal guru, for his help and support during the development of this project, as well as his infinite patience in explaining the intricacies and obscure features of that programming environment.

Notes

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