

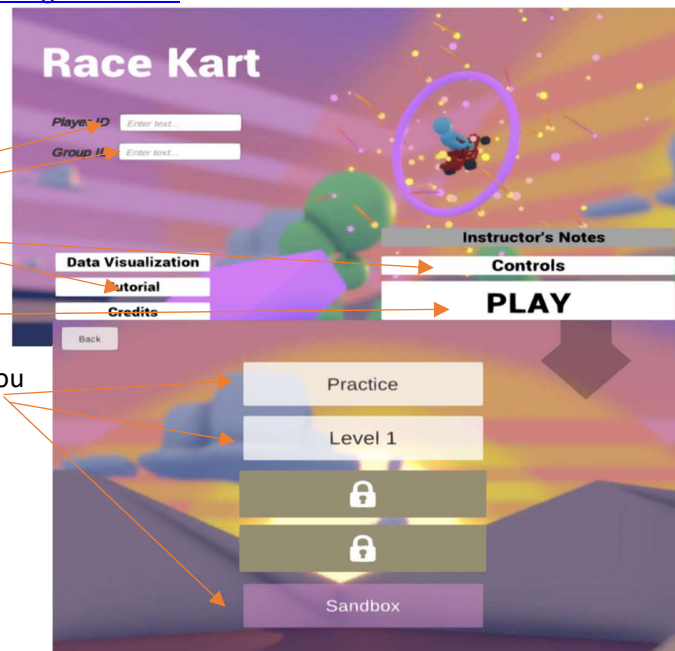
Race Kart Game Instructions:

Go to the web site and watch the video tutorial: <https://stat2games.sites.grinnell.edu>.

Then select the **Race Kart** tab and then click the **Play Racer** button.

This site may take a few seconds to load.

- Enter a **Player ID** and a **Group ID**. Any combination of alphanumeric characters will work. *Note that this ID will be public on the web, so do not use your actual name for a PlayerID.*
- Check out the **Tutorial** and **Controls** before playing
- Click the **Play** button:



This will bring you to the **Menu** page. There are several options that you can choose from. You can select either practice, level 1, or the sandbox.

Goal: Reach the finish line as soon as possible.

Customize Car OPTION:

Select tires: Press triangles on top to change the tires.

Select engine: Press triangles in the middle to change the engine.

Select car: Press triangles at the bottom to change the car.

Specs: Press specs button to check the specs of the car.

Ready: Press ready button to play the game.

Challenge mode: Press the Challenge mode button to go to challenge mode.

If challenge mode is selected:

Choose booster: Press the plus sign or minus sign to change at most two aspects. Player can make up to two changes. Each change will add 1 second on your finish score.

Ready: Press ready button to play the game.



WHEELS			
Classic	Steer	Suspension	Grip
Classic	5	0.7	0.3
Roadster	5	0.5	0.9
Muscle	5	0.9	0.4
Muscle	5	0.8	0.7

ENGINES			
Classic	Top Speed	Acceleration	Acceleration Curve
Classic	25	5	0.4
Roadster	15	10	0.8
Muscle	22	12	0.6

BODY		
Classic	Drag	Gravity
Roadster	10	0.8
Muscle	20	0.8
Muscle	20	1.2

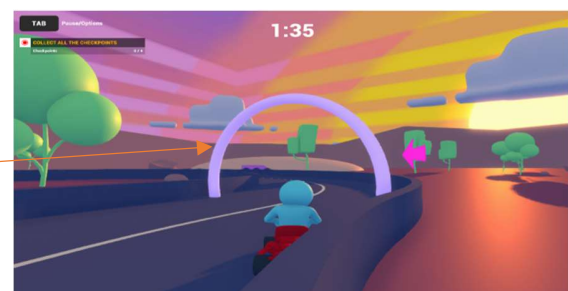
You can make up to two changes. Each change will add 1 second on your finish score.

Top Speed	15.0	+
Acceleration	- 15.0	+
Acceleration Curve	- 0.8	+
Suspension	- 0.8	+
Coasting Drag	- 10.0	+
Steer	- 7.0	+
Grip	- 0.3	+

Reset Values

READY

Check point: Pass through all the pink check points to finish the game



Racer Game Data:

Variable name	Type of variable	Role	Description
Game:	Quantitative		Each game is assigned a unique game number
GameDate	Date		The date and time the game was played. In, Year/Month/Day/Hour: Minute format.
PlayerID	Categorical		Any alpha-numeric term used for each player
GroupID	Categorical		Any alpha-numeric term used for each player or group. Often instructors ask all students in the class to use the same GroupID
Level	Categorical	Explanatory	Level of the game
Obstacles	Quantitative	Explanatory	Number of obstacles on the track
Surface	Categorical	Explanatory	Type of surface on the track
Tire	Categorical	Explanatory	The name of the tire being used. There are three types of tires
Engine	Categorical	Explanatory	The name of the engine being used. There are three types of engine
Body	Categorical	Explanatory	The name of the body being used. There are three types of body
Ramps	Categorical	Explanatory	Whether the track has ramps
AccCurve	Quantitative	Explanatory	The acceleration curve of the car
Suspension	Quantitative	Explanatory	The suspension of the car
Drag	Quantitative	Explanatory	The drag of the car
Steer	Quantitative	Explanatory	The steer of the car
Grip	Quantitative	Explanatory	The grip of the car
Braking	Quantitative	Explanatory	The braking of the car
Gravity	Quantitative	Explanatory	The gravity of the car
Challenge1	Categorical	Explanatory	The 1 st change the player made in challenge mode
Challenge2	Categorical	Explanatory	The 2 nd change the player made in challenge mode
Finished	Categorical	Explanatory	Whether the player finished the game
PathCurvature1	Quantitative	Explanatory	The path curvature 1

PathCurvature2	Quantitative	Explanatory	The path curvature 2
PathCurvature3	Quantitative	Explanatory	The path curvature 3
Track	Categorical	Explanatory/Response	The name of the track that the car is driving on. There are five types of tracks
FinishTime	Quantitative	Explanatory/Response	The time it took to finish the track
TimeToTopSpeed	Quantitative	Explanatory/Response	The time it took to the car to reach the top speed
TopSpeedreached	Quantitative	Explanatory/Response	The top speed of the car
Speed	Quantitative	Explanatory/Response	The speed of the car
CheckPoint1	Quantitative	Explanatory/Response	The time it took to reach check point 1
CheckPoint2	Quantitative	Explanatory/Response	The time it took to reach check point 2
CheckPoint3	Quantitative	Explanatory/Response	The time it took to reach check point 3
Restart	Quantitative	Explanatory/Response	The restart time
Acceleration	Quantitative	Explanatory/Response	The acceleration of the car