A08 – MauroKart

This application is a simple car racing game. It is contained in `index.html`, and the procedure for computing and update the world, view and projection matrices are contained in file `WorldViewProjection.js`. In particular, a single procedure receives for input the position and the rotation of the car (`carx`, `cary`, `carz`, `cardir`) to compute the world matrix, the position of the camera (`camx`, `camy`, `camz`), to compute the view matrix using the *Look-At* technique described in the course (using for target the position of the car defined by `carx`, `cary`, `carz` and as up-vector the y-axis), and the aspect ratio (`aspectRatio`), to compute an appropriate perspective matrix with a 60^o Fov-y, near plane at *0.*1 and far plane at *1000.0* . Complete the procedure by adding the code to compute the matrices in the appropriate way to make the game playable.

References:

The algorithm for the third-person camera tracking, and for the car motion, have both been taken from the book:

Game Programming Gems, vol. 4

respectively at chapter 4.1, page 303, and chapter 3.2, page 221. The book can also be found in .pdf format searching on the Web.