Assignment 1

Bicycle Odometer – Environmental Quantities

We want to develop a simple bicycle odometer. It shall display the current speed, the day trip distance, or the total distance ridden on the bicycle. The user can switch between the three values by pressing a button.

Identify all environmental quantities relevant for a system (behaviour) requirements specification. Identify which are monitored quantities and which are controlled quantities.

Write the part of the system specification which describes the relevant variables and their link to reality. Be rigorous and precise. Use a drawing where appropriate. Use a suitable tabular notation for the variables. If the informal description above lacks relevant details, provide them yourself and document this.

Submit your solution both on paper and by email to `brederek@tzi.de` (as a PostScript or Pdf file).

You may use any word processor you like. If you use LaTeX, you might be interested in looking up the packages `array` and maybe also `rotating` and `longtable`.

The next assignment will continue the specification of the bicycle odometer.