TSPR solution file format

This document provides a description of the solution file format for benchmark instances for the TSPR, as provided on the website `http://gent.cs.kuleuven. be/tspr`. The order in which the elements are described in this document corresponds to the order of the elements in the solution file format.

1 File format

The first line shows general information regarding the solution:

`instance feasible objective unassigned time`

With `instance` the name of the instance, `feasible` a boolean value indicating whether the solution is feasible, `objective` the cost of the solution, `unassigned` the number of unassigned tasks, and `time` the time required to obtain the solution.

1.1 Task assignments

Task assignments in the solution are given as follows:

y_0
y_1
$\ldots$
$y_{|T|}$

For each task $t \in T$, the assigned employee y_t is specified.

1.2 Shift assignments

Shift assignments are specified as follows:

x_{00}	x_{01}	$\ldots$	$x_{0|D|}$
x_{10}	x_{11}	$\ldots$	$x_{1|D|}$
$\ldots$	$\ldots$	$\ldots$	$\ldots$
$x_{|E|0}$	$x_{|E|1}$	$\ldots$	$x_{|E||D|}$

For each employee $e \in E$ and day $d \in D$, the assignment on day d of employee e is specified by x_{ed}, which is the index of the assigned shift.