Sistemas Reativos

LabLua – PUC-Rio
www.lua.inf.puc-rio.br

reactive:

readily responsive to a stimulus

(Merriam-Webster)

Classificação de "Sistemas"
(Berry 1989)

- Sistemas transformacionais

  - *"compute results from a given set of inputs"*

- Sistemas interativos

  - *"interact at their own speed with users or with other programs"*

- Sistemas reativos

  - *"interact with their environment, but at a speed which is determined by the environment, not by the program itself"*

- gcc, gdb, quake, md5, shell, zip, http, gui

Environment / Ambiente

- Componente externo à aplicação
  - "mundo analógico" no qual a aplicação está inserida

- Input / Sensores
  - Teclado, Mouse, Botão, Sensores (luminosidade, temperatura, etc.), Temporizador

- Output / Atuadores
  - LED, Tela, Impressora, Motor

- Input<=>Output
  - Serial, Rádio

Artigos & Videos - 01

- Sistemas Reativos

    - David Harel - "On the development of reactive systems"

    - Gerrard Berry - "Real time programming: Special purpose or general purpose languages"