

PB138 - Modern Markup Languages and Their Applications

MAP OF THE NETWORK CONNECTION

BERAN, KUNÍKOVÁ, LEKNEROVÁ, MIČUDA



OVERVIEW

- > simple desktop application
- > register and maintain information about devices
- > SOHO network
- > application functionality:
 1. register / add / remove / refresh the devices (computers, routers, switches, hubs,...)
 2. register / add / remove connection between two devices
 3. file import / export
 4. graphical preview



XML

> XML structure elements:

1. masterRouter
2. mainDevice
3. devices
4. device
5. parentPort
6. type
7. types

> validates XML

> required elements/attributes



DEVICE, DEVICE MANAGER

- > device constructed via Builder pattern
 1. did
 2. deviceType
 3. address
 4. numberOfPorts
 5. arrayOfPorts
 6. name
- > computer, hub, modem, router, switch
- > create, update, delete
- > unit tests



PORT, PORT MANAGER

- > port constructed via Constructor
 1. deviceA
 2. deviceB
- > ethernet, wifi
- > create, delete
- > unit tests



GRAPHICAL USER INTERFACE

- > SWING, java.awt
- > 20 devices and their connections
- > application functionality:
 1. add / edit / delete the devices
 2. add / remove the ports
 3. file import / export
 4. clickable icons, displayed connections



POSSIBLE IMPROVEMENTS

- > drag and drop
- > svg output
- > customized type of devices

**THANK YOU FOR YOUR
ATTENTION**