PB138 - Modern Markup Languages and Their Applications

## MAP OF THE NETWORK CONNECTION

#### **OVERVIEW**

- > simple desktop application
- register and maintain information about devices
- > SOHO network
- > application functionality:
  - 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, update, 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