Step 1: Prepare Raspberry Pi [20min]

Material list
Raspberry Pi
Micro SD card, minimally 16Gb
PC with an SD card slot (maybe you will need an SD card adapter)
Power supply (5V, 2 or 3A)
Monitor, keyboard, mouse

- Download and install Raspberry PI Imager (Download)
- Download Pi4J-Basic-OS (Download)
- Start the Imager and follow these steps:
- Click on “Operating System” > “CHOOSE OS”
- Select “Pi4J-Basic-OS (32-bit)”
- Put your SD card into your computer or in an SD card reader you can connect to USB
- Click on “SD Card” > “CHOOSE SD CARD”
- Select the SD card
- Open a terminal window and type in *java -version*. Java will be started to show you the installed version
- Now your SD-Card is ready to be used in a Raspberry Pi

Step 2: Preparing a developer computer [10min]
Download and install IntelliJ IDEA: (Download)
VNC Viewer. This allows a comfortable access to the Raspberry Pi's desktop (Download)

Step 3: Connect to the Raspberry Pi [15min]
The developer computer and the Raspberry Pi must be on the same WLAN.
A simple solution for this is to create a hotspot with a smartphone with these parameters:

SSID: Energiesammler
Password: Energiesammler24

The Pi4J-Basis-OS image is configured to automatically connect to this hotspot.
Connect your developer PC also to the hotspot Pi4J-Spot.

Connecting via SSH
Enter the following in a terminal of the developer computer:

ssh pi@pi4j.local
Passwort: 'pi4j'

Connecting via VNC
Using the same IP address a VNC connection to the Raspberry Pi can be made. The VNC client shows a window which gives access to the entire desktop of the Raspberry Pi.