

Documentation - Supply Chain Game

1. Connecting Raspberry Pi to Wi-Fi: Bayern@WLAN

- Browser
hotspot.vodafone.de/Bayern
- If it does not work:
 - Open terminal: `sudo date --set 'JJJJ-MM-TT HH:MM:SS'` (type in the current date and time)
 - Try connection again

2. Updating Raspberry Pi

- Terminal
`sudo apt-get update`
`sudo apt-get upgrade`

3. Download Git-Repository (if it not exists on the desktop)

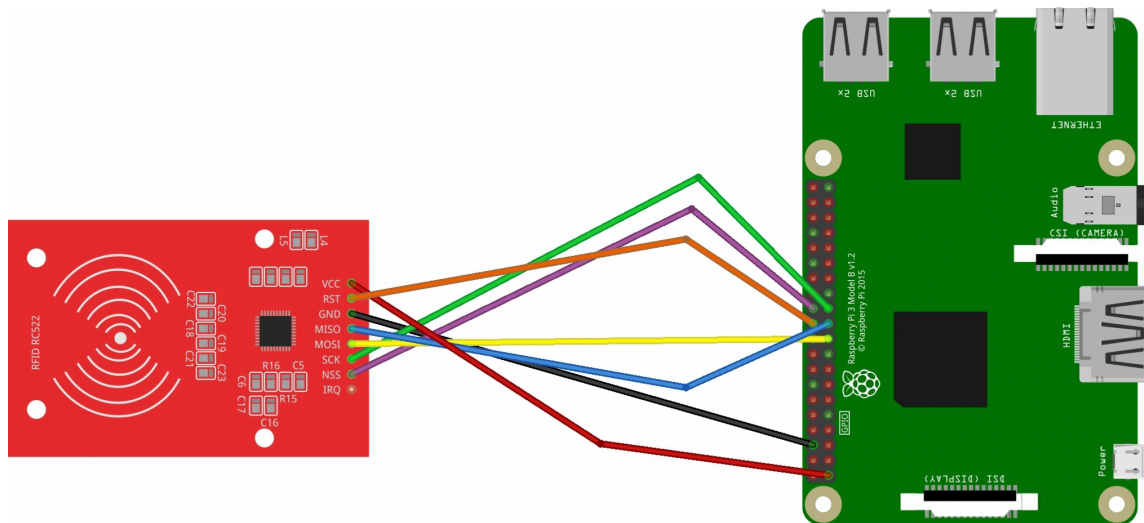
- Terminal: `cd Desktop` (or Schreibtisch)
- Terminal: `git clone https://github.com/loTLabHNU/SCGame`

4. Installing RFID-Modul

- GPIO Assignment:

RFID-Reader	Raspberry Pi
VCC	GPIO 1 (3V Power)
RST	PIN 22 (BCM 25)
GND	PIN 6 (Ground)
MISO	PIN 21 (BCM 9)
MOSI	PIN 19 (BCM 10)
SCK	PIN 23 (BCM 11)
NSS	PIN 24 (BCM 8)
IRC	/

5. Circuit diagram



6. SPI

- Activate SPI:
`sudo raspi-config`
interfacing options – SPI – enable
`sudo reboot`
- Updating Config-file
`sudo nano /boot/config.txt`
dtparam=spi=on (add at the end of the file)
- Installing RFID-Reader
`sudo apt-get install python3-dev python3-pip`
`sudo pip3 install spidev`
`sudo pip3 install mfr522`
- Test RFID-Reader:
Open: Read.py or Write.py

7. Installing MySQL-Server on rp-admin

- Terminal:
`sudo nano /etc/mysql/mariadb.conf.d/50-server.cnf`
Change Bind-address to 0.0.0.0
strg + o
strg + x

8. Change name of all Raspberry Pis

- Terminal:
`sudo nano /etc/hostname`
change name to:
rp-admin
rp-team1
rp-team2
rp-team3
rp-team4
strg + o, enter
strg + x

- Terminal
sudo nano /etc/hosts
change name to:
 rp-admin
 rp-team1
 rp-team2
 rp-team3
 rp-team4
stag + o
strg + x

- Reboot
sudo reboot

9. Installing MySQL-Server on rp-admin

- Terminal
sudo apt-get install mysql-server
sudo mysql -u root -p
 enter password: root
create user ,pi'@,%' identified by ,pi';
grant all privileges on *.* to ,pi'@,%' with grant option;
flush privileges;
exit

10. Installing MySQL Database Driver

- Terminal
sudo apt-get install python-mysqldb
sudo python -m pip install mysql-connector