

# 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)

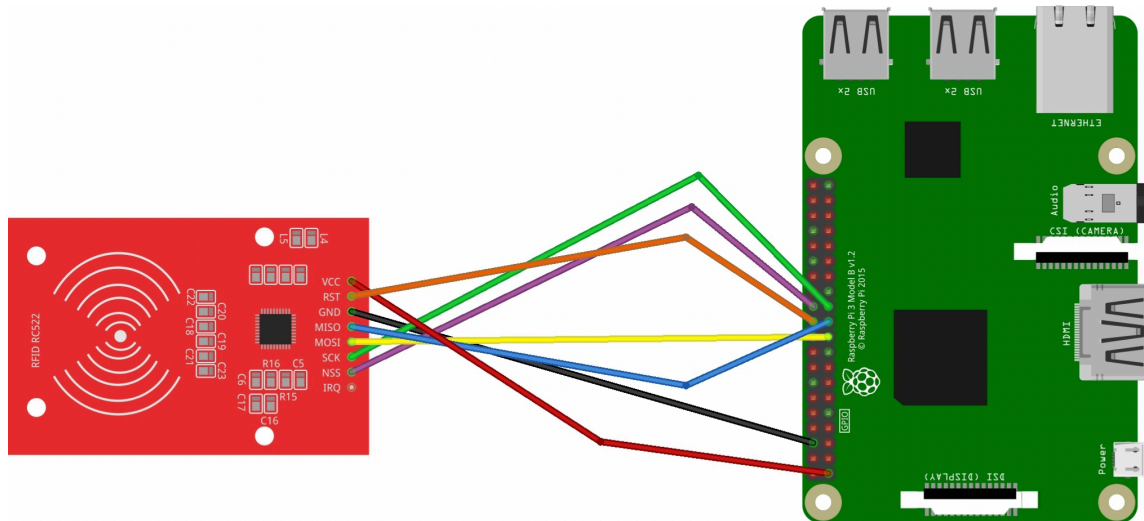
- Terminal: `cd Desktop` (or Schreibtisch)
- Terminal: `git clone https://github.com/loTLabHNU/SCGame`

## 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`  
`dtoverlay=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 mfrc522`
- Test RFID-Reader:  
Open: Read.py or Write.py

## 7. 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

## 8. Bind-Adress

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

## 9. 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

## 10. Installing MySQL Database Driver

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