Sprint 2 - Präsentation

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Ziel des Projekts

Türklingel

- Bei Knopfdruck wird ein Foto aufgenommen
- Foto wird per Telegram an Hausbewohner geschickt
- Hausbewohner entscheidet, ob Tür geöffnet wird oder nicht

Buzzer einbinden

#23

Diagramme überarbeiten

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Ansteuern der LEDS & des Relais wenn die Tür geöffnet werden soll

#21

Buttons zum Öffnen/Abbrechen der Tür integrieren

#20

Homeassistant entfernen

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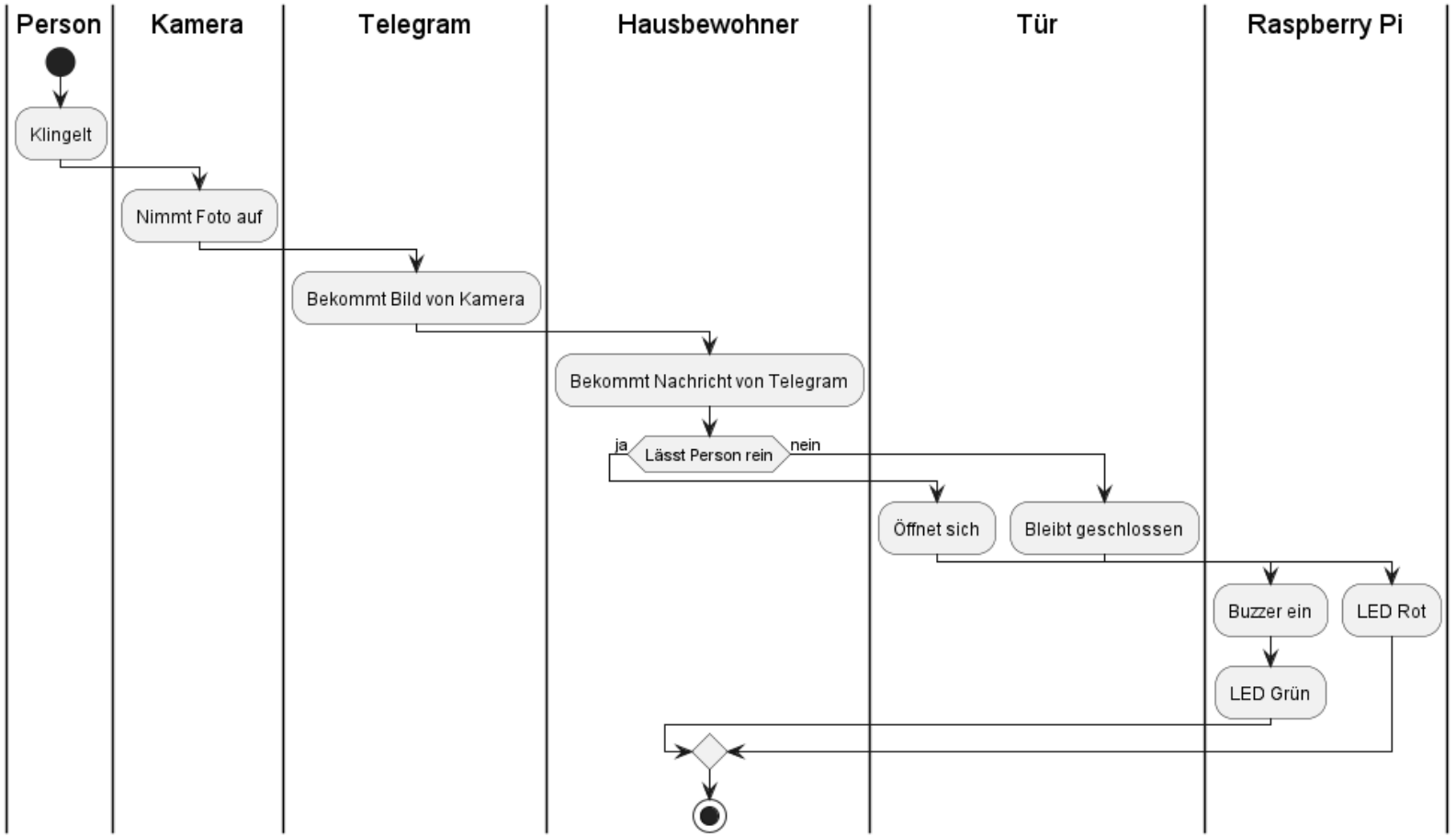
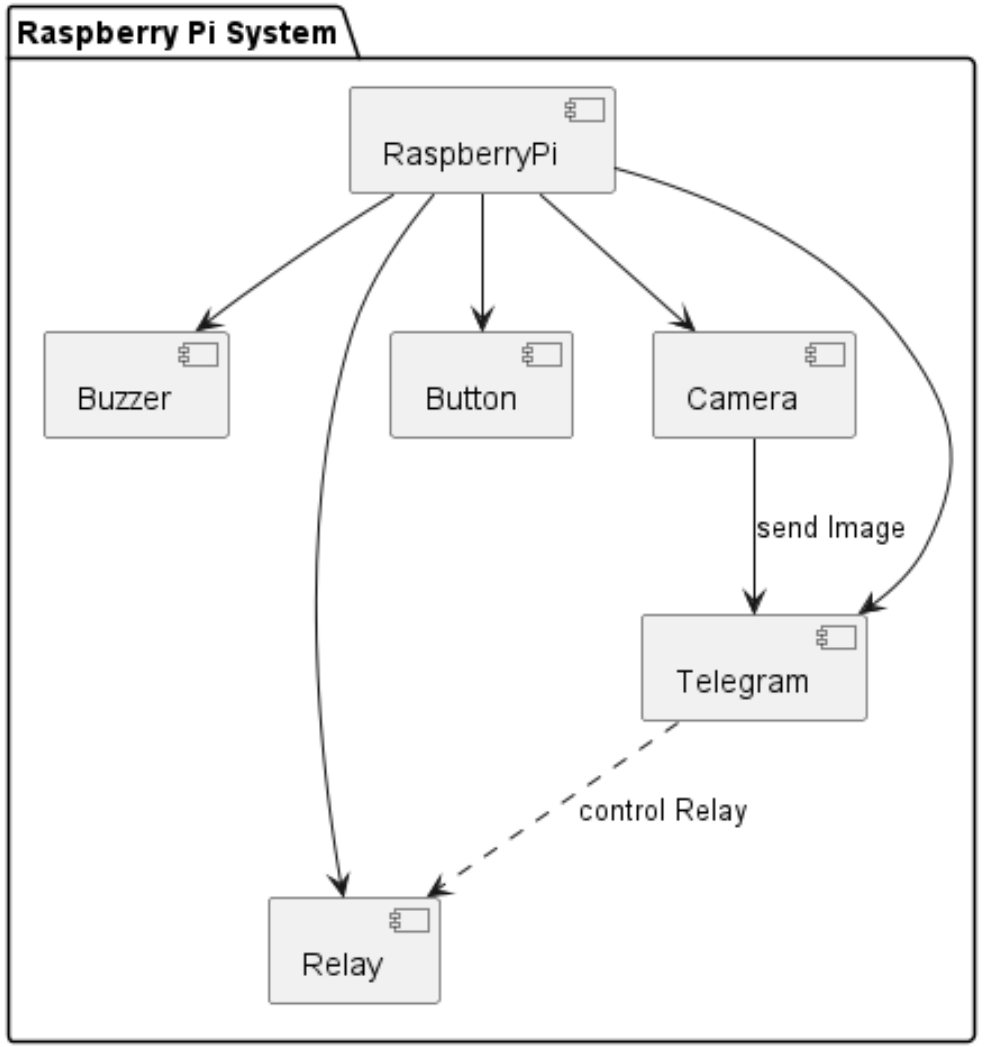
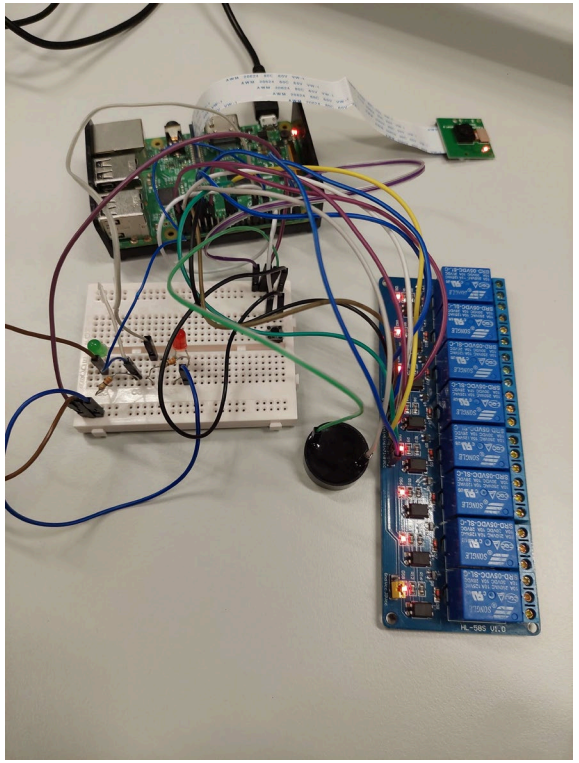
Issues

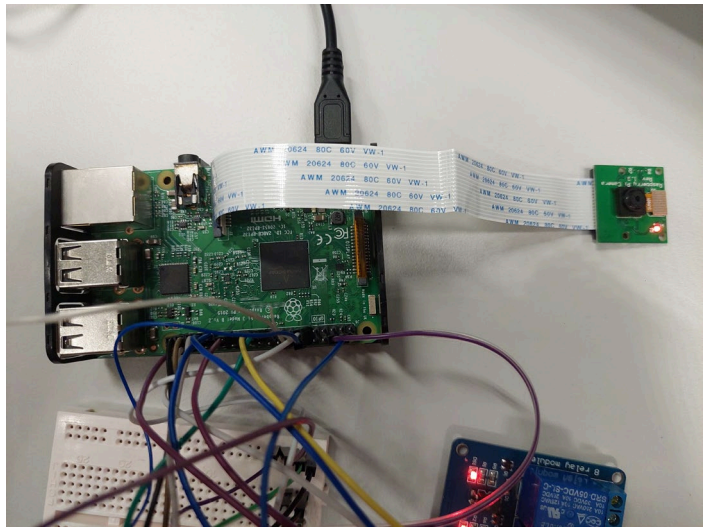


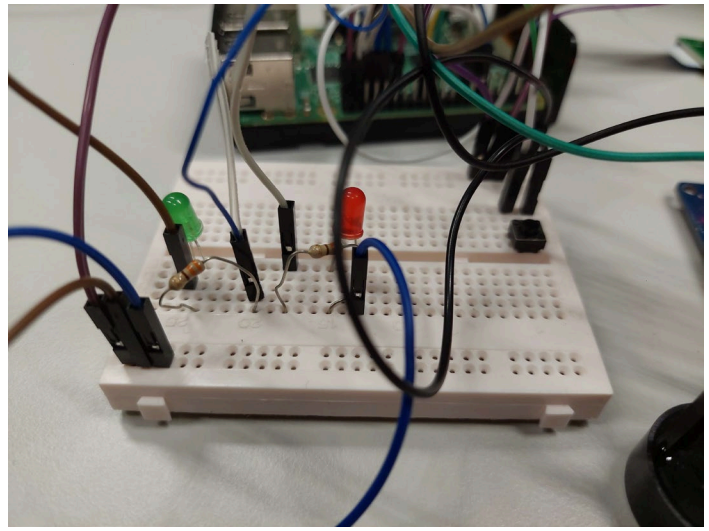
Aktivitätsdiagramm



Architekturdiagramm







Aufbau

Python– Telegram Bot Callback

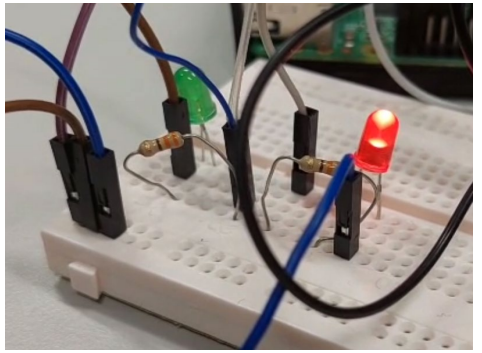
```python
@bot.callback_query_handler(func=lambda call: call.data in ["open_door", "ignore"])
def callback_handler(call):
    chat_id = call.message.chat.id
    message_id = call.message.message_id

    # Edit the original message to remove the inline keyboard
    if call.data == "open_door":
        # Code to open the door
        print("Opening")
        openDoor()
        bot.edit_message_reply_markup(chat_id=chat_id, message_id=message_id, reply_markup=None)
        bot.edit_message_caption(chat_id=chat_id, message_id=message_id, caption="Opened the door")
    elif call.data == "ignore":
        # Code to ignore the request
        print("Ignoring")
        bot.edit_message_reply_markup(chat_id=chat_id, message_id=message_id, reply_markup=None)
        bot.edit_message_caption(chat_id=chat_id, message_id=message_id, caption="Did not open the door")
        keepDoorClosed()
```

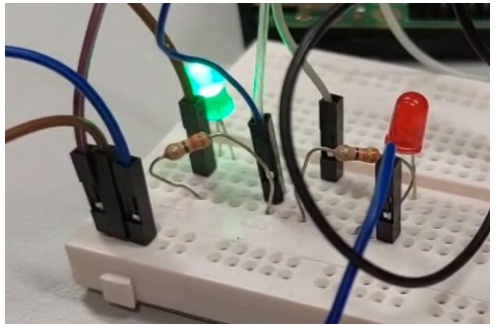
Python – Capture Image Function

```python
def capture():
    buzzer.on()
    timestamp = datetime.now().isoformat()
    image_path = './pi/%s.jpg' % timestamp
    camera.capture(image_path)

    # Send a message with the image and inline keyboard
    markup = types.InlineKeyboardMarkup()
    open_button = types.InlineKeyboardButton(text="Open Door", callback_data="open_door")
    ignore_button = types.InlineKeyboardButton(text="Ignore", callback_data="ignore")
    markup.row(open_button, ignore_button)

    with open(image_path, 'rb') as image:
        bot.send_photo(chat_id, image, caption='Someone is ringing', reply_markup=markup)

```

Python – Open Door / Keep Door Closed

```python
def openDoor():
    green_led.on()
    for i in range(15):
        for i in range(len(RELAY)):
            GPIO.output(RELAY[i], GPIO.HIGH)  # Schalte das aktuelle Relais ein
            sleep(0.01)  # Warte für 0.5 Sekunden
            GPIO.output(RELAY[i], GPIO.LOW)   # Schalte das aktuelle Relais aus
            sleep(0.01)
    green_led.off()

def keepDoorClosed():
    red_led.on()
    sleep(10)
    red_led.off()
```





Danke für eure Aufmerksamkeit!