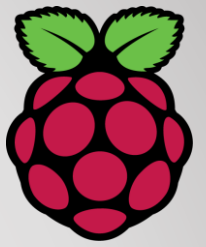


# Smart Home Hackathon

Steven, Karl und Stackoverflow

# Zeitplan



## Freitag

- 17:00 Uhr Eintreffen der TeilnehmerInnen
- 17:30 Uhr Abendessen
- 18:30 Uhr Einführung
- 19:30 Uhr Beginn der Projektarbeit, Ideensammlung

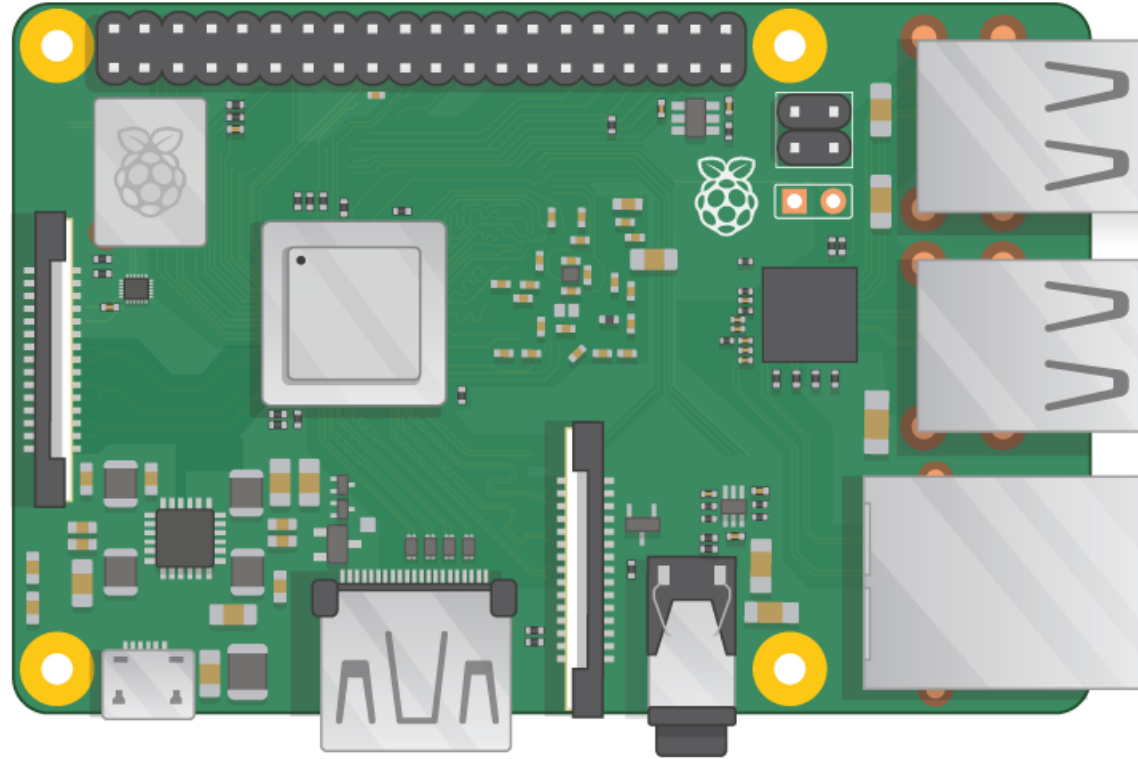
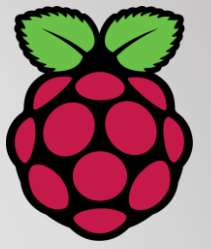
## Samstag

- 08:30-09:30 Uhr Frühstück
- 13:30 Uhr Besprechung der ersten Ergebnisse
- 14:00 Uhr Mittagessen
- 19:00 Uhr Abendessen

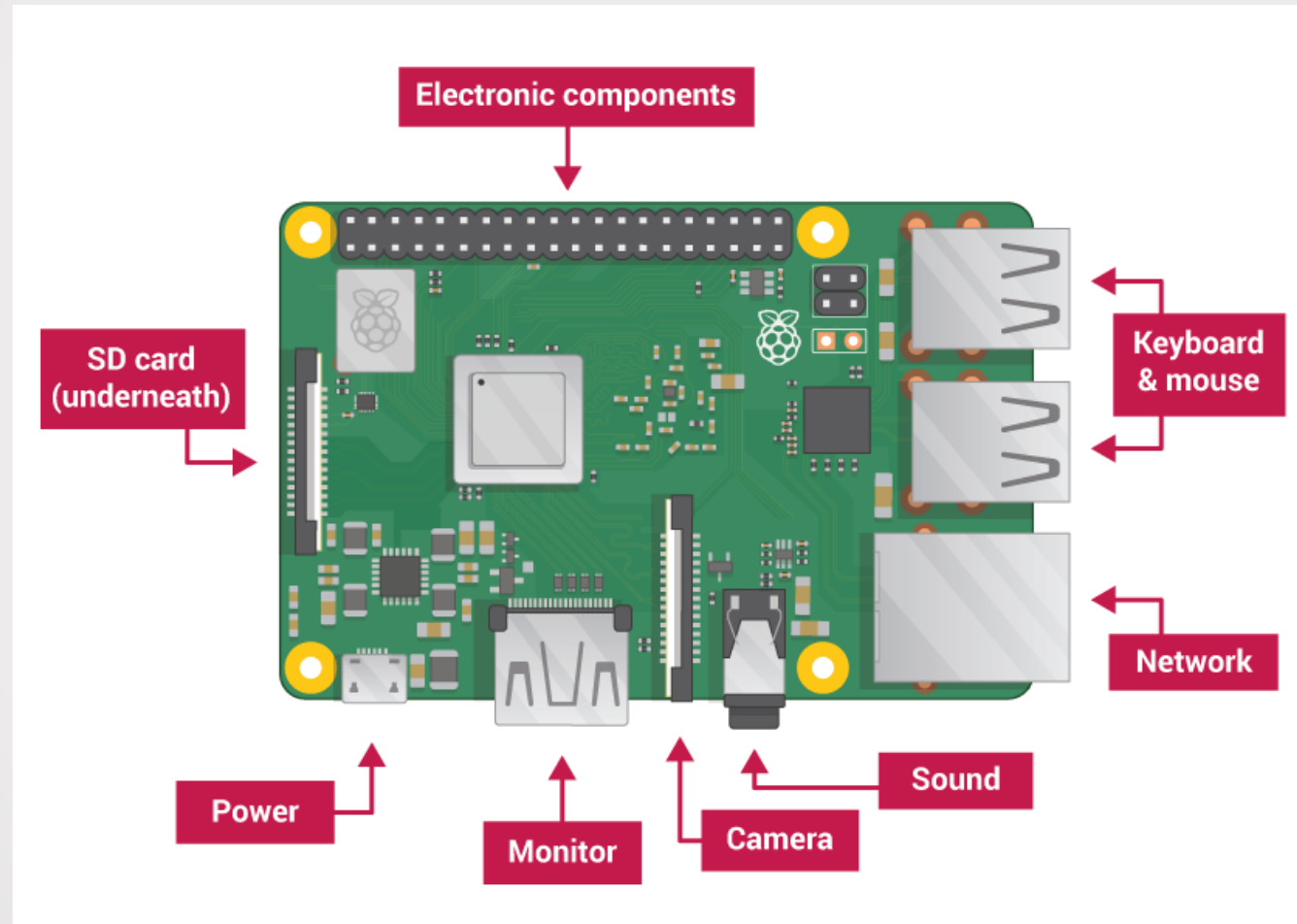
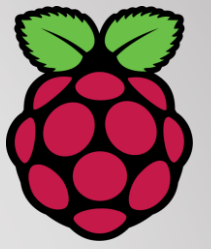
## Sonntag

- 08:30-09:30 Uhr Frühstück
- 12:00 Uhr Besprechung der Ergebnisse
- 13:30 Uhr Aufräumen und anschließende Abreise

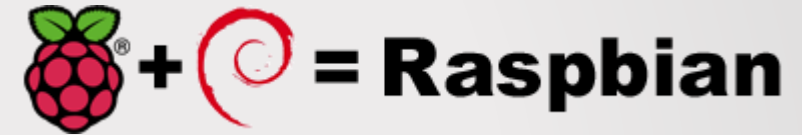
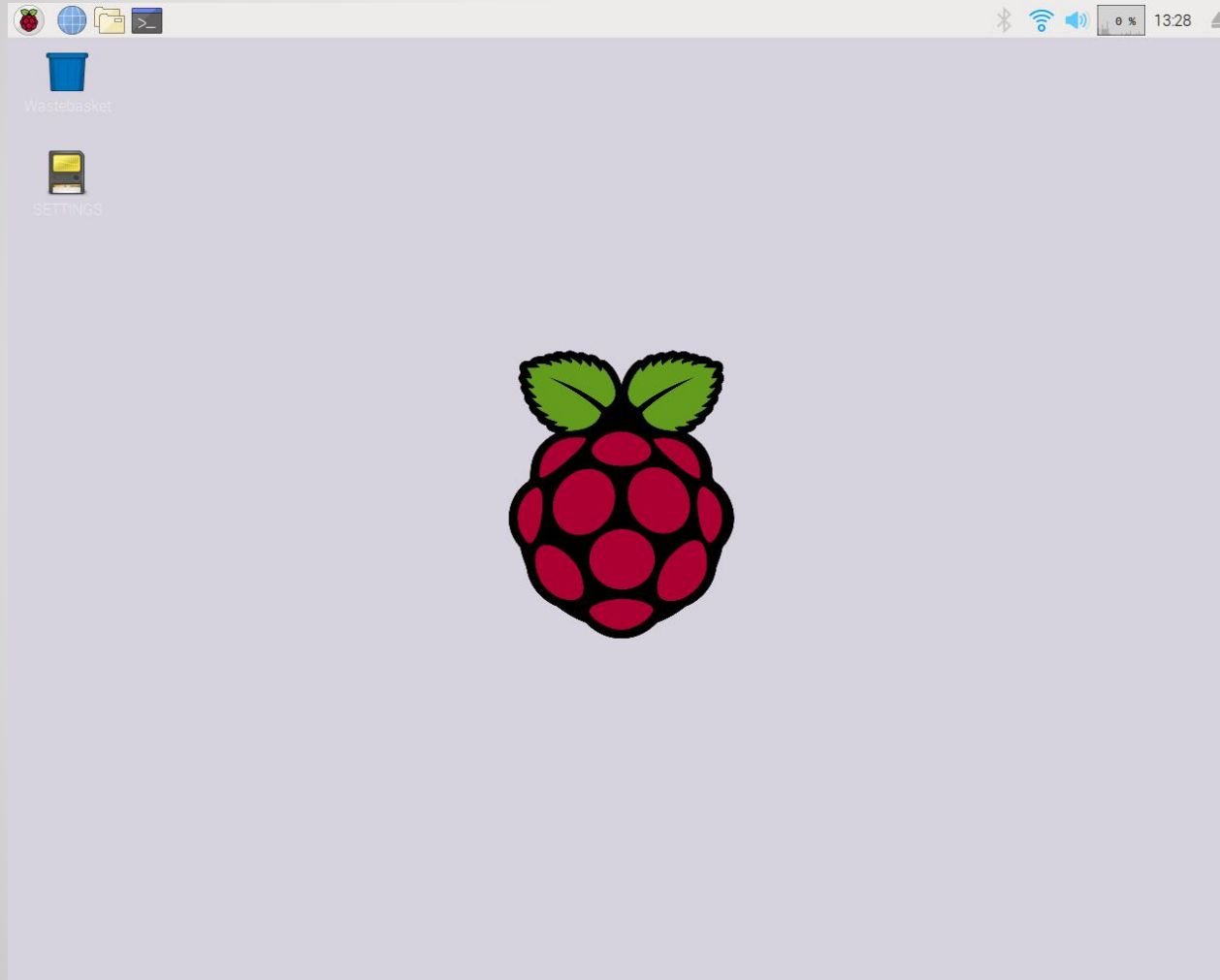
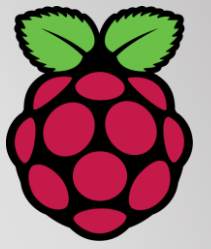
# Der Raspberry Pi



# Der Raspberry Pi

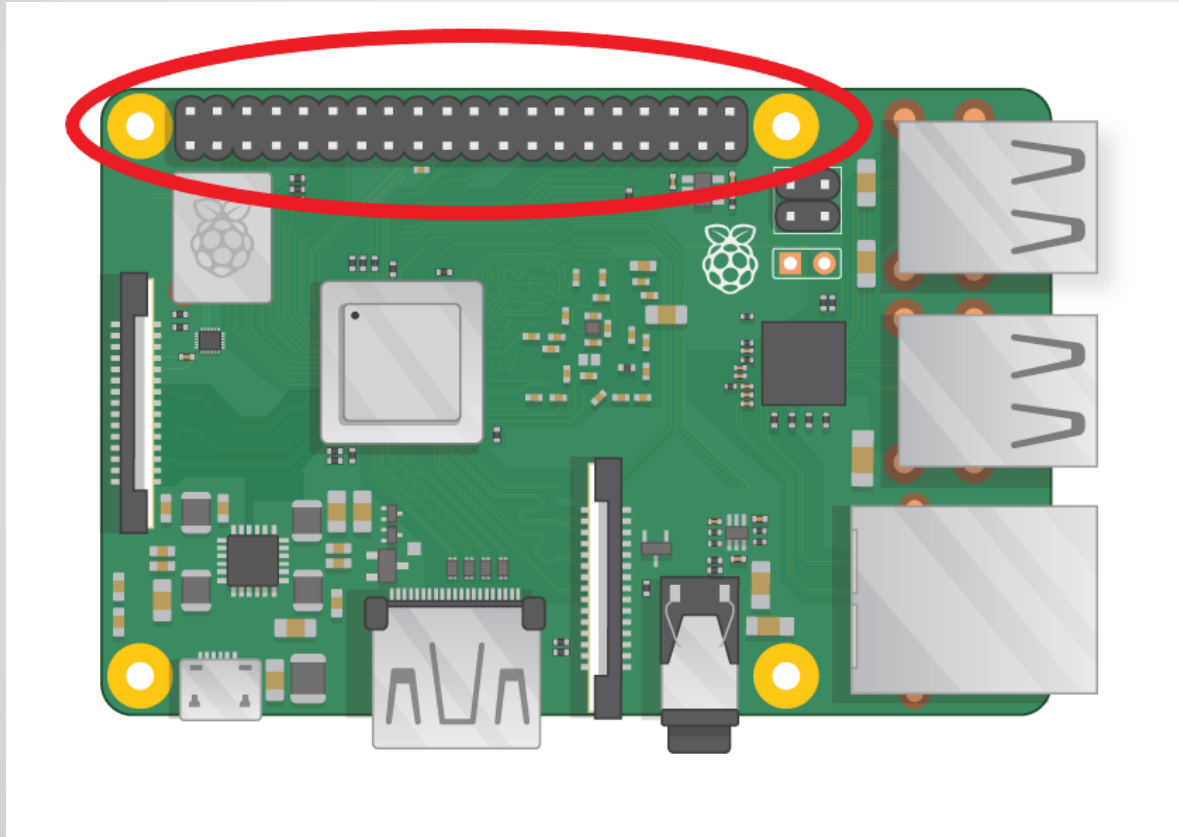
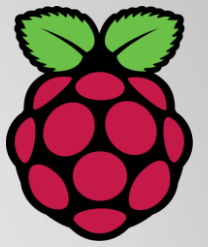


# Der Raspberry Pi



Allg. Paketverwaltung: apt  
Python Paketverwaltung: Pip3  
Python Umgebung: Python 3 IDLE

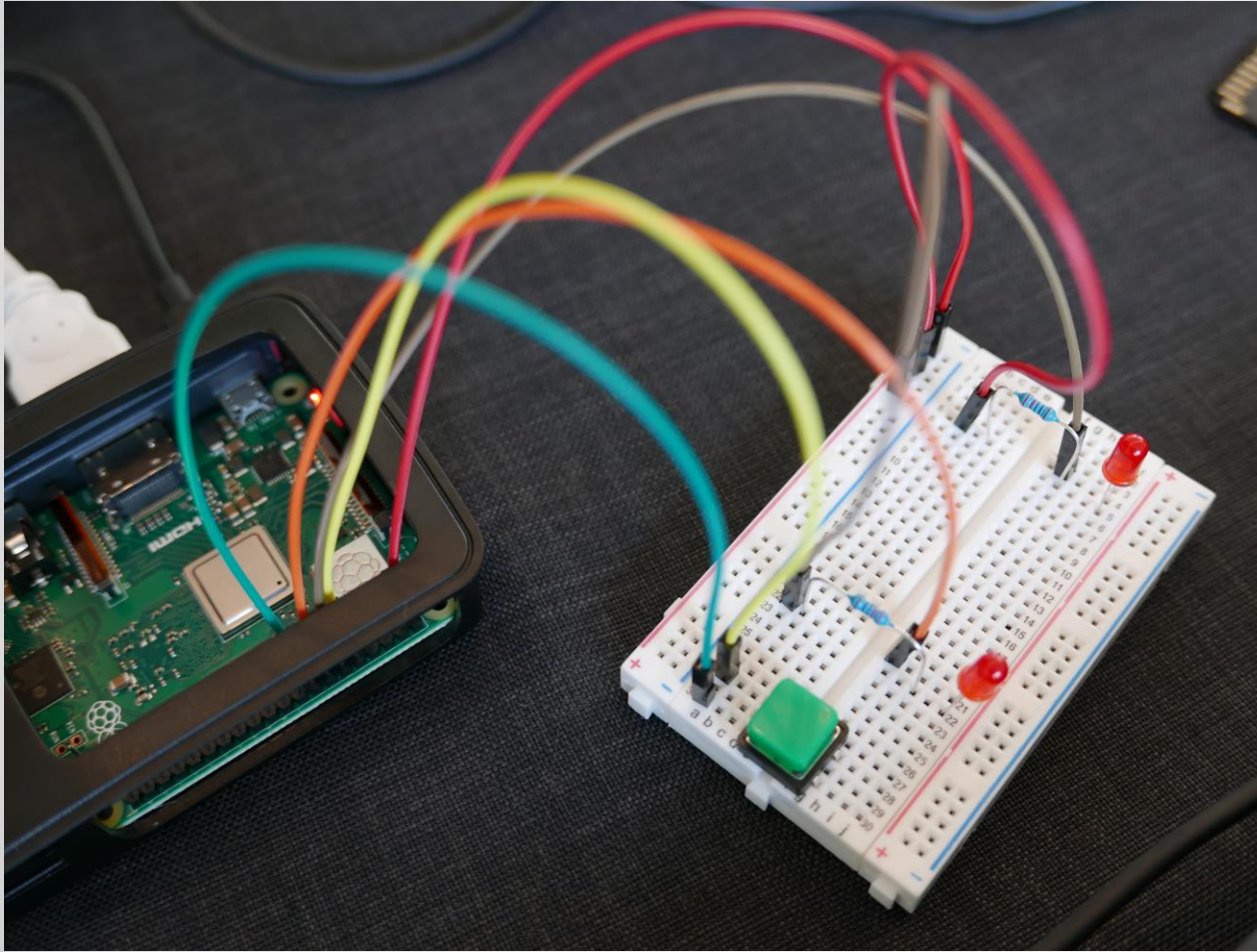
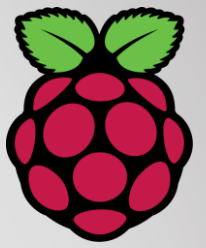
# GPIO-Pins



| J8          |        |    |    |        |             |
|-------------|--------|----|----|--------|-------------|
| Power       | +3,3V  | 1  | 2  | +5V    | Power       |
| {I2C} SDA1  | GPIO2  | 3  | 4  | +5V    | Power       |
| {I2C} SCL1  | GPIO3  | 5  | 6  | GND    |             |
| GPCLK0      | GPIO4  | 7  | 8  | GPIO14 | {UART} TXD0 |
|             | GND    | 9  | 10 | GPIO15 | {UART} RXD0 |
|             | GPIO17 | 11 | 12 | GPIO18 | PCM_CLK     |
|             | GPIO27 | 13 | 14 | GND    |             |
|             | GPIO22 | 15 | 16 | GPIO23 |             |
| Power       | +3,3V  | 17 | 18 | GPIO24 |             |
| SPI0_MOSI   | GPIO10 | 19 | 20 | GND    |             |
| SPI0_MISO   | GPIO9  | 21 | 22 | GPIO25 |             |
| SPI0_SCLK   | GPIO11 | 23 | 24 | GPIO8  | SPI0_CE0_N  |
|             | GND    | 25 | 26 | GPIO7  | SPI0_CE1_N  |
| {ID EEPROM} | ID_SD  | 27 | 28 | ID_SC  | {ID EEPROM} |
| GPCLK1      | GPIO5  | 29 | 30 | GND    |             |
| GPCLK2      | GPIO6  | 31 | 32 | GPIO12 | PWM0        |
| PWM1        | GPIO13 | 33 | 34 | GND    |             |
| PCM_FS      | GPIO19 | 35 | 36 | GPIO16 |             |
|             | GPIO26 | 37 | 38 | GPIO20 | PCM_DIN     |
|             | GND    | 39 | 40 | GPIO21 | PCM_DOUT    |



# GPIO-Pins



| J8          |        |    |    |        |             |
|-------------|--------|----|----|--------|-------------|
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| {I2C} SDA1  | GPIO2  | 3  | 4  | +5V    | Power       |
| {I2C} SCL1  | GPIO3  | 5  | 6  | GND    |             |
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# Flask Hello World

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