# Conclusion

In conclusion, the finished prototype satisfies all requirements. Regarding materials used for the construction of the model, medium-density fiberboard (MDF) can be used as a material for models due to its low manufacture time and high customizability, while polylactic acid (PLA) is more suitable material for more complex shapes like threads thanks to the 3D printing.

Moreover, PWM can be utilized for adjustment of color or brightness of LED, while transistor can be used as switches and amplifiers of current. Printed circuit boards (PCB) are a practical option for placing circuitry, while capacitors are able to reduce signal distortion.

Higher readability of code and easier assignment of coding tasks can be achieved by having multiple libraries each for different section of smart home. In addition, computer file organization was a key inspiration during the development of a menu structure.

High frequency of group meetings contributed to consistent progress. However, sensible deadlines could potentially enhance workflow in the group.

What’s more, members are now familiar with development of a technical project encompassing various aspects, meanwhile acquiring new knowledge and skills. Amongst newly acquired skills are: 3D design, circuit design, improved soldering, improved coding abilities and many more.

All in all, the project greatly contributed to evolvement of members’ hard and soft skills, while it familiarized members with the dynamic in a project group.