





DIPLOMARBEIT

Gesamtprojekt

ModTable

PLATZHALTER für (Bild, Grafik)
Aufbau, Schaltplan...
oder Logo

Team members:	Supervisor:		
Mayrhofer Sebastian	Dipl.Ing. Rusch Helmut Elmar		
Rankweil, on the 1.8.2023			
delivery note:			
DA original, on the 1.8.2023			
<u> </u>	Dipl.Ing. Rusch Helmut Elmar		
DA digital, on the 1.8.2023			
271 digital, on the 1.0.2020	Dipl.Ing. Rusch Helmut Elmar		





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Declaration under oath

I declare in lieu of an oath that I have written this thesis on my own and without any without any help from others, that I have not used any sources or aids other than those indicated, and that and that I have made the passages taken verbatim and in content from the sources used as such.

Rankweil, on the 1.8.2023	
	Mayrhofer Sebastian



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Abbreviations & Notes

GUI Graphical User Interface
OLED Organic Light-Emitting Diode - Wikipedia article



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1 Concept design

My final thesis, which i called ModTable, is a table which smartly adepts to the user. Its aimed to fix the most annoying things with modern tables: cables, design and the function that everything just works. I want to fix this with my project, where i want to build one complete package where everything is well integrated and easy to use for the end user. This product is aimed at a work environment, ideally in a individual office.

1.1 Functions

The Table should fulfill all basic functions of an office table so these are :

- 1. A external Monitor
- 2. Height adjustable Table
- 3. Camera System for Meetings
- 4. Microphone for Meetings

And some additional features

- 5. Status bar for notifications, timer, and calendar events
 - (a) Small OLED Screen for name of the event etc
 - (b) LED Bar for Status indication (embedded into the table)
- 6. Touch Screen inside the table for controlling all the functions

1.2 Milestones

The Project will be worked through in 3 Stages (Versions)

1. Version 1

In the first prototype version the basic functionality should be created, so these following functions should be met:

- (a) The screen should be able to adjust the table height
- (b) The screen should be able to control all connected devices (Camera, Microphone)
- (c) The connection from the table to the laptop should transmit the data for the Display and the connected Devices, and charge the device (Laptop)

2. Version 2

The second version should implement the aforementioned status bar, with the small OLED screen which should display the next calendar event or a timer, all of this should be controlled by the main control screen.





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3. Version 3

For the third version the table should be constructed an assembled, this milestone may be worked on parallel to the other versions so the sequence may not be correct.





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2 Abbildungsverzeichnis





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3 Tabellenverzeichnis





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4 Codeverzeichnis