

# ATALAS : LENDING AN EAR FOR MEN'S MENTAL HEALTH

Michalis Stavrou || Newcastle University || Newcastle Upon Tyne, UK || m.stavrou1@ncl.ac.uk

**INTRODUCTION** Upon addressing the subject matter of “data wellbeing for social good”, men’s mental health immediately provoked my inquisitiveness, referencing my personal familiarities and experiences with the struggles encountered by men. From time immemorial, humankind has blossomed on the unremitting exploitation of the efforts produced by men, however in this postmedieval era, the burden strapped to men by numerous societies and cultures across the globe has been substantially enlarged the last few decades. In the fullness of time, the collective expectations and challenges faced on a day-to-day basis, have a detrimental influence on the wellbeing of these individuals. Countless desperate men are being led to the end of the line, upon which they undertake some radical actions, namely putting an end to their own lives. In the interest of preventing the aftermath from the long-lasting effects of poor mental health, these men must be ensured to be provisioned with suitable support.

**LITERATURE REVIEW** The piecework was profoundly stimulated by the efforts of the Canadian clinical psychologist, author and media personality, Jordan Bernt Peterson, [1] a prevalent personality that confronts more than a few controversial and sensitive gender-related subjects that have enticed a solid following of young individuals. [2] Amongst these, Peterson frequently speaks about depression and suicide, having experienced himself a personal life-long battled against depression. [3] Peterson describes depression as an inflammatory diseases that drives individuals to a clouded secluded state of mind far beyond imagination, with cases at times

being unreachable to prevent the foreseeable outcome from transpiring. [4] On another note, Peterson indicates that despite women attempting suicide more frequently than men, due to domineering levels of anxiety and depression, men in fact commit suicide immeasurably because of the usage of lethal means. [5] Whilst depression and anxiety can affect everyone equally, in accordance with field studies, young male individuals commit suicide about three times more than female individuals, racking about three quarters of

suicide deaths. [11] In 2021, out of about 5200 suicides recorded in England, about 3800 of those were committed by men. Male suicide rates were observed to be substantially great, between the age groups of 20-44 and 60-64, peaking at the age group of 50-54. [6] Other studies have revealed that three in four men acknowledge to having previously suffered from the effects of depression, [7,8] with about four in ten men regularly feeling troubled, out of which one in ten men potentially having suicidal manifestations. [11]

Peterson emotionally expresses that many of these young individuals have not had a real word of encouragement in their entire life, that would permit them to mend themselves to a relatively straight path. [10] Studies reveal that about 40% of men refrain from engaging in dialogue regarding their mental wellbeing, a subsequent consequence of the assigned societal gender positions that



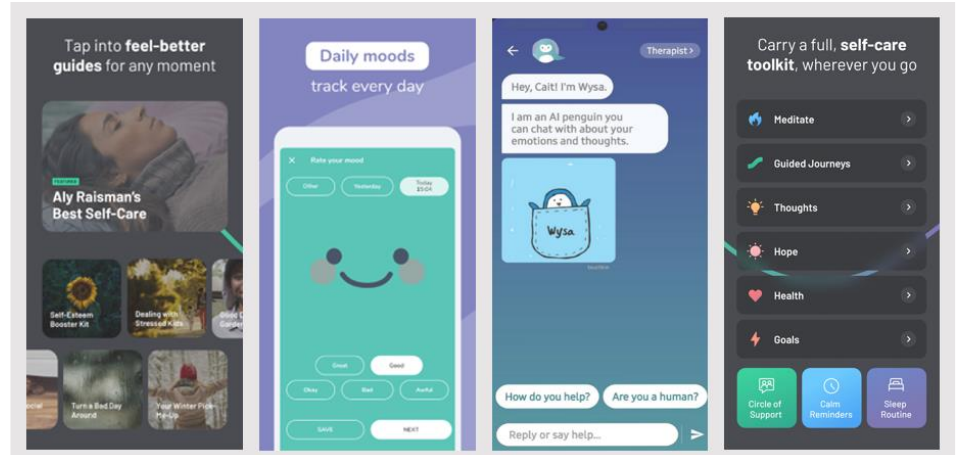
discourage men from communicating emotions that exhibit weakness. [8,9] With almost one in three men being too embarrassed to pursue apposite support [11], Peterson propels the surrounding social circles of these individuals to contribute by encouraging them to seek the necessitated support, either from friends or medical professionals or at the very least, be there to lend an ear. [4,9] Despite health professionals being frowned upon by men [11], especially regarding the potential side-effects of antidepressants, one side-effect of this increasingly alarming phenomenon is that there no recovery. [4]

Just as importantly, Peterson invigorates young individuals that have the drive to undertake their depression, to establish some sort of step towards a solidified objective, in belief that small accumulating advances can be unbelievably effective. By identifying a sequence of objectives and choosing to carry out the least objectionable, only then will the emotional drives of an individual be persuaded into believing and striving towards something. [12]

**STATE OF THE ART REVIEW** Before proceeding, an investigation was conducted on publicly available systems and solutions within the space, starting off from my mobile applications. High-rated mental health related applications were explored to identify potential recurring features, patterns and shortcomings. The process encompassed the selection of three applications (*MyPossibleSelf*, *Wysa*, and *Sanvello*), upon searching the term “Mental health apps” on Google Play. Common features identified:

1. Useful information (*library of general information and guidance*)
2. Self-care guidance (*sequence of tools to take care of yourself*)
3. Progress tracker (*regular tracking of the mental wellbeing*)
4. Contact support (*exchange of dialogue*)

Despite the applications aiming towards the provision of support on different levels, there is a noticeable lack of usage engagement.



Once the individual discontinues engagement from their behalf, interaction between user and application becomes rather challenging, as there is not any actual enticing motives to motivate an individual to expend effort.

Other analogous mental health related systems encompass a rather broad range of interactive devices, predominantly wearables. These devices attempt through the employment of distinct technologies, to embark upon critical symptoms emerging from poor mental health, for instance regulating stress levels, sleep, emotions, etc. In a similar fashion, these devices ensure in common that the individual is supported accordingly by keeping track of progress. [13,14]



**USER PERSONAS** Personas were produced to completely comprehend the necessities, experiences, behaviours and objectives, of the anticipated user group.

Focus was particularly placed on individuals who are undergoing a challenging time in their life and are looking to make a change. The persona of Dimitri refers to an isolated young male individual who has not been successful in his goals and ultimately given up. On the other hand, the persona of Thommas refers to a middle-aged individual suffering the collapse of his marriage and the relationship with his beloved children. Both these individuals hesitate and discard the mere thought of pursuing the necessitated support, either from friends or a professional.

Key takeaway is the exploration of a solution that omits any potential internal or external support and is utterly responsible for relieving the individual from the effects of the symptoms experienced.

## DIMITRI BROFLOVSKI



AGE	26	LOCATION	London, UK
OCCUPATION	Unemployed	EDUCATION	HSD
STATUS	Single	ARCHETYPE	Jester

### BIO

Dimitri is a 26yo long-lasting unemployed young man, who currently resides in London. Following his early dropout from university, he has been stagnant ever since, having no specific objectives in life. In spite of few attempts made at locating employment, Dimitri was struck repeatedly with rejection due to the lack of necessary qualifications.

Nowadays, Dimitri can be found dillydallying in his day-to-day routine, waking up late and playing video games in his room. Although lately, he has been observed to have isolated himself socially, and further exhibiting signs of aggressive behaviour towards his family. Deep down, whilst Dimitri refuses to receive the corresponding support from a therapist, he yearns for other means that would permit him to break loose from the 'prison' he feels entrapped in.

### PERSONALITY



## THOMMAS COOPER



AGE	55	LOCATION	Manchester, UK
OCCUPATION	Civil engineer	EDUCATION	PHD
STATUS	Divorced	ARCHETYPE	Caregiver

### BIO

George is a 55yo man, occupying a managerial position at a large corporation in Manchester. Whilst being an utterly active individual, with numerous pastimes, George ensures that the spotlight of his life is captivated by his children. The last couple of months however, his wife decided to proceed with a divorce, subsequently influencing his bond with his children.

In due course, George developed severe stress, accumulating clouded emotions and thoughts, and eventually exhibiting signs of depression. Overwhelmed with bitterness, ingratitude, resentment, and frustration, George comprehends that he needs some means to exert some pressure. Nonetheless, considering the possibility of others labelling him as pathetic, George lacks the courage to pursue any support offered.

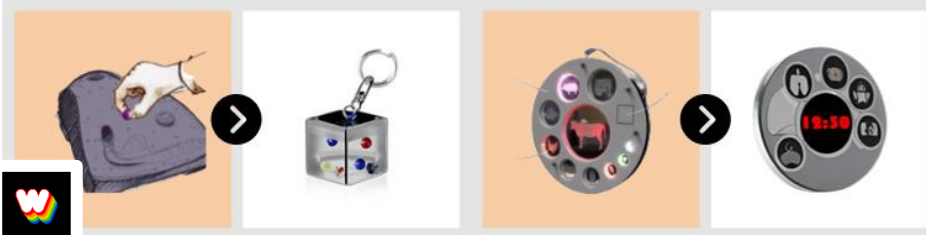
### PERSONALITY



**IDEATION** Following the classification of the research findings, two predominant approaches have been deduced, permitting the provision of suitable support for men. The first approach encompasses the encouragement of individuals via the employment of objectives, whereas the second approach embroils encouragement via communication means.

**APPROACH #1 : ENCOURAGEMENT VIA OBJECTIVES** At the outset, brainstorming centred the development of a concept that necessitated the vigorous engagement of an individual, by carrying out a sequence of objectives on a day-to-day basis. The core notion is that the individual is frequently prompted of what objectives to accomplish throughout the course of a day, and essentially keeping track of progress as well as progress concerning with the wellbeing of the individual.

Bishop's Marble Answering Machine concept was employed as a mental model to create the concept of a marble management system. With each marble representing an objective, the individual would be permitted to envision the objectives at hand and engage with these marbles upon completion of objectives. Of course, the concept was immediately rejected due to complexity of such a system. An alternative solution was formed by employing the Econundrum device as a mental mode. The device would permit the envisioning of objectives and their status, through the showcase of a sequence of icons. Nevertheless, the concept was likewise rejected as the overall approach was deemed not effective, particularly in captivating the engagement of the individual.



**APPROACH #2 : ENCOURAGEMENT VIA COMMUNICATION** The intention within this approach was to primarily eradicate the shortcomings of the aforementioned approach. Nonetheless, communication can encompass the provision of support that can be outsourced within the social environment of an individual or from a third party, namely a therapist. Even so, bearing in mind that young male individuals encounter complications expressing themselves, in addition to the likelihood that an individual may possibly be deprived of that type of support, it was determined to follow a pathway based on limited to none human support.

Voice assistants such that is Alexa, could be employed to develop a companion concept that expands upon the exchange of ideas, processing information in an endeavour to mend the wellbeing of an individual. Fundamentally, the concept of a companion implicates autonomous devices that would permit playful interaction and communication, likewise to desktop robot companions such that is Vector, Emo and Eilik. In this manner, engagement would be instigated by the companion, forming a reciprocal connection with the individual.



**BRANDING** The device was emblematically baptised **AT-ALAS**, deriving from the term "alas", referring to the expression of unhappiness, pity or concern [15], as well as the name of the Greek titan "Atlas" who was the embodiment of endurance as he was burdened with carrying the heavens upon his shoulders. [16] The voice companion likewise adopted the name Alas and envisioned to embody the appearance of an emotional support animal. These types



of animals are known for dealing with medically diagnosed disabilities, regardless of significance, through the provision of care and company. [17] Finally yet importantly, for the development of a well-grounded and recognizable theme, the color pallet was based on the green ribbon employed for mental health awareness. Gamification was further applied to permit playful and pleasant interactions, encouraging the predominantly intended male audience.

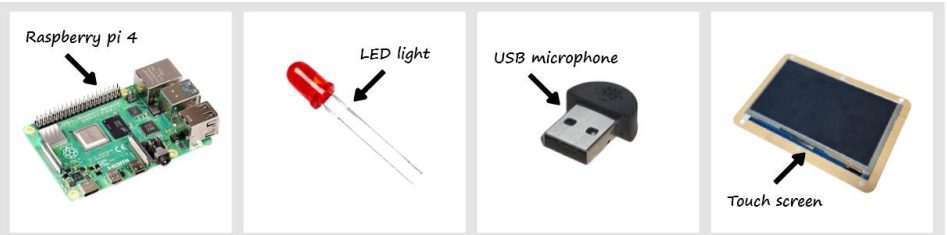


## CONCEPT DESIGNS

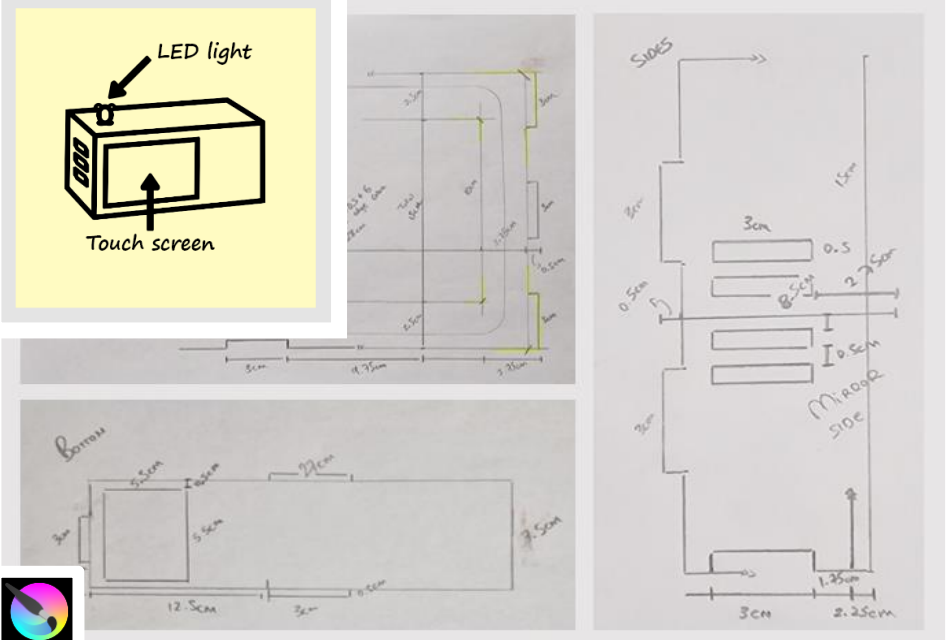


## FEATURES N' COMPONENTS

- ❑ Raspberry Pi 4
- ❑ LED light (utilized to indicate voice companion communication)
- ❑ USB microphone (utilized to record user voice)
- ❑ Touch screen (utilized to display User Interface)

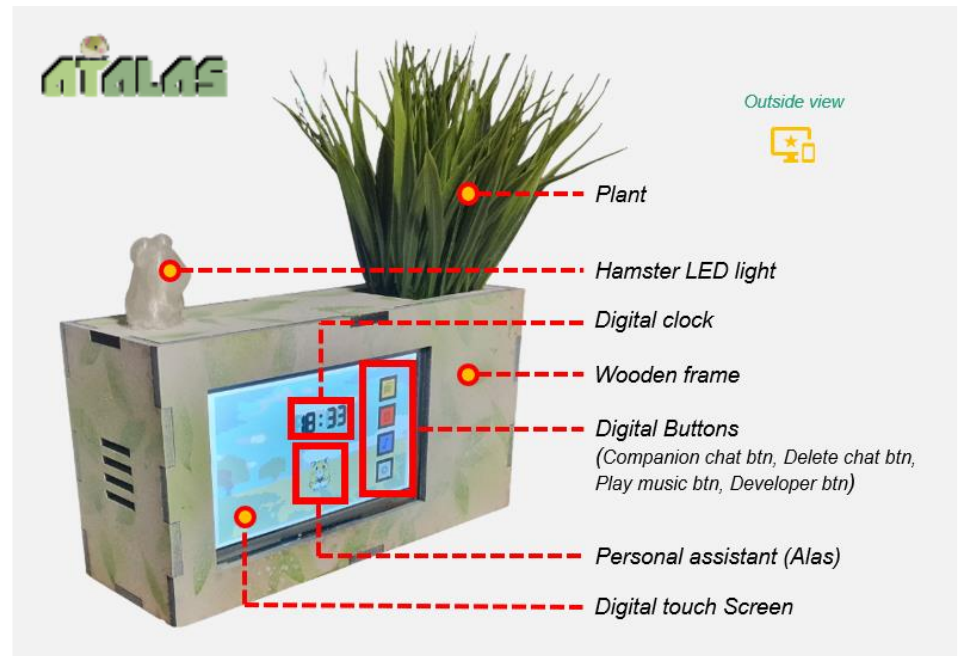
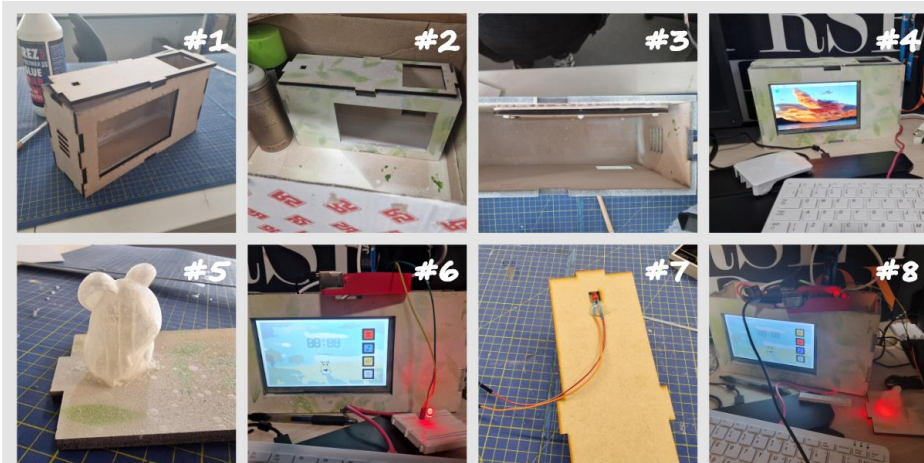


## CONCEPT SKETCHING



**CONCEPT PROTOTYPING** Configuration of the Raspberry Pi was performed by following the instructions in the article “I<sup>2</sup>C Communication Using Node.js and a Raspberry Pi”, published by elektor magazine. [18]

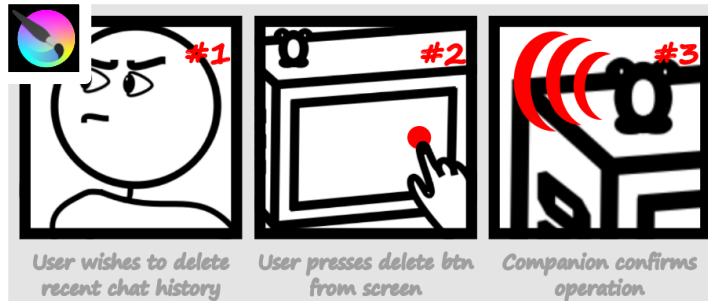
**GITHUB REPOSITORY:** <https://github.com/Khura1/Atalas>



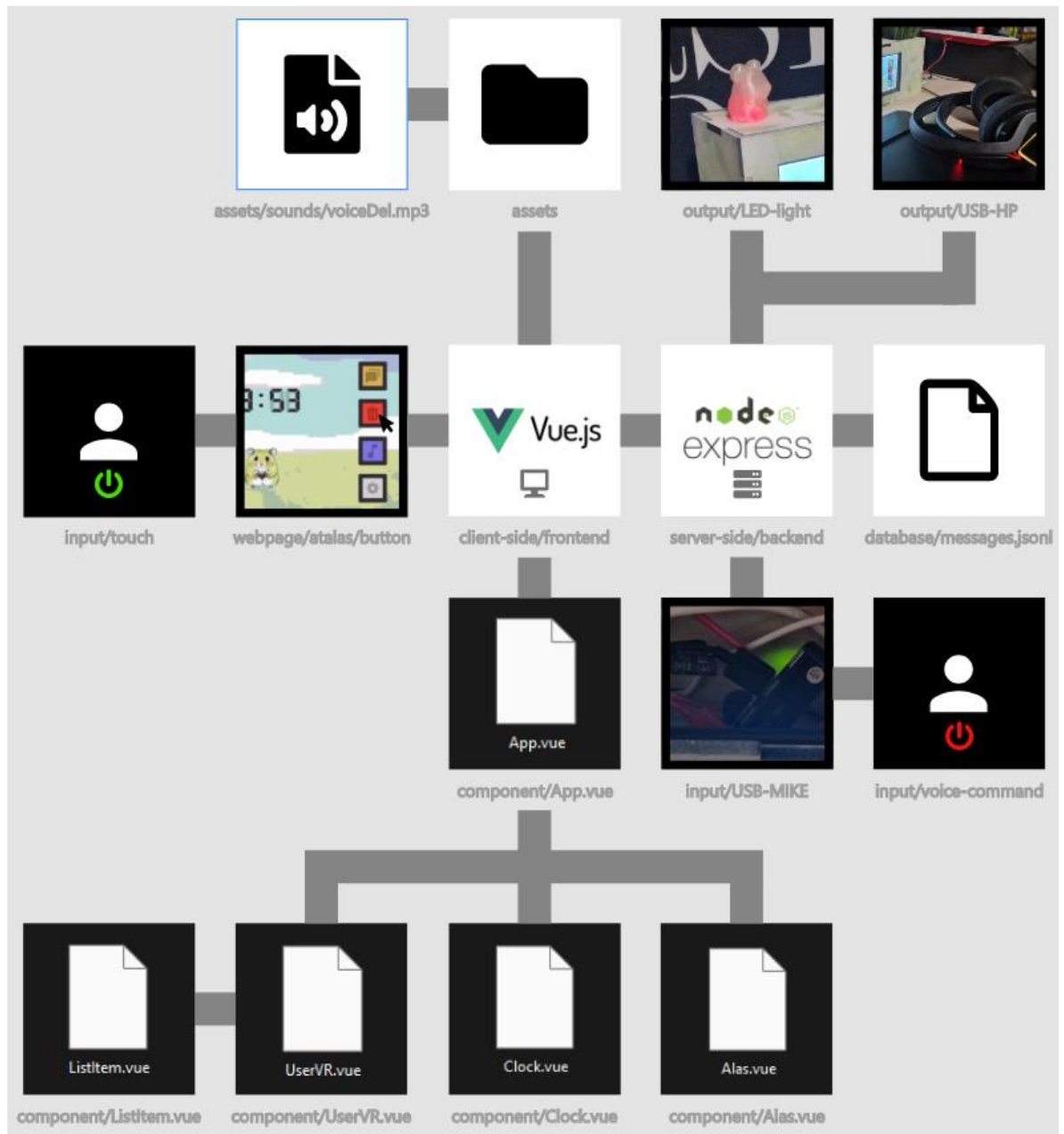
**OPERATION N' USE** Atalas at the present time runs Nodejs and Vue on separate ports, and encompasses three primary operations:

1. Chat with voice companion
2. Delete recent chat history w/ voice companion
3. Play music from playlist

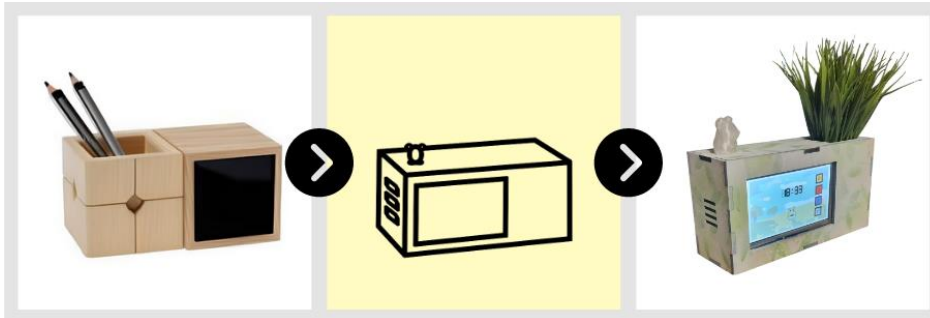
To comprehend how each individual operation functions internally, a walkthrough of the delete operation is conducted from the user's perspective.



As observed, the operation is alternatively conducted by means of the touch screen, due to the incompleteness of the speech recognition feature. Real-time speech recognition would be available by employing AssemblyAI to convert speech to text transcriptions, and thus permitting the use of voice commands via the USB-Mike. Although, the system responds applicably, through the indicative hamster LED and audio received from a USB-HP connected to the Raspberry Pi. Concurrently, the preceding chat transcription is removed from the text-based jsonl file responsible for withholding the database of the system. In the same manner, all operations are carried out under this procedure structure.







## REFERENCES

- [1] Ephson J., Main N., Shkhurtaj T. (2022, Jul 9). Who is Dr Jordan Peterson and what happened to him on Twitter?. The Sun. URL: <https://www.thesun.co.uk/news/17558439/who-is-clinical-psychologist-dr-jordan-peterson/>
- [2] Psychologies. (2018, Oct 16). Jordan B Peterson: a conversation around men's mental health. URL: <https://www.psychologies.co.uk/jordan-b-peterson-a-conversation-around-mens-mental-health/>
- [3] The Weary Christian. (2018, Jul 11). Jordan Peterson on his depression (and what's helped). URL: <https://thewearychristian.com/jordan-peterson-on-his-depression/>
- [4] Truthspeak. (2018, Apr 29). Jordan Peterson on Depression and Suicide. YouTube. URL: <https://www.youtube.com/watch?v=QeYPah4mxj4>
- [5] Modern Wisdom. (2023, Jan 20). Jordan Peterson on Why Men Commit Suicide!. YouTube. URL: <https://www.youtube.com/watch?v=PFwUU1sYJvE>
- [6] Samaritans. (2021). Suicides in England. URL: [https://media.samaritans.org/documents/Suicide\\_Stats\\_England\\_2021.pdf](https://media.samaritans.org/documents/Suicide_Stats_England_2021.pdf)
- [7] Priory. (2023). Why Are Suicides So High Amongst Men?. URL: <https://www.priorygroup.com/blog/why-are-suicides-so-high-amongst-men>
- [8] Priory. (2023). Men's Mental Health: 40% Of Men Won't Talk About Their Mental Health. URL: <https://www.priorygroup.com/blog/40-of-men-wont-talk-to-anyone-about-their-mental-health>
- [9] Circle Health Group. (2023). Men and mental health: a damaging stigma. URL: <https://www.circlehealthgroup.co.uk/health-matters/mens-health/men-and-mental-health-a-damaging-stigma>
- [10] Kerry Terry. (2022, Aug 19). Jordan Peterson on suicide among men. YouTube. URL: <https://www.youtube.com/watch?v=krBfZCn-rxg>

**DISCUSSION** The development process was principally carried out effortlessly with a solution reached as premeditated, however some inevitable complications and unpredictable events did emerge. Setting off, the preliminary configuration of the digital screen proved to be rather challenging and necessitating extensive research and assistance to conclusively establish the connection with the Raspberry Pi. Another complication that was encountered with disappointment encompassed the configuration of the Raspberry Pi to automatically run the Nodejs and Vue ports upon startup of the device. The fruitless attempts led to the mere configuration of the device to launch the client-side in full screen mode. Final yet equally significant, trivial complications were encountered with permitting communication between the client and server, due to the running of separate ports/directories.

Even so, the insights and efforts within this piecework can be expanded upon to materialize a fully-fledged personalised companion that would be capable of provisioning the corresponding support to an individual. In belief that AI can substitute human presence, voice assistants could potentially shapeshift the relations between humans and technology.

**END**



- [11] Street T. (2022, Jan 19). How to support men around you with their mental health. Lloyds Pharmacy. URL: <https://onlinedoctor.lloydspharmacy.com/uk/mental-health-and-wellbeing-advice/support-mens-mental-health>
- [12] MulliganBrothers. (2018, Aug 22). WATCH WHEN YOU FEEL LIKE GIVING UP! - Best of Jordan Peterson Greatest Advice. YouTube. URL: [https://www.youtube.com/watch?v=dsSV3wVN\\_yE](https://www.youtube.com/watch?v=dsSV3wVN_yE)
- [13] Aayushi K. (2022). 6 Best Wearable Tech Devices For Improving Mental Health. Calm Sage. Calm Sage. URL: <https://www.calm sage.com/wearable-devices-help-with-mental-health-issues/>
- [14] Wadowsky L. (2020, Oct 27). These IoT devices can improve your mental health. The Gadget Flow. URL: <https://thegadgetflow.com/blog/iot-devices-for-mental-health/>
- [15] Merriam-Webster. (2023). Alas interjection. URL: <https://www.merriam-webster.com/dictionary/alas>
- [16] Atsma A. (2017). ATLAS. Theoi. URL: <https://www.theoi.com/Titan/TitanAtlas.html>
- [17] ESA Doctors. (2023). Can a Hamster Qualify as an Emotional Support Animal?. URL: <https://esadoctors.com/hamster-emotional-support-animal-qualify/>
- [18] Bigrat F. (2023, Apr). I2C Communication Using Node.js and a Raspberry Pi. Elektor Magazine. URL: <https://www.elektormagazine.com/magazine/elektor-292/61510>

## APPENDIX

### GITHUB REPOSITORY

<https://github.com/Khura1/Atalas>

**STATEMENT OF CONTRIBUTION** This piecework was accomplished solely by the efforts of Michalis Stavrou.

**REFLECTION** In accordance with the solution proposed in the preliminary phase, I can confidently state that the device reached a rather satisfying outcome. It must be admitted that the solution necessitated the acquirement of new expertise and knowledge that derived from previous projects undertaken. The employment of the Raspberry Pi permitted the selection from numerous opportunities available, enforcing the growth of my limits, as the Micro: bit was rather restrictive regarding that.

Apart from the hands-on challenges encountered along the road, undertaking a project of this scale by myself was certainly rewarding, however definitely reminded me that teamwork makes the dreamwork. The flow of thoughts, ideas and labour was observed to be utterly slow and time-consuming, leaving little to no time for venturing deeper into the solution. All the same, the remarkable opportunity to embark completely on all the different development phases, permitted me to conquer my uncertainties coming into this project.

All in all, the scale, complexity and innovation necessitated by this project contested my competence of reaching such great standards, by advancing upon previously acquired experiences and knowledge.