

Q QANTAS ASSURE.

NEC \ Orchestrating a brighter world

DESIGN BRIEF

INTERACTIVE PRODUCT DESIGN

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QUT

DNB603 | INDUSTRIAL DESIGN 6 | N9182161

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INTRODUCTION

Wellness is defined by being a conscious, self-directed and evolving process for a person to achieve their full potential. By giving a person confidence in their day-to-day lives it can enable them to achieve great things. A person's ability to remember is what defines them. If an adult forgets something, such as dates and times it can be detrimental to their work and their own mental state. It's not just being late to an event, it's what happens consciously to the person. Feelings of regret, uselessness and idiocy can be felt by anyone that forgets important information. This problem of forgetfulness is the target of design.

AIMS

The aim of this project is to design a product that will improve the user's wellbeing by giving them confidence in their work and social lives.

OBJECTIVE

This aim will be achieved by providing the user a product that will assist them with remembering Names and important information in their professional life.

PURPOSE

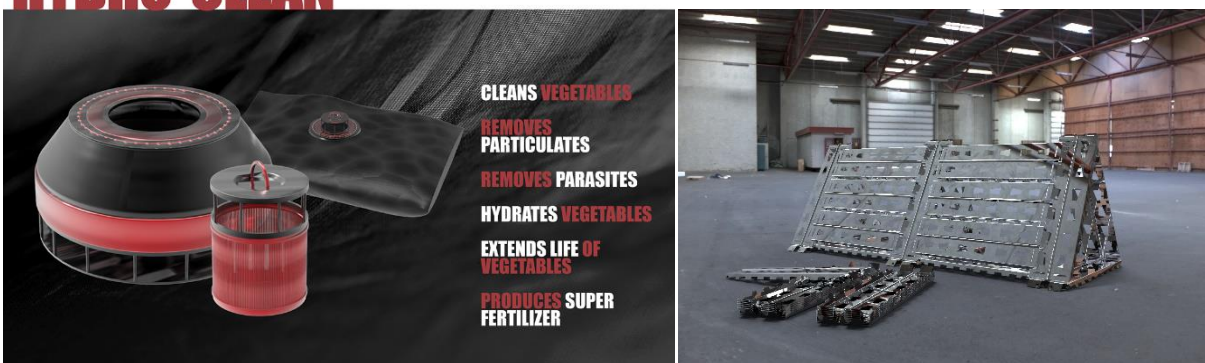
The purpose of this product is to enhance the mental wellbeing of the user through giving them confidence in their lives by enabling them to **remember more and forget less.**

DESIGN PROFILE

SPECIALISATIONS

Jack Gurr Design's has been involved with numerous projects that include; Kitchen Products, Flooding Solutions, Advertising Campaigns and Mass Transport Systems to name a few. In small to large scale work this design firm has produced only extremely high quality designs for future users.

HYDRO-CLEAN



DESIGN PROFILE

To see an in-depth look into what previous designs and work that has been developed you can have a look at the digital portfolio at Behance.com by following the link: <https://www.behance.net/jvgurr98e1>

COMPANY NAME

Jack Gurr Designs is the company that will be producing the design work for the client and their partners. If these clients or partners would like to monitor the progress of the design, they can visit the firms design blog which gets updated weekly with research and concepts. You can find this blog by following the link:

<https://jackgurr.wordpress.com>

CLIENT PROFILE

The Client is NEC Australia in partnership with the Qantas Assure Wellness Program.

BACKGROUND

NEC Australia is a leading technology company. They aim to deliver innovative solutions to help customers gain greater business value from their technology investments. This customer focused attitude gives it a great bond with their partners in the Qantas Assure Wellness Program. This program started by Qantas Australia promotes Wellness through technology and future products. With this information gathered through these devices Qantas can better serve their loyal customers.

PRODUCT RANGE

NEC produces a variety of quality electronics that include; displays, monitors, projectors, phones and handsets that are touch enabled. With their 45 years of technological manufacturing prowess, NEC has the global capacity to produce millions of units nationwide.

Qantas Assure Wellness Program is a health insurance scheme that helps individuals stay well and active. They do this through developing products to give to customers when they sign up for their insurance. One such promotion they have going at the moment is that they are giving customers a free Apple Watch that will send Qantas information about their activities. With this information Qantas gives the customer Qantas Points and other rewards for the amount of physical activity they do.

DESCRIPTION OF MARKET

NEC has offices in 45 countries around the world where they employ over 109 000 workers. NEC Corporation also has a Net Revenue of \$36.9 Billion since in 2013. Qantas is a diverse corporation that has seven different Subsidiary companies that include the popular Airline, QantasLink, Q Catering, Qantas Freight, Express Ground Handling, Qantas Holidays and Jetstar.

PROBLEM STATEMENT

DESCRIPTION

The issue of forgetfulness affects everyone regardless of age or sex. A person's mental state can be affected negatively by this. The feeling of uselessness when you forget an important meeting or the name of the host of that meeting. This is an example of a situation where the user faces on a weekly or even daily basis. By removing these negative feelings from their lives it can have appositve effect on their wellness.

POTENTIAL OPPORTUNITIES

Possible design opportunities will include devices that can make it easy and efficient to take down reminders. These reminders can be accessed at a later date. This removes the need for crude reminders like writing on one's hand or bits of paper. Other opportunities could include memory exercises that could improve the person's ability to remember

things over a duration of time. Any device that reduces the amount of, “damn, I forgot that” moments. Thus helping the person gain more control over their wellness.

DESIGN CRITERIA

USER DEMOGRAPHIC

The user demographic will include current young people from Gen Y, which means that in 10 years’ time when the product will be in the market the user will be in their early 30’s. The product will be for any sex and culture. These people will be in a full time position at work. They are in a field of work where dates, people’s names, phone numbers must be remembered. They are looking to becoming more focused in their day-to-day life. They are also looking to reduce the amount of negative thoughts brought about by their forgetfulness.

PERSONA

Jordan Gurruford is the focus user. He suffers from lack of sleep due to his work hours being long, he doesn’t get to move around much at home or work, and he lacks motivation outside and inside work, when he does get free time at home he spends it sitting down drinking alcohol. All of these life choices feed into his forgetfulness which is a day-to-day battle.

He wants to have a healthier life. He wants to be more productive and clear headed. He also wants to be able to communicate better with his co-workers, rather than forgetting their names constantly.

Persona

Jordan Gurruford

Age: 31 (In 2026)
Sex: Male
Hobby: Game, TV
Income: \$130,000 Per Year
Living location: Outer Suburb
Occupation: Software Engineering



USER REQUIREMENTS

This user group will need a base level of competence with technology. The user needs to have the physical abilities of a 1st percentile male or female. They need the basic dexterity to manipulate electronic devices that can be found in 2016. The user may also need to have access to a smart phone to use additional features of the product.

FORM AND FUNCTION RESOLUTION

The form will follow a modern look as the device will be sold in 2026. The product will come in a variety of materials and colours to suit the The functions of the device will be to remind the user of names and information relating to those names at any time.

CULTURAL AND ENVIRONMENTAL REQUIREMENTS / CONSIDERATION

The Australian environment has to be considered when realising this device. The Culture of Australia compared to other countries is one of diversity. People from different nationalities make up a large portion of the Australia's people. Thus the design must be accessible to any person regardless of their cultural background

MATERIALS AND MANUFACTURING

Materials and the manufacturing process will be of high quality for the product when being developed.

SYSTEMS DESIGN

The system in place for the product might be woven into already existing products. Smart phones may give the user an extra level of information for the user to implement in their lives. Other devices such as computers may give the user larger portions of data to analyse.

SAFETY

The safety of the person using this product and for the people around the user will be prioritize accordingly. Thus no harm will come to the user or people around the user.

SUSTAINABILITY

From when the materials are dug out of the ground to when they are smelted into raw metals, all the way to when these metals are formed to make the product; Sustainability for the future will be paramount. The recyclability of the product will also have to be a focus.

MAINTENANCE

As little maintenance as possible will be required by the user. This will reduce the need for extra components or disposable materials.

TESTING REQUIREMENTS

The product will be tested by those that originally did the Model of Goal Directed Behaviours survey. This will help determine if the product has sufficiently helped them. Testing will also further the designs progress as issues that arise can be dealt with.

DESIGN PROCESS

INITIAL BRAINSTORMING

The initial brainstorming found that there are many aspects of this problem to face. one of the first concepts that where thought of was a stylus that could be used to record information by writing on any surface. The user could write

a list out and it be transferred to their phones for later review. Feasibility was an issue as the sensors and coded needed to produce a prototype would be out of scope with this project.

A more feasible option was the idea to make a recording device out of a ring. Making the look ring look as discrete as possible to reduce the amount of attention the user gets. The device will be activated when the user shakes hands with another person. This ring records the conversation and stored on the person’s phone. It will be stored as text rather than audio.

RESEARCH

Research regarding the user and other aspects of the design include; The user, the current marketplace, technology, the user experience and the product ecosystem. From the gathered information that you can find in this research report we come to some conclusions.

IDEATION

INITIAL CONCEPT PRESENTATION

DESIGN DEVELOPMENT

FINAL PRESENTATION

DELIVERABLES

GANTT CHART

Time Management Sheet (Gantt Table)

	Connor Crawford (CC)		Jack (JG)		Narissan Irlen (NI)		Peter Cho (PC)	
WEEK	1	2	3	4	5	6	7	8
DESIGN BRIEF	JG Started	JG	JG Draft	JG Due	JG	JG	JG	JG Check
BLOG	JG	JG	JG	JG Due	JG	JG	JG	JG
RESEARCH REPORT								
- USER	NI, PC, PC, JG Started	NI, CC, PC, JG	NI, CC, PC, JG Draft	NI, PC, PC, JG Due				
- MARKET	JG Started	JG	JG Draft	JG Due				
- TECHNOLOGY	CC Started	CC	CC Draft	CC Due				
- EXPERIENCE	NI Started	NI	NI Draft	NI Due				
- PRODUCT ECOSYSTEM	PC Started	PC	PC Draft	PC Due				
- Introduction/ Conclusion	NI, CC, PC, JG Started	NI, CC, PC, JG	NI, CC, PC, JG Draft	NI, CC, PC, JG Due				
Initial Concepts								
- Concept Dev			JG Start	JG	JG	JG	JG	JG
TECH TASK								
- Arduino Model				JG Start	JG	JG	JG Due	
- Final Model								
WEEK	9	MID SEM BREAK		10	11	12	13	
DESIGN BRIEF						JG Add more	JG Due	
BLOG	JG Check	JG	JG	JG	JG	JG	JG Due	
DESIGN FREEZE	Due							
FINAL DESIGN								
- Concept Dev								
FINAL PRESENTATION							JG Due	
- Development								
- Final Model								
Final Concepts								
Design Freeze								
Final Designs								
Presentation								
- Posters								

GOALS/ MILESTONES AND DELIVERABLES

1. RESEARCH REPORT – This research report will analyse the gaps in the market and help to evaluate what product needs to be deigned in the first place.
2. DESIGN BRIEF– Research will be compiled and a design brief will be drafted
3. INITIAL CONCEPTS TO FINAL CONCEPTS –Concept development will start. These initial concepts will be followed up by the final design.

4. **FINAL DESIGN** – The final design will be CADed up and rendered
5. **WRITE DESIGN SPEC** – Develop the final design into spec drawings
6. **UPDATE DESIGN BRIEF/NEW PROPOSAL** – The design brief will be updated with new information about the design and proposal
7. **DETAILED DESIGN / DESIGN ENGINEERING** – The final design will be created in high fidelity with all features in place.
8. **MODELLING** – The product will be assembled through modelling techniques
9. **TEST** – This finalized design will go through rigorous testing to determine any flaws.
10. **PROTOTYPE** – The design will be made into a working prototype.
11. **SUBMISSION** – after the product has been completely tested it will be submitted to NEC and Qantas for review

ANALYSIS

RISKS AND BENEFITS

There will be little to no risk in using the product. Any that arise in the development cycle will be removed or reduced to a degree that will be satisfactory to the client. The benefits the user will be massive. Ranging from a more positive outlook on remembering things to physical changes in the person manner as they get to enjoy life further.

LIMITATIONS OF DESIGN

A limitation of the design may be that it can't reduce the number of things a person forgets to zero. This will be due to a number of factors out of our control. Such as how the person interacts with the device, the environment it is used in and when it is used.

MITIGATION OF ISSUES

To reduce the amount of issues the user will come across, the product will have to go through thorough testing. This way any faults in the design can be found and removed.

SYNOPSIS

CONCLUSION AND SUMMARY

To conclude, this design brief outlines all the aspects of the design that will come about in the future. As this product is developed the client will be given a say in the direction that it will take. At any point in the design cycle the client can contact us to make adjustments to this document. This changes will be taken into consideration by the designers.

CLIENT APPROVAL

INITIAL CONCEPTS – BLOG ALSO HOLDS INFO ON EACH CONCEPT



MemoRing

Remember More. Forget less



Wellness Benefits



Improve cognitive abilities and focus more on work.



Increased productivity by using the App as an aid when documenting in a calendar or diary.

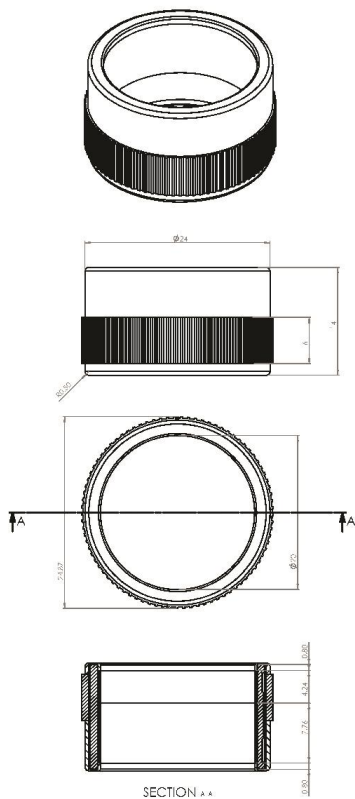


The MemoRing can help increase the amount of information the person can remember.



Reduce the stress levels due to work.

Detailed View



INTERACTIONS

Handshake

When the user shakes the hand of another person the MemoRing starts recording (the recording will start 30 seconds prior to this) the conversation.



Deactivate

After the conversation is over the ring will keep vibrating every two minutes until the user twists the bezel, which will then stop the recording.

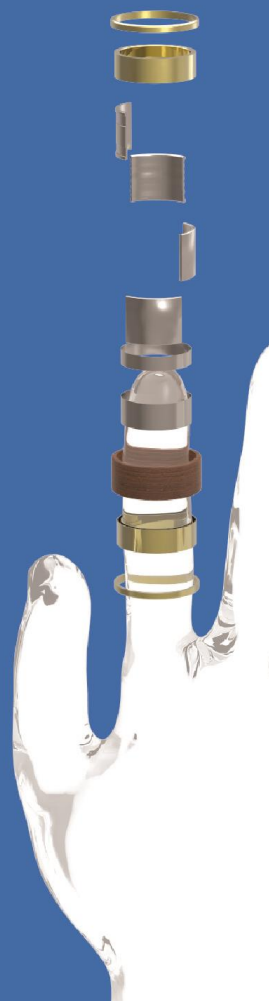


Companion App

After the recording is stopped the ring will transport the audio to the companion app which will translate it into text for the user to look over after.



This app will also highlight important information for the user to read and take note.



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PRODUCT ECOSYSTEM

Phone Connectivity

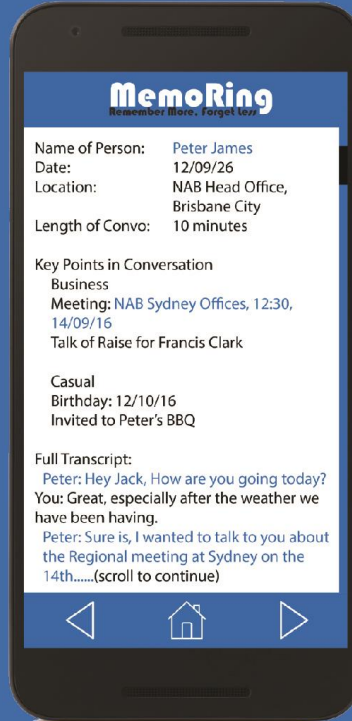


MemoRing connects to the companion app view bluetooth to communicate the audio to text

Induction Charging

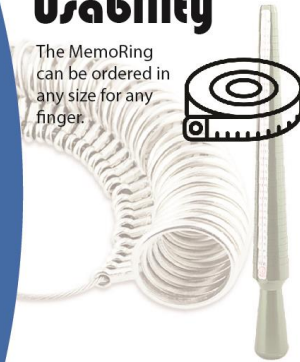


Induction charging makes it easy to keep the MemoRing fully charged and ready to go.



Usability

The MemoRing can be ordered in any size for any finger.



Sustainable

Fully customize your MemoRing for your personnel taste. By giving the customer this option the ring will become a fashion statement rather than just a wellness device.



INTERACTIONS - QoI

INTERACTION	USER ACTION	GOAL	METAPHOR	SENSOR ACTION	SENSOR	SYSTEM OUTPUT
Start Recording	Shaking hands with someone	To enable the device to record the conversation	Greeting a person by shaking their hand	Shaking the right hand up and then down to activate	Accelerometer	Vibration Motor (Single short vibration)
Powering Off	Pulling the ring off the finger	Power off the device	The removal of the device from the user's finger	Pulling the ring all the way off the finger	Heat Sensor	Vibration Motor (Single long vibration)
Stop Recording	Twisting the ring	To disable the recording of a conversation	Action of twisting the ring	Turning the bezel of the ring	Switch	Vibration Motor (Two quick vibrations)

ACTION	REACTION	FUNCTIONALITY	PROBLEMS	QUALITY OF INTERACTION
Meeting an important person for the first time.	Trying to keep calm and to retain all the information from the conversation	To add this person to your business network and to expand your knowledge	Worrying about remembering the person's name and the details from the conversation	Design for positive mental wellness
Trying to recall a previous conversation	Racking your brain to remember names, dates and locations	Regurgitating information so that you can take notes or prepare for further engagement with that person	Wasting time and energy as well as stressing about not being able to remember important information	Design for increased productivity
Turning on a recording device	Enabling the device to record you and someone else	storing the conversation for later	The object isn't discrete or easy to manipulate	Design for discrete use and easy user engagement
Turning off device	Turning the power off	No need for the conversation to be recorded or sensitive information that shouldn't be recorded	Fiddling with switches and buttons make it difficult to quickly turn off the device	Design for ease of use

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