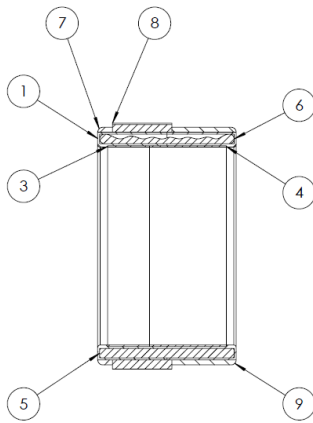
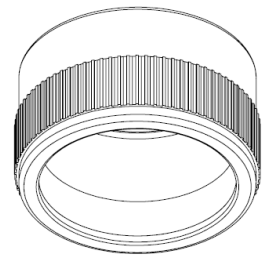
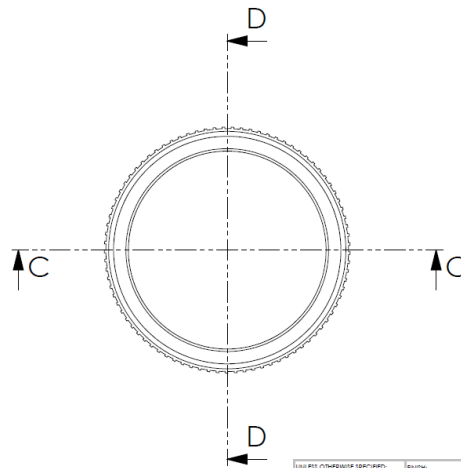


SECTION C-C
SCALE 3:1

ASSEMBLY VIEW



SECTION D-D
SCALE 3:1



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS	FINISH:	DEBBS AND BREAK SHARP EDGES	DO NOT SCALE DRAWING	REVISION:
SURFACE FINISH:				
TOLERANCES:				
LINEAR:				
ANGULAR:				

PRODUCT SPECIFICATION REPORT

INTERACTIVE PRODUCT DESIGN



JACK GURR

QUT



DNB603 | INDUSTRIAL DESIGN 6 | N9182161

CONTENTS

INTRODUCTION	2
MEMORING	2
TECHNOLOGY.....	2
RECORDING.....	3
POWER.....	3
ALERTS	3
ON/OFF FUNCTIONS	3
SENSORS	4
VALUE	4
JUSTIFICATION	4
COSTING	4

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.

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 a positive effect on their wellness.

Having a record of important information that deems remembering can also give the person confidence that they have the information on hand if they need it. This confidence can be transferred to the person overall mental wellbeing which will improve over time.

MEMORING

The MemoRing is a stylistic memory device designed to help the user record and collate information from face to face meetings with other persons in the work and social environment. This device works by using a mic located on the users ring that records conversations when the persons shake hands. This recording then gets transferred to a companion app that translates the recording into a text based format that the user can easily digest.

MAIN FUNCTIONS INCLUDE:

- Recording conversation
- Creating a transcript of the conversation
- Displaying important information first
- Looking like any other piece of jewellery that the person would wear
- Creates an archive of information
- Creating a 'phone book' of clients
- Fashionable jewellery

TECHNOLOGY

The final working prototype of the MemoRing can be seen in figure 1. This device shows just how the device will work and how the user will interact with it. The bulky button, accelerometer, mic and vibration motor are haphazardly attached to a 3D printed ring. These electronics when fabricated will be miniaturized. In the 10 years from now when the device will be implemented technology would have further stretched the boundaries of micro-computing. This will allow the manufacturing process to produce something very similar to the more polished conceptual model seen in figure 2. Each piece of technology will be looked at closely in the below list and displayed in the below exploded view of the ring.

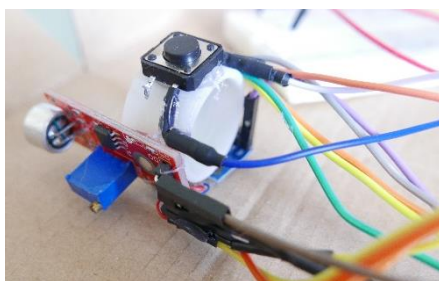
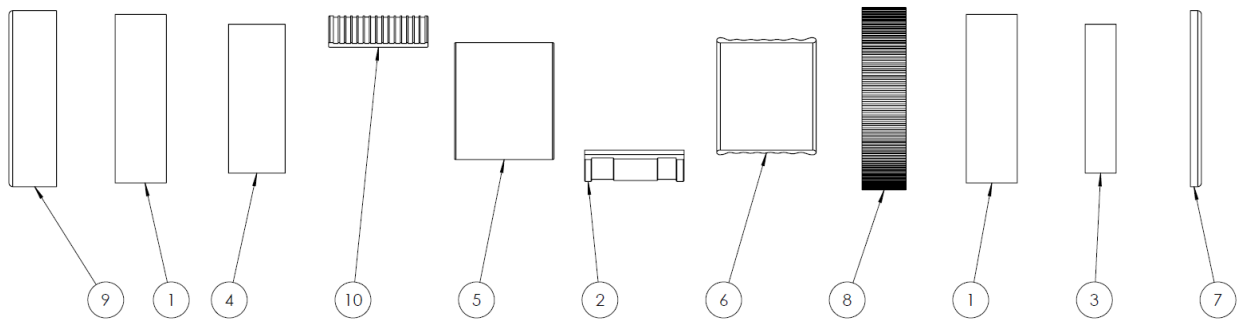


Figure 2: Working MemoRing Prototype



Figure 1: Polished Final model of the MemoRing



MEMORING INLINE VIEW

RECORDING

The MemoRing uses a small recording device tucked into the side of the ring. Its function is to always be recording so as to catch the 30 seconds before the handshake activates the device.

POWER



Powering the device will be coming from a small Lithium-ion 60mAh battery. This will give the device enough power to run throughout the entire day. The remaining power will be displayed on the companion app that goes with the device.

The unit will be charged via an induction charging plate found on the inside of the ring. When this plate comes in contact with the charging bay seen in figure 4 it will begin the process of charging the ring to full capacity so that it is ready for use the next day.

Figure 4: Induction charging bay for MemoRing

ALERTS

The alerts for the MemoRing will come from a small vibration motor within the ring. It will be used to alert the user to;

- Low battery (patterned vibration)
- Continued recording (two quick vibrations)
- Starting a recording (single quick vibration)
- Ending a recording (single quick vibration)

ON/OFF FUNCTIONS

The device uses a heat sensor to turn the ring on or off. When the heat sensor detects contact heat from the persons finger it turns on. When the ring is taken off the finger and there isn't any heat radiation from a finger it will turn off or go into a sleep mode. These settings can be changed using the companion app.

SENSORS

The accelerometer is used to activate the recording function on the device. It is programmed to start the recording when a handshake is made. The specific action of up and down motion with the hand is what the accelerometer is waiting for.

VALUE

The value in the product is its ability to help the user in a variety of aspects in their day-to-day lives. Having the ability to record and look over previous conversations gives the user the uncanny memory of someone that remembers all and is always prepared. The increased productivity that the device gives to the user will allow them to reach further in their career.

JUSTIFICATION

The reasoning behind using the handshake as the activating switch was for its natural integration into the person's life. They don't have to change anything about how they interact with people. They can just relax and let the MemoRing do all the work.

With its multitude of designs and styles it will help the user to maintain the use of the device. As it looks like any other piece of jewellery it will be treated as such. Thus, keeping them engaged longer than other wellness device gimmicks.

COSTING

All of the costing is laid out in the B.O.M where you can see what the price of each component and the total cost for 10000 units. Each MemoRing will cost (at the time of this report being made) \$23.62. That's relatively cheap for a high end electronic device. The total cost of the tooling, material and of the shelf components for 10000 units will cost \$236,375.