

WATF
RIDE
WITH THE PACK





PROBLEM
WOTEX
INSPIRATION
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MARKET
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THE PROBLEM

Young motorcyclists are most at risk when taking a bend, particularly when the rider is fearful due to lacking the sufficient knowledge and experience to safely and effectively navigate the road.

“I’d like to not be afraid when taking a corner. I think that is the reason why most people crash, because they’re afraid to take the corner. I think something like this could really help riders confidence and a bit of peace of mind”

- Billy Kelly





Encourage social riding by connecting riders in the same area.

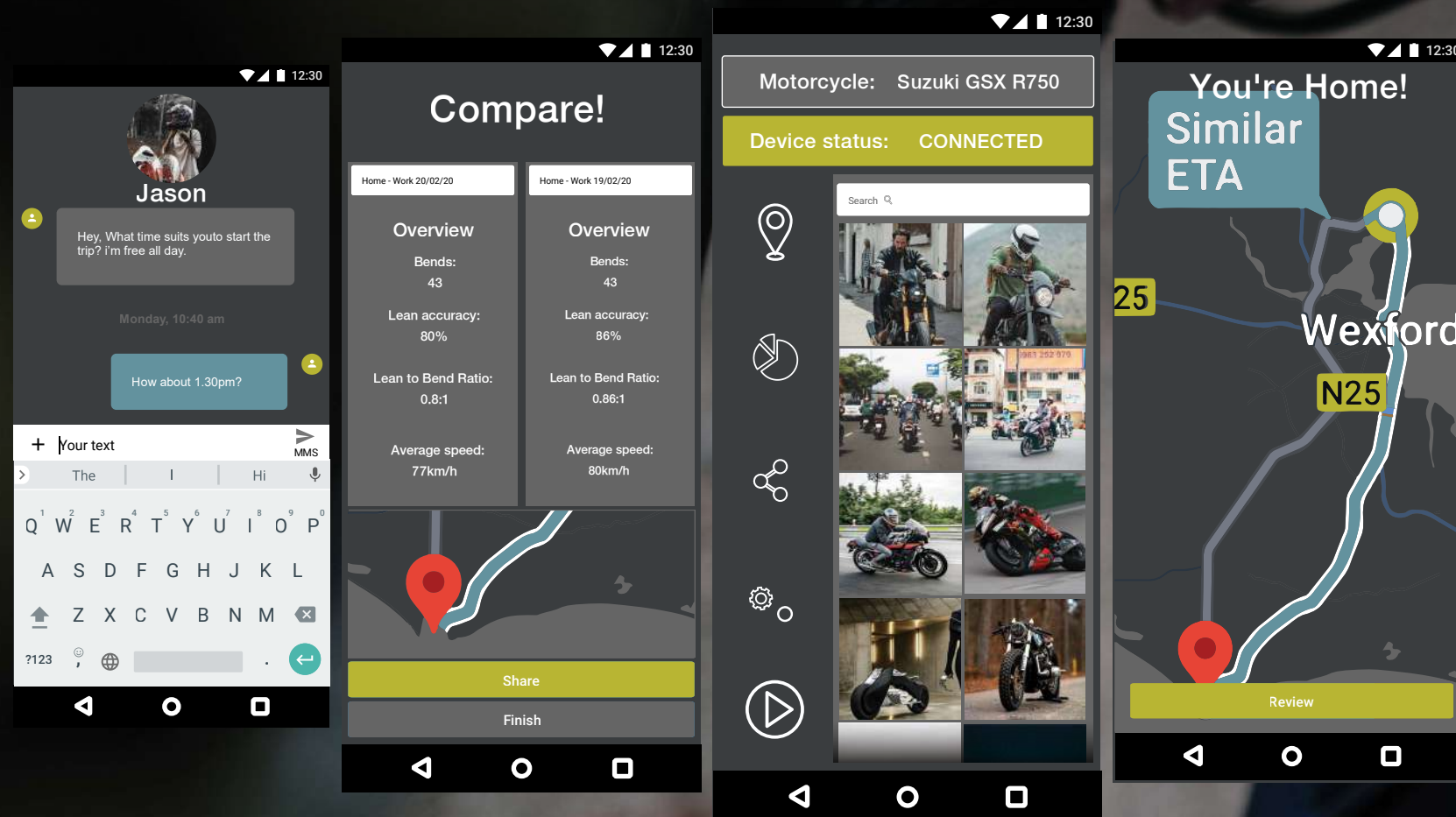


Recycle data to give the user feedback and Information statistics on performance.



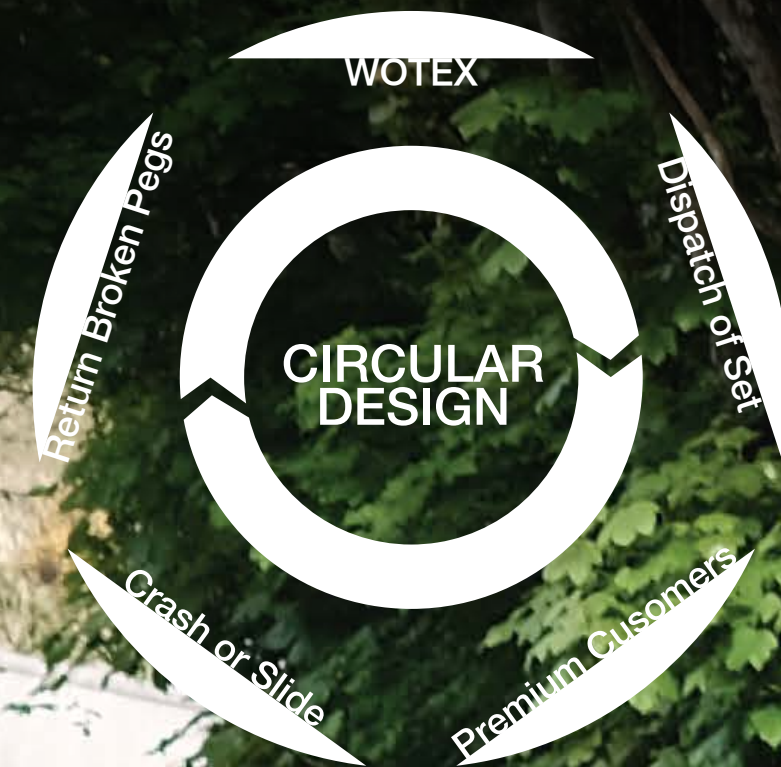
Inform the rider of the optimal path through each bend.

A Integrated technology and learning platform that gives every motorcyclist the power to take safety and performance into their own hands. With continuous learning and group riding practices, WOTEX lets you to lead the pack.

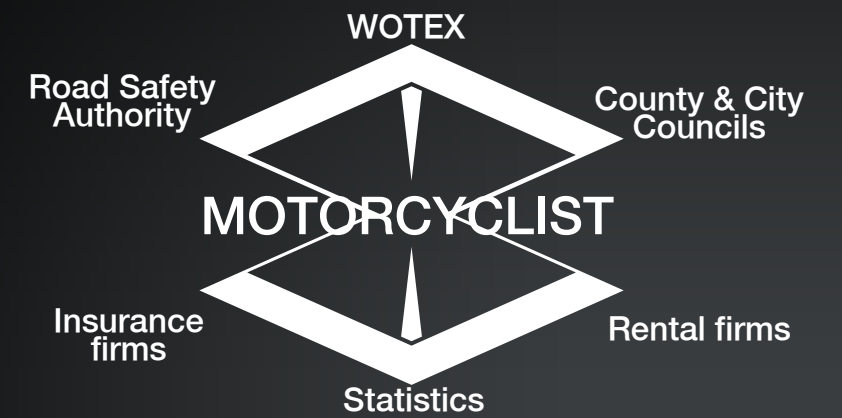


The technology uses various sensors and cloud computing to create detailed road mapping information, to produce advanced route data, tailored to tell motorcyclists what they want to know.





Circular design allows us to generate revenue through both sales and a premium application while affording the user peace of mind that their investment is more than just a foot-peg, but support throughout their entire experience of motorcycling. Circular design also places the responsibility of care for the environment back on us allowing us to recycle every part.



WOTEX captures and brings valuable data to all stakeholders in the product ecosystem while maintaining focus on the experience of its users.



The data captured shows movement patterns and can be used to identify problem areas that can be used by authorities to perform predictive maintenance and enhance infrastructure for all road users.

INSPIRED

Inspired by a friend and his family. In 2013, his father was travelling a winding road, A slight error in judgement while taking a bend, he lost control. Not only did this result in the loss of use in his leg but led to the emotional and financial strain on his family that has changed their life's.

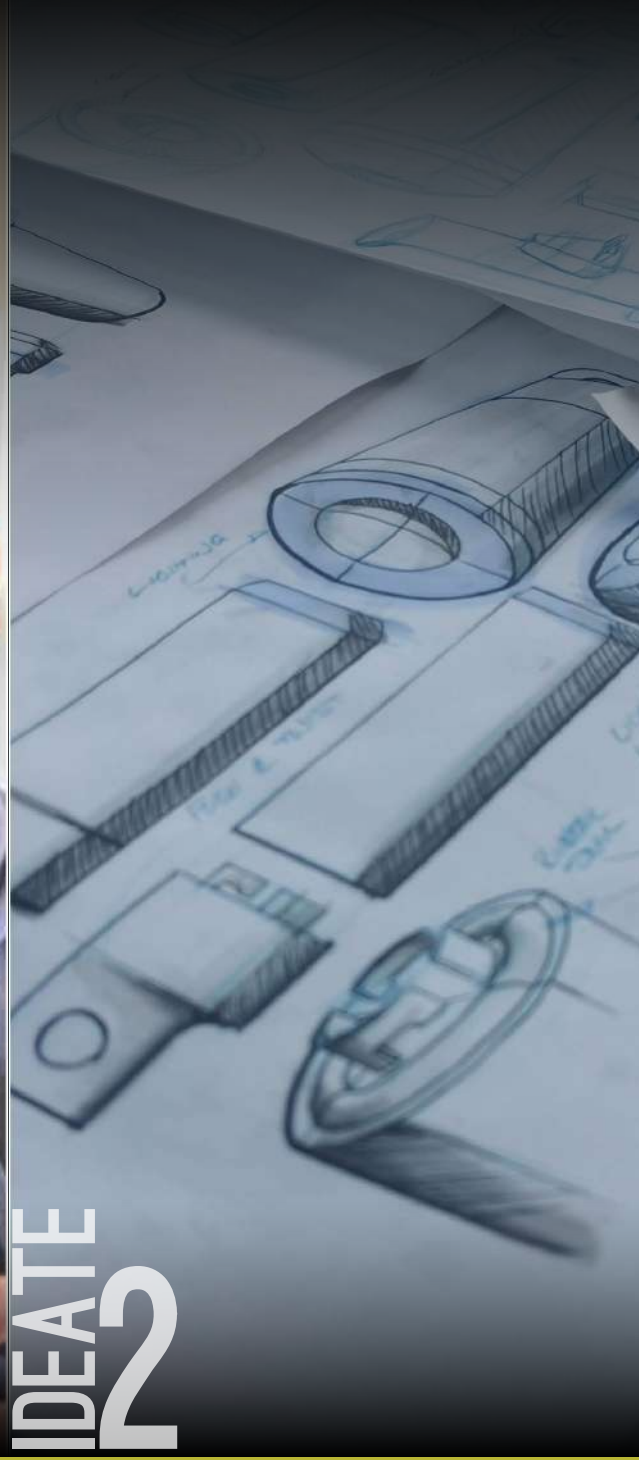


PROCESS

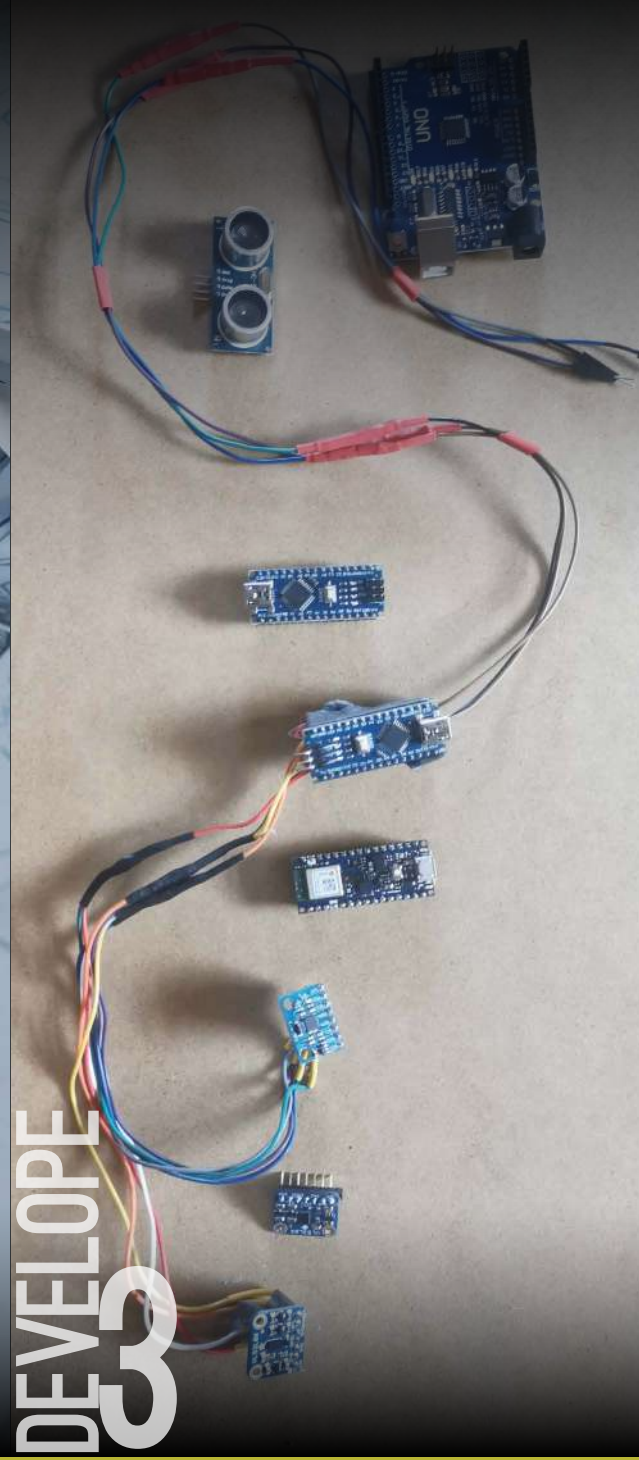
RESEARCH
1



IDEATE
2



DEVELOPE
3



TEST
4



REFINE
5



MARKET

3,750

3,750 Motorcycles licenced throughout Ireland in 2019 and grows year-on-year.

Bikers are exposed to a highly competitive marketplace where safety is that dominant driver for the motivation to purchase the latest safety technology.

Most often, technology is adopted from the automotive industry and adjusted to suit Powered Two Wheel vehicles. It is much less common for technology to be specifically designed to cater for the needs of the motorcyclist.

Industry growth In Europe





RESEARCH & FINDINGS



Interview & deep
conversation



Behavioural
Observation



Online Contextual
Surveys

To truly understand the motorcyclists, I took a deep dive into the motivations, habits and fears that are associated with the powered two wheelers.

The main findings were that motorcycles are most often used as a multi-functional mode of transport and their users use them to carry out everyday tasks and for leisure activities.

Bikers are highly understanding that safety is largely in their hands and are proactive in tackling the controllable factor and therefore, are willing to go the extra mile to ensure their safety.



74% of bikers experience at least 1 “off” during their motorcycling time.

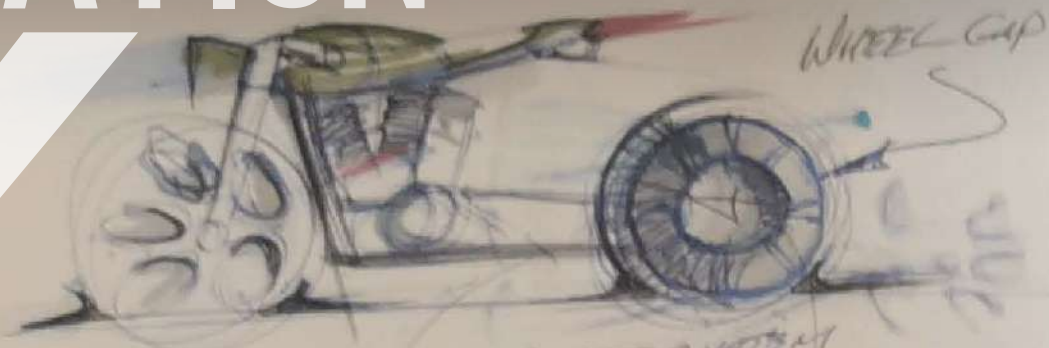


Motorcyclists are 72% more likely to be killed than other road users, making them the most vulnerable of all road users.



1/3 incidence are single vehicle accidents

IDEATION



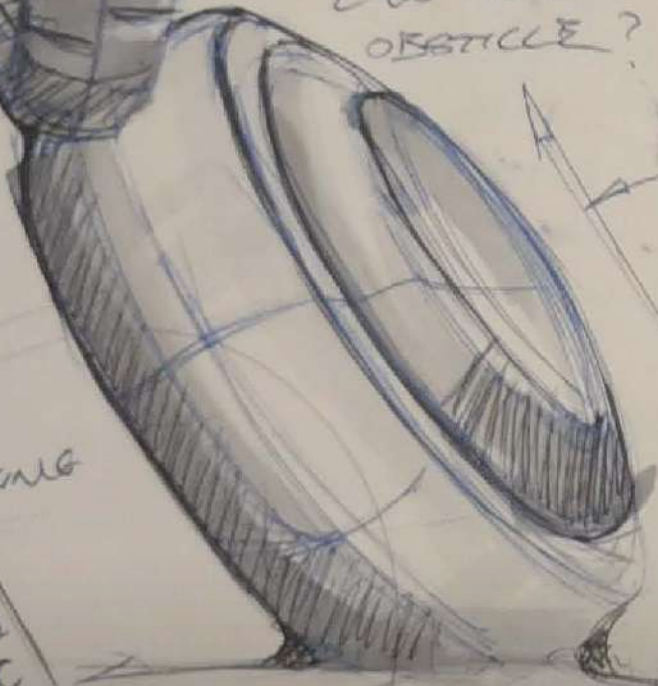
SMART SYSTEM
???



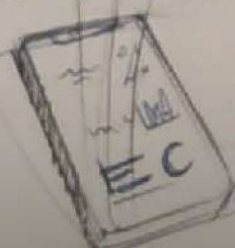
PIED
SENSOR
???

MEASURE AXLE
MOVEMENT

LOGS ON GPS AS
OBSTACLE?



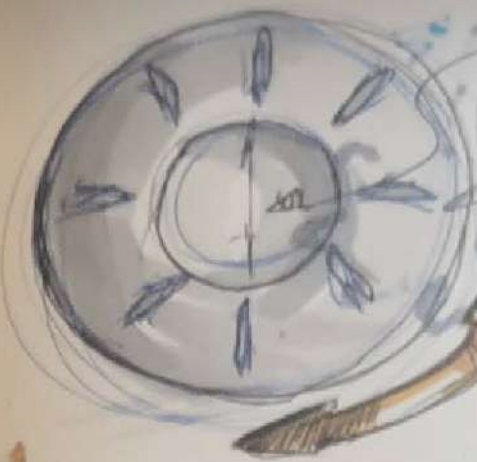
LEAN ANGLE
X
SPEED
=
SUFFICIENT
BRAKE TAKING



MEASURES
LEAN
ANGLE

DISPLAY STATS TO
25. RIDE.

Aaron O'Neill 6/2/20



FIXED UPRIGHT

EXTERNAL RING
ROTATES

COULD EXTERNALLY
MEASURE AFS/TORQUE
CONTROL SYSTEMS

SIZE?



WHAT TECHNOLOGY HAS TO FIT?

WHAT ABOUT
RECORDING
OBSTACLES?

INTEGRATED
CAMERA

CALIBRATE
THROUGH APP
WHEN RUMPED

COMPATIBLE
WITH GoPro?
COMPATIBLE APPS

MEASURE RIDE
METRICS

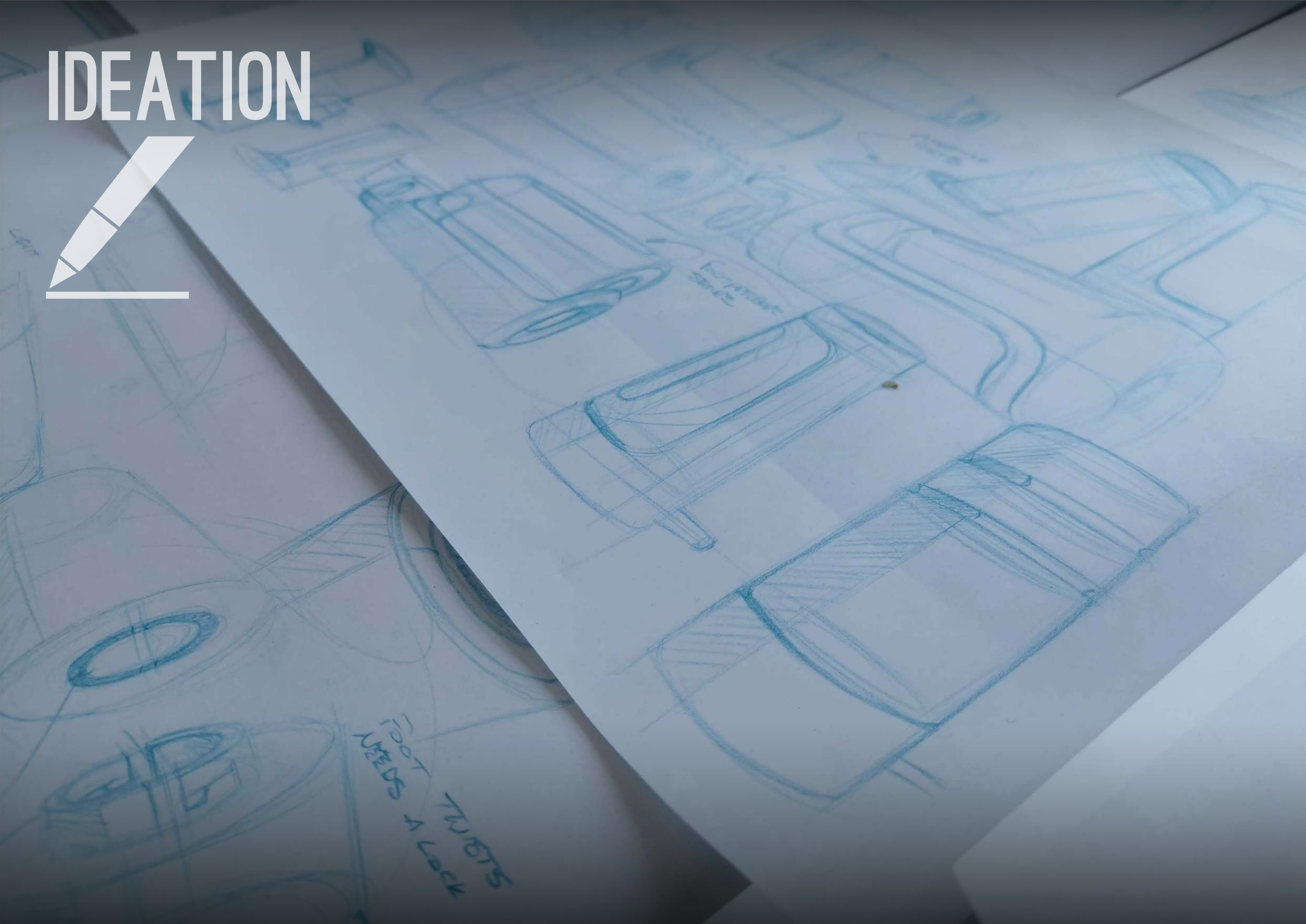


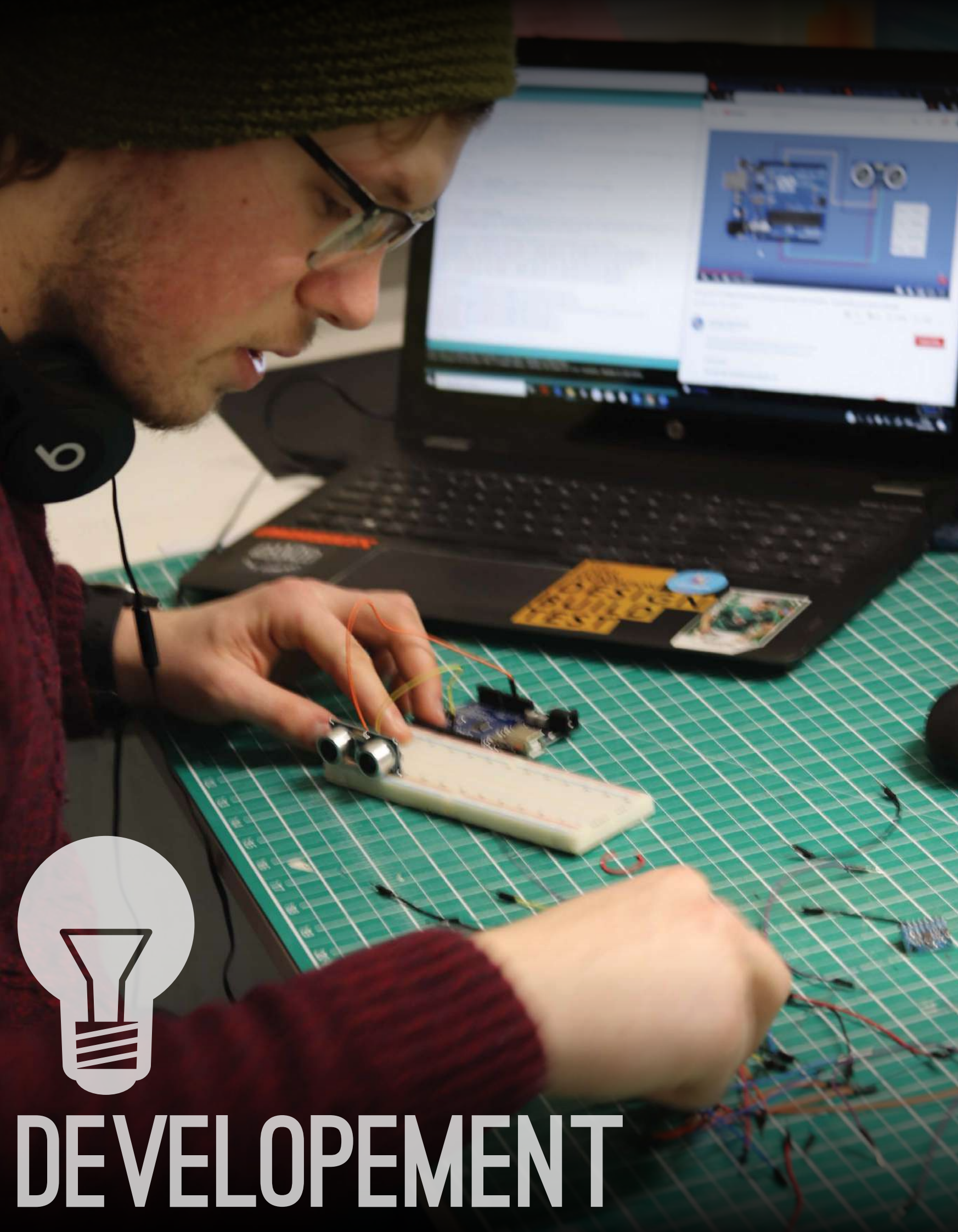
DIFFERENCE
IN HEIGHT

MEASURE
TREE PROXIMITY?

Aaron O'Neill 6/2/20 26.

IDEATION





DEVELOPEMENT STAGES



Electronics



Prototypes



Application



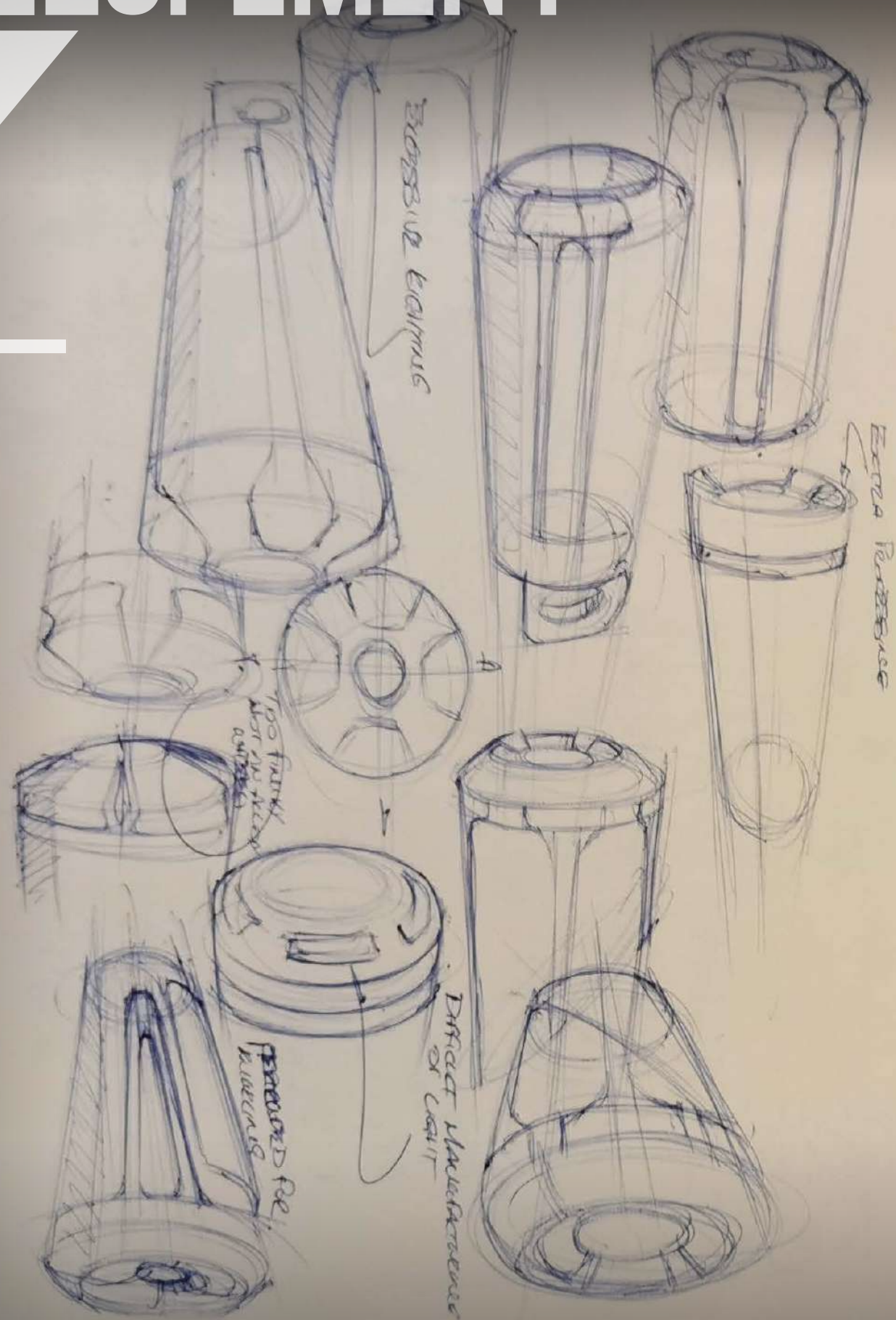
Detail sketches



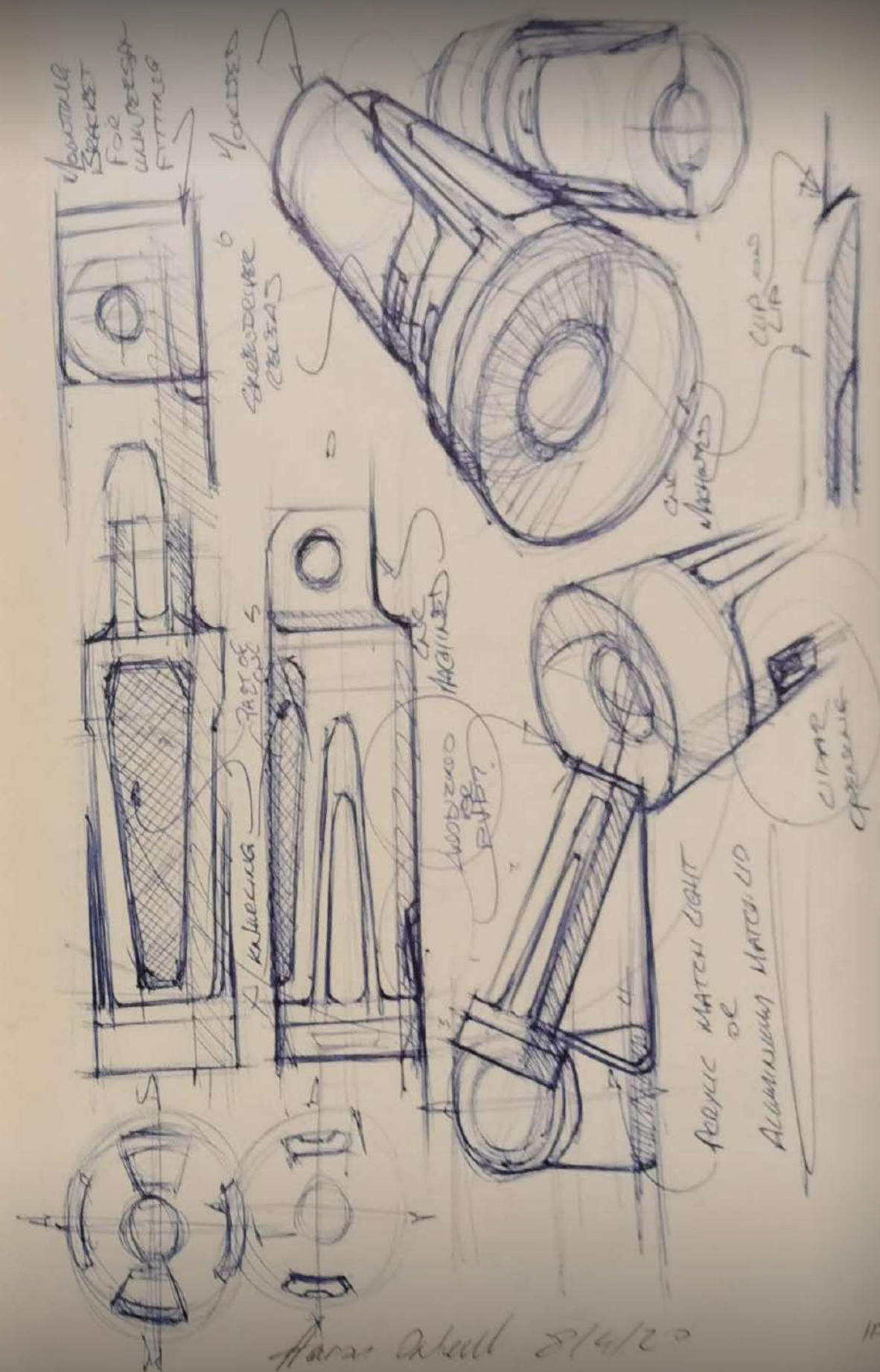
CAD



DEVELOPEMENT



116 8/4/20 Aaron Hall



Harriet Abbott 8/4/20

DEVELOPEMENT



DEVELOPEMENT



Testing of the application is essential to the overall experience and engagement of the motorcyclist. The aim is was to attain the simplest possible way for the user to achieve any task through visual cues to encourage the social and educational features.

Extensive application user testing of multiple user flows was carried out to during the development of the application to ensure the holistic experience.



TESTING

Development of the application was predominantly informed by the iterative user testing.

Visual ergonomics and attention to all senses are important considerations to ensure utmost safety for bike riders.

Colour testing was utilised to optimise the emotional responses of the user to invoke a calm and deliberate reaction to applications informative notifications.

TESTING

Simple user testing methods to ensure an ergonomic fit that is comfortable for the user, functional in gripping the boot and allows manoeuvrability for gear-change.



PROGRESS BEFORE PERFECTION



WATF
RIDE
WITH THE PACK





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