

**Fourth Element Energy**

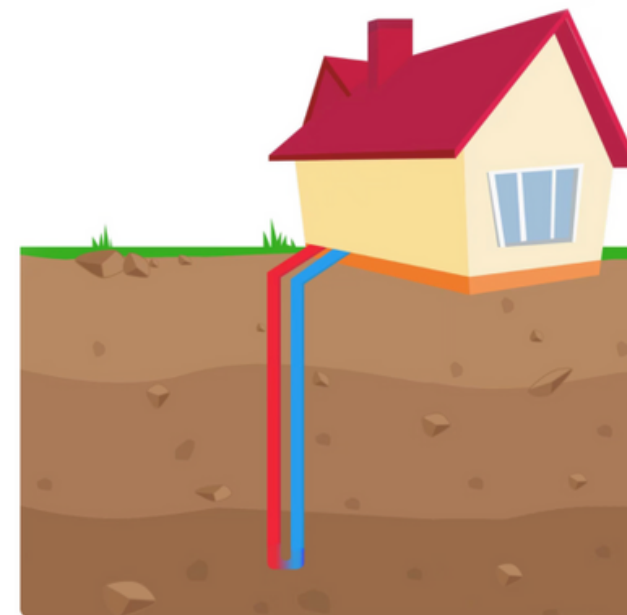
**University of Melbourne**

4EE



THE UNIVERSITY OF  
MELBOURNE

# PRE-DESIGN GEOTHERMAL TOOL



**Geothermal**

Ver 0.1.0

Language English ↕

Theme Light ↕

☐ I accept the [terms and conditions](#)

Copyright © 2023 4EE. All rights reserved.

Name of Project : IOS Mobile App

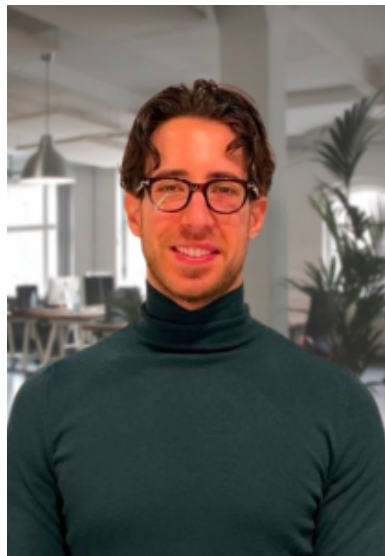
Team : IO-Redback

Date : May 24, 2023

# Agenda

- The Team
- Background
- The product
- Benefit
- Demo
- Handover to client
- Challenges

# Team member



Luke Rosa

Supervisor



Ruiqi Pang

Product Owner



Yichen Liu

Scrum Master



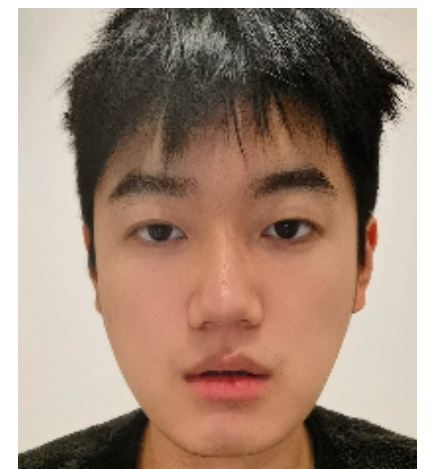
Yuntian Wan

Developer



Yuwei Gu

Developer



Haoyuan He

Developer

# Background



## The client

---

- Guillermo Narsilio Ferrero
- Fourth Element Energy Pty Ltd

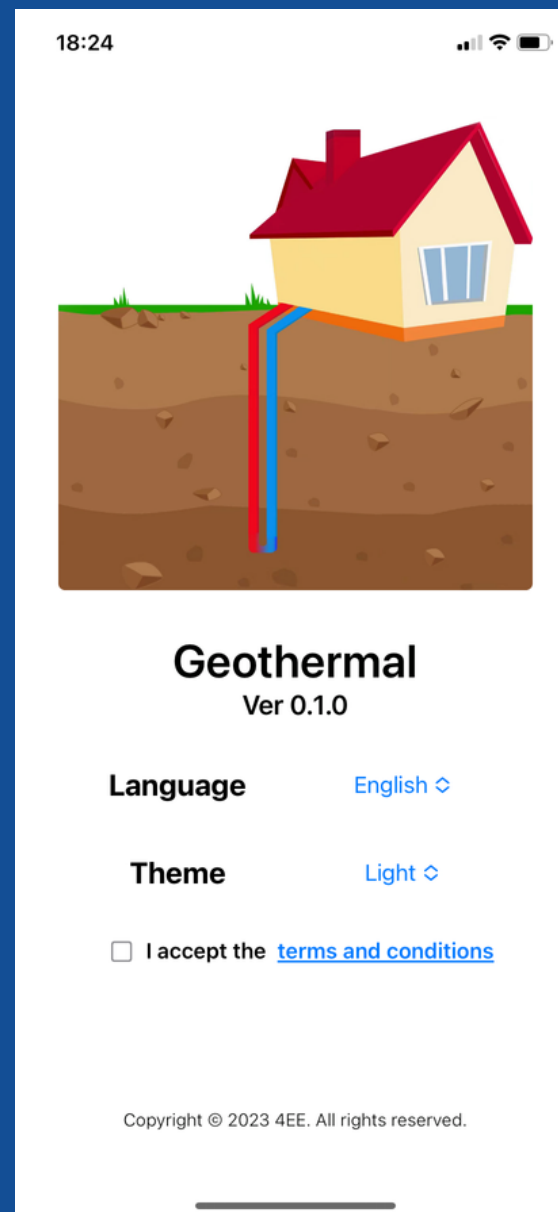
## The problem

---

- the IOS app was published in 2016
- some functions are out of date
- new requirements

# Product

A pre-design IOS tool employed for calculating geothermal systems.



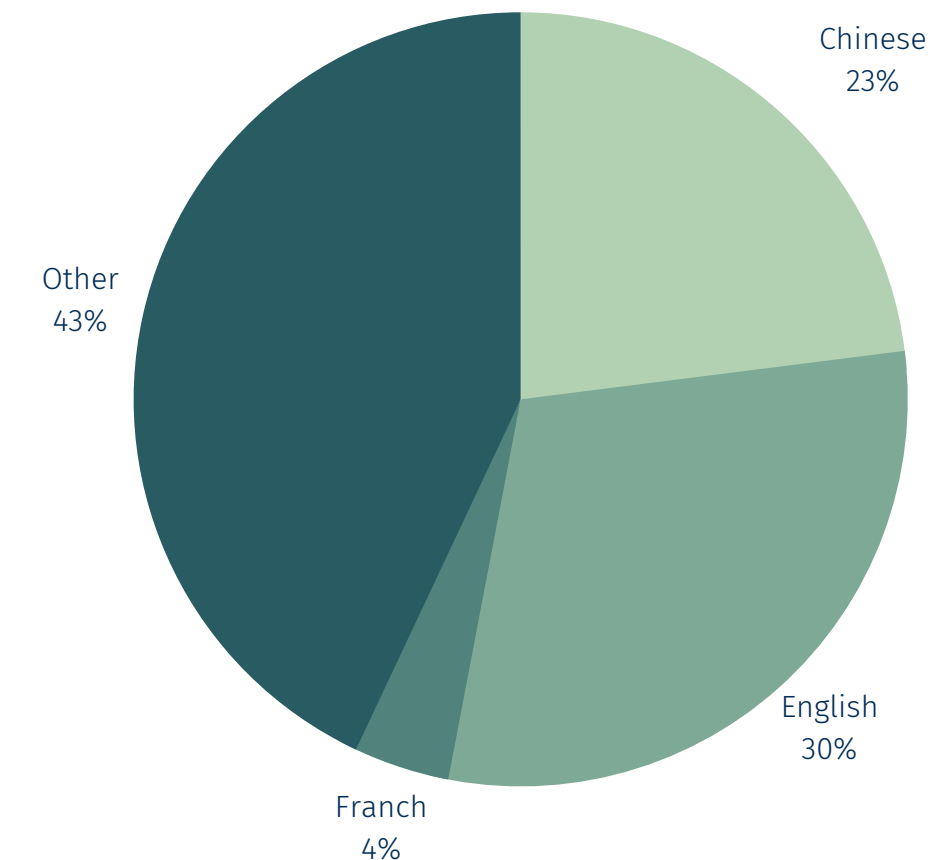
# Benefit

Feel free to reach out!



**Better user experience**

**Languages spoken by nearly half of the world's population can be covered**

**Green energy**



# DEMO!

NAME	MARKET SIZE	TYPE
Ethan Jackson	 45 %	Junior Engineer
	<b>Bio</b> <p>Ethan Jackson is a 25-year-old entry-level geothermal system engineer. He recently graduated with a degree in infrastructure engineering and has been working in a company that specialises in geothermal systems for 6 months. He has a basic understanding of geothermal systems and is able to complete the geothermal system design under the guidance of senior professionals. He is eager to learn more and gain practical experience in designing efficient and cost-effective geothermal systems for buildings.</p>	
<b>Quote</b> <p>“ <i>Empower me to design a greener tomorrow.</i> ”</p>		
<b>Goals</b> <ul style="list-style-type: none"><li>• Use the app to design geothermal systems individually and improve his business skills.</li><li>• Quickly gain a solid understanding in geothermal systems and their components.</li><li>• Stay up-to-date with the latest industry trends and guidelines.</li></ul>		
<b>Frustrations</b> <ul style="list-style-type: none"><li>• It would be time consuming to complete the entire system design independently at his current level.</li><li>• He finds it challenging to understand some technical abbreviations and calculations.</li><li>• He needs to use multiple tools for the designing and calculating of geothermal systems.</li></ul>		
<b>Demographic</b> <p>♂ Male 25 years</p> <p>📍 Australia</p> <p>Geothermal system engineer</p>		



# Handover to client



**IOS - Testflight**

**After we deploy the software on Testflight, client can test it.**



**App Store**

**Once the client approves our software, it can be deployed to the App Store**

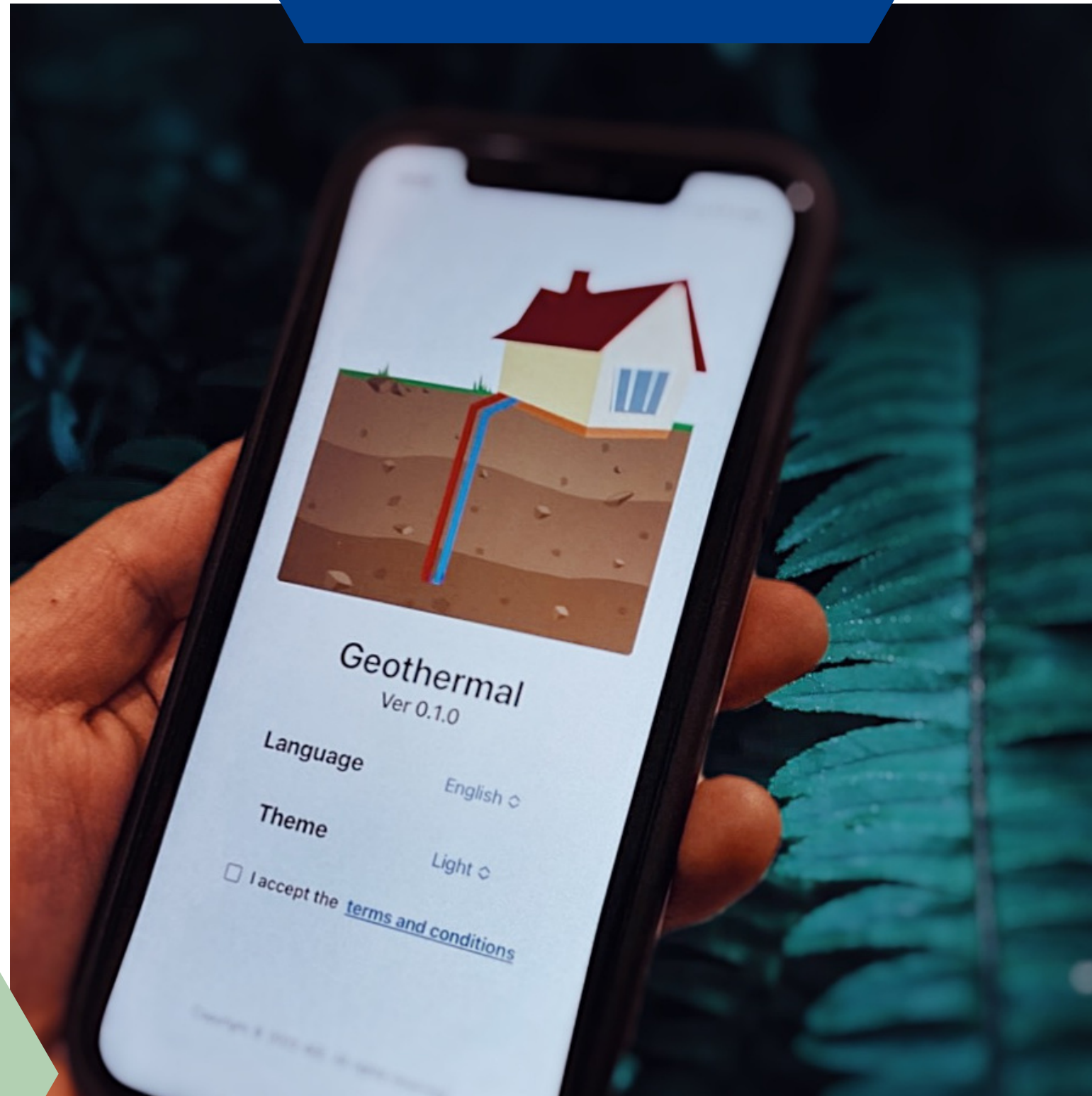
# Challenges

**1.** No experience

**2.** Communication

★ **3.** Refactoring





# Thank you !