



PTT TALENT INTERNSHIP

Operation/Technic EV Charger

By: Parintara (Kat) Wongsrisoontorn



TABLE OF CONTENTS

01

INTRODUCTION

Overview of Organization Structure & Responsibilities

02

APPLICATION

Design the User Interface (UI) & Test the App to Identify Bugs

03

REPORT GENERATOR

Use Python & Pandas to Clean and Generate Reports

04

DATA ANALYSIS

Analyze User Data for Marketing Optimization

01

INTRODUCTION



on|ion TEAM



**Throne
Hongladarom**
Head of EV Charger



**Parntip
Payappanon**

Sales & Marketing Manager



**Thanaset
Petchwattananon**

Operation Manager

OPERATION/TECHNIC INTERN



DESIGN

Review & design the application interface

Update & enhance user guides and station banners



SOFTWARE

Develop software tools to optimize process efficiency & minimize human errors



MARKETING

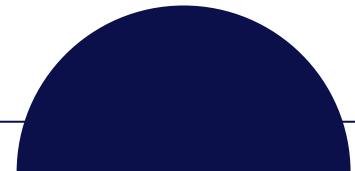
Analyze data to predict customer behaviors

Use insights to evaluate business profitability

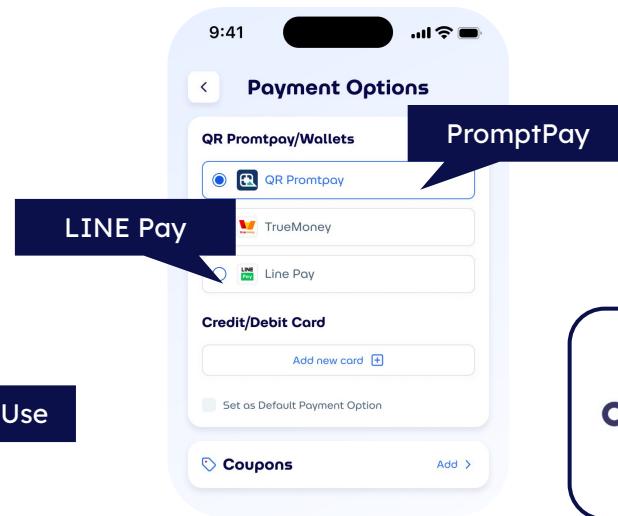
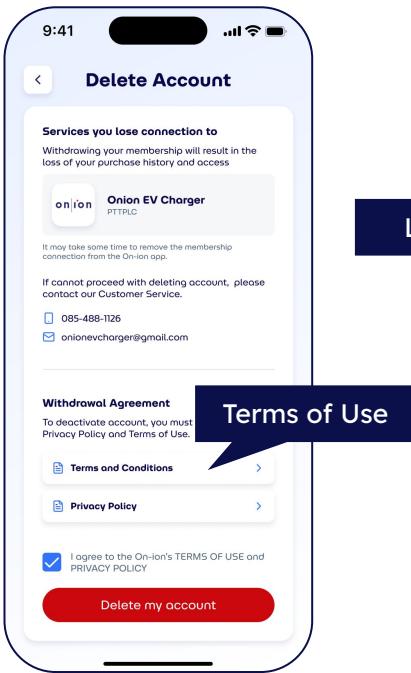
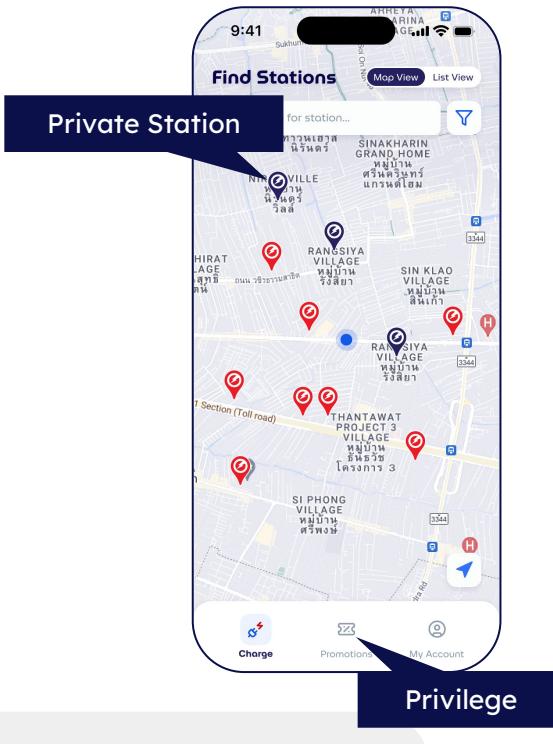


on|ion APPLICATION

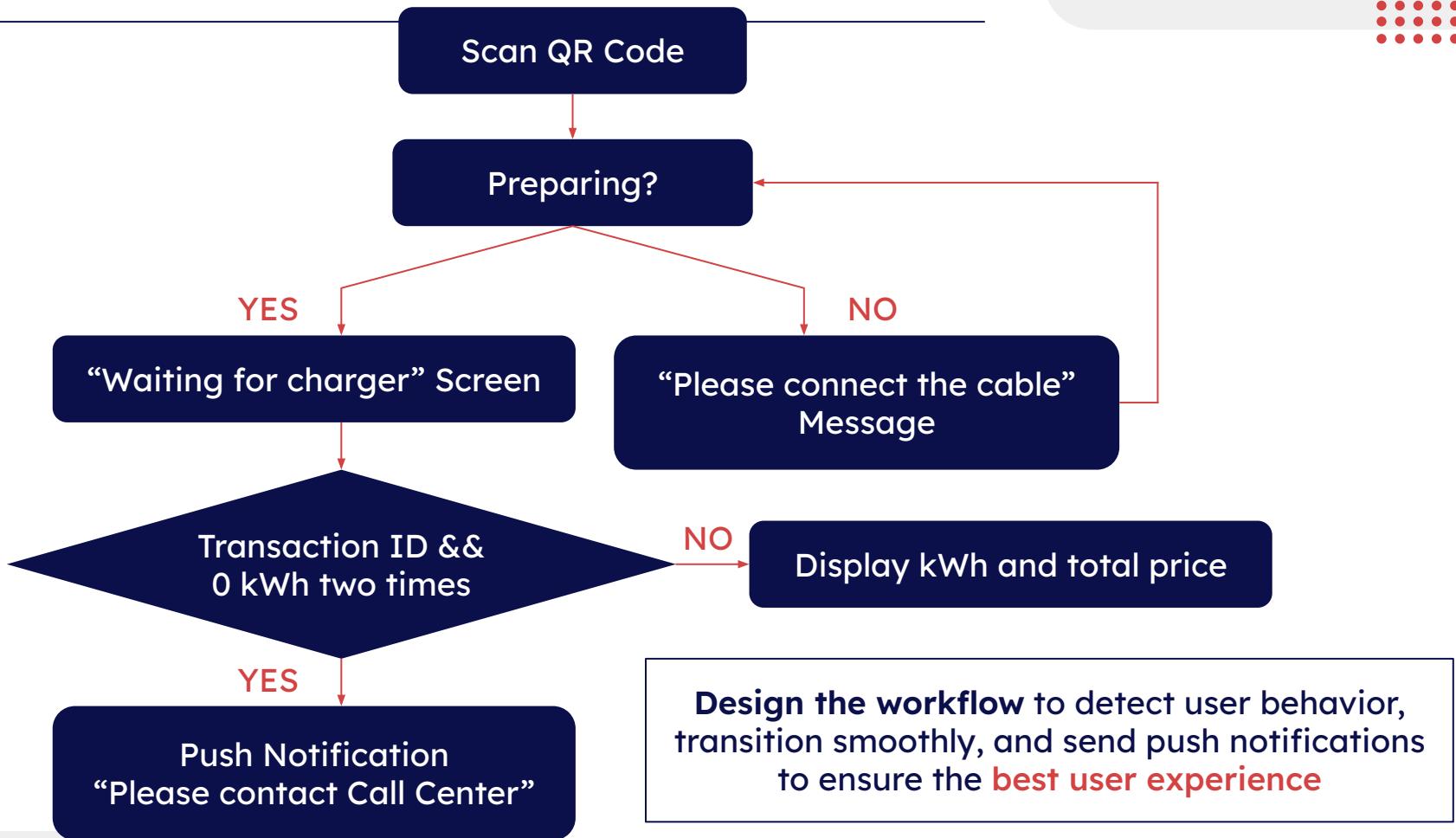
02



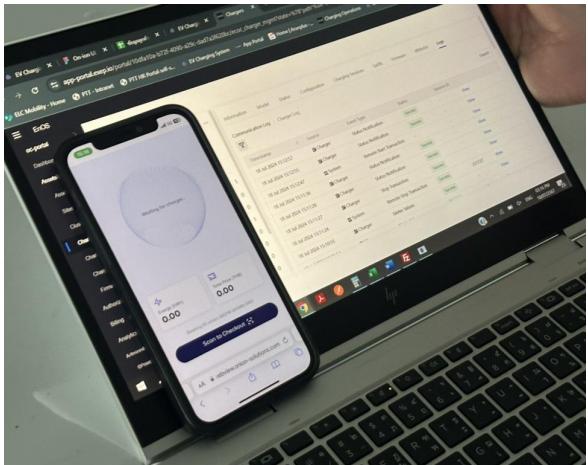
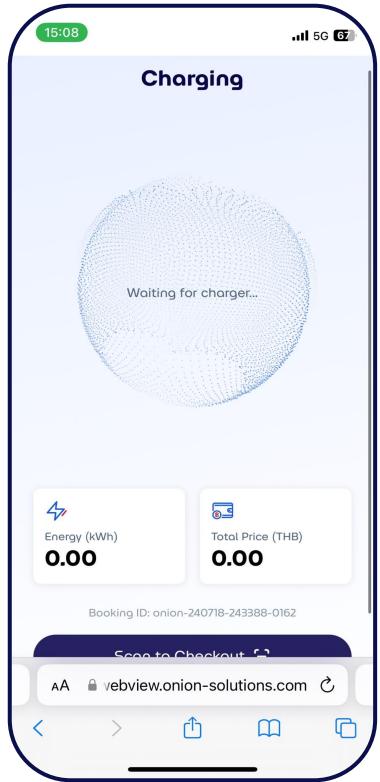
on|ion APPLICATION



Review and refine the user interface (UI) on Figma



on|ion APPLICATION



Test the app at the test station with EV cars to identify bugs

03

REPORT GENERATOR

**“I WISH THERE
WERE A TOOL
TO DO IT QUICKLY
FOR ME.”**

I need to generate so many reports.
This will take me **at least two days.**
I wish there were a tool to do it
quickly for me.

— Asameen Khunyabee



CODE SOLUTION

1. Update the Payment Amount column
(Total Amount - Refund)
2. Remove bookings with a **charging amount < 0.1 kWh** and status **UNPAID**
3. Remove bookings with **using time > 24 hrs** and status **UNPAID**
4. Add the Report Summary section





SAMPLE OUTPUT

	A	B	C
310			
310	onion-240601-779480-0007		
311			
311	onion-240601-779480-0004		
312			
312	onion-240601-779480-0003		
313			
313	onion-240601-779480-0002	240601117794800100	
314			
314	onion-240601-779480-0001	240601117794800100	

Included irrelevant entries
(314 Bookings)



	A	B	C
229	228	onion-240601-779480-0025	240601117794800
230	229	onion-240601-779480-0021	240601117794800
231	230	onion-240601-779480-0019	240601117794800
232	231	onion-240601-779480-0016	240601117794800
233	232	onion-240601-779480-0014	240601117794800
234	233	onion-240601-779480-0005	240601117794800
235	234	onion-240601-779480-0006	240601117794800
236	235	onion-240601-779480-0002	240601117794800
237	236	onion-240601-779480-0001	240601117794800

Only necessary data
(236 Bookings)

REPORT SUMMARY



AK	AL	AM
0	180 PAID	
0	180 PAID	
	0 PAID	
0	180 PAID	
	0 PAID	
0	180 PAID	
Date		
Summary Amount	31370 Baht	
Summary Amount W/O VAT	29317.76 Baht	
VAT	2052.24 Baht	
Summary kWh	2680.4 kWh	

10 – 15 minutes

Time spent per report



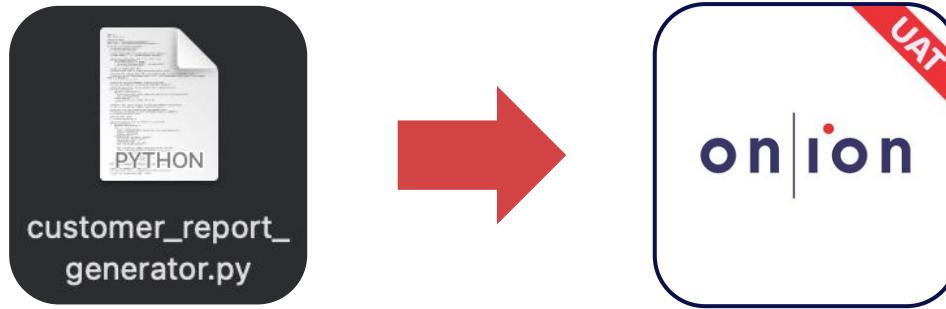
< 1 minute

Generate ALL reports *simultaneously*

> 900%

**Increase in efficiency & prevention of human errors,
allowing employees to focus on other tasks**

BACKEND INTEGRATION



Code was integrated into the application backend
to create a **user-friendly** report generator

DATA ANALYSIS

04



“I WISH WE KNEW CUSTOMER PATTERNS TO PREDICT DEMAND”

We need to understand customer behavior to **make business decisions** for new stations. I wish we knew customer patterns to **predict demand**.

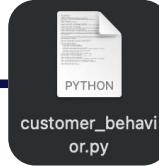
— Teetawat Wongnim



SOLUTION

DATA ANALYSIS

Use data to **identify customer patterns** for each time interval & location type



REPORT

Clean & update data
and generate summary
for **customer reports**

BEHAVIOR

Generate **customer behavior tables**
using report data



SAMPLE OUTPUT

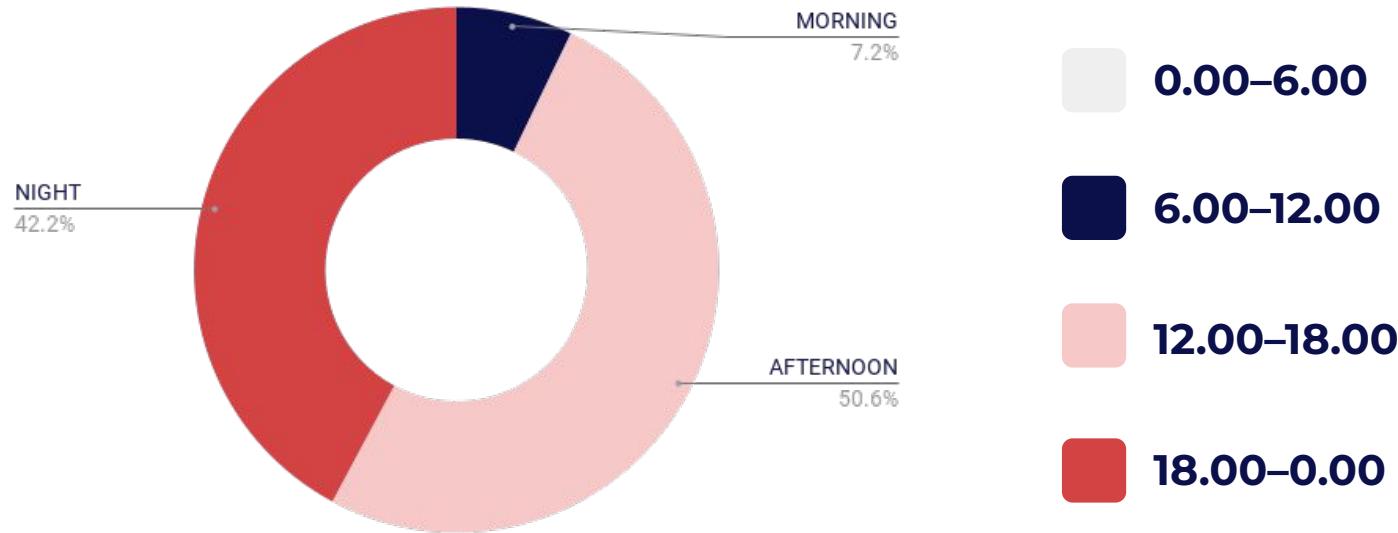


	A	B	C	D	E	F	G	H	I	J	K
1	Hour	2024-06-01	2024-06-02	2024-06-03	2024-06-04	2024-06-05	2024-06-06	2024-06-07	2024-06-08	2024-06-09	2024-06-10
2	0:00	0	0	0	0	0	0	0	0	0	0
3	1:00	0	0	0	0	0	0	0	0	0	0
4	2:00	0	0	0	0	0	0	0	0	0	0
5	3:00	0	0	0	0	0	0	0	0	0	0
6	4:00	0	0	0	0	0	0	0	0	0	0
7	5:00	0	0	0	0	0	0	0	0	0	0
8	6:00	0	0	0	0	0	0	0	0	0	0
9	7:00	0	0	0	0	0	0	0	0	0	0
10	8:00	0	0	0	0	0	0	0	0	0	0
11	9:00	0	0	0	0	0	0	0	0	0	0
12	10:00	1	0	3	3	1	2	2	1	1	0
13	11:00	4	5	5	4	1	2	4	3	3	0
14	12:00	7	9	7	4	4	2	5	8	9	3
15	13:00	8	9	10	4	4	3	4	9	10	4
16	14:00	10	9	7	3	1	3	5	10	12	4
17	15:00	8	11	8	2	2	3	8	8	8	5
18	16:00	9	9	9	4	4	3	9	8	9	3
19	17:00	11	12	9	4	6	5	8	9	11	3
20	18:00	12	8	9	7	12	4	9	10	5	7
21	19:00	12	9	7	6	11	8	9	10	7	6
22	20:00	9	8	4	3	6	8	2	9	7	3
23	21:00	6	2	3	1	1	3	2	8	4	1
24	22:00	1	1	0	0	0	0	1	2	1	0
25	23:00	0	0	0	0	0	0	0	0	0	0

A table showing customer usage by date & hour



CUSTOMER BEHAVIOR



Data from Central Ladprao Station (June 2024 Report)

CONCLUSION

**“I have learned the business aspects
of engineering and gained the skills to
develop practical tools for solving
real-world challenges.”**

— Parintara Wongsrisoontorn



THANK YOU

