UNIVERSITI TEKNOLOGI MARA PERAK BRANCH.

SCAFFOLD WEIGHER WITH ALERT SPEAKER.

MUHAMMAD IZZAT SYAHMI BIN OTHMAN

Innovation project report submitted in partial fulfillment of the requirements for the degree of **Bachelor of Science (Hons.) Construction Technology**

Faculty of Architecture, Planning & Surveying

JULY 2021

AUTHOR'S DECLARATION

I declare that the work in this innovation project report was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This topic has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

In the event that my innovation project report, be found to violate the conditions mentioned above, I voluntarily waive the right of conferment of my degree and agree be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

Name of Student	: Muhammad Izzat Syahmi Bin Othman
Student I.D. No.	: 2019893138
Programme	: Bachelor of Science (Hons) Construction Technology
Faculty	: Architecture, Planning and Surveying
Innovation Project	: Scaffold weigher with alert speaker.
Title	
Signature of Student	:
Date	: March 2020

ACKNOWLEDGEMENT

Alhamdulillah, Praise to Allah the Most Merciful and the Most Graceful. Salawat and Salam to Prophet Muhammad S.A.W.

First of all, I would like to express my extensions of gratitude towards my beloved Family. My supportive parents that work really hard to raised me. I am really thankful to them and all their sacrifices. My wise brother and little sisters, they also have supported from far with the helps and thoughts. I dedicated most of my degree years to my family.

Next, thank you to Dr. Hayroman bin Ahmad my final year project supervisor and special thanks to Dr Asmat binti Ismail the Final Year Project subject lecturers for their helps and resources. I truly enjoy the entire journey in accomplishing this research. It has been such a pleasure to navigated under both of these excellent lecturers despite the Pandemic outbreak on Online Distance Learning.

Not to forget, my beloved and helpful housemates which is also my classmates that I really spent my ODL session with them. They have helped me all along despite all the tears and laughter's that we have been going through together. I am out of words on how to express my feeling of gratitude towards these guys.

Lastly, I would like to express a special thanks to my Special best friends that have secretly supporting me with all my ambition from behind. Despite all the hardships that she has been through these days, she still never fails to emit that supportive aura, she tries her best to show and channel her spirits. Her story made me highly motivated and don't want to give up on my future.

Thank You.

AUTHOR'S DECLARATION	iii
ACKNOWLEDGEMENT	iv
CHAPTER 1.0	1
INTRODUCTION	1
1.1 Background of study	1
1.2 Problem Statement	5
1.3 Research Questions	7
1.4 Research Aim and Objectives	8
1.5 Scope of Study.	
1.6 Limitation of Study.	9
1.7 Significant of study	9
1.8 Report outline	10
CHAPTER 2.0	12
LITERATURE REVIEW	12
2.1 Introduction	12
2.2 Overview of Scaffold overloading issue.	12
2.3 The importance of scaffolding and guidelines for approval of desig	n scaffolding.
	13
2.4 Various type of Scaffold and the commonly use Scaffold	15
2.5 Advantages of Tubular aluminium and metal scaffolding	16
2.6 Problem related to scaffolding.	17
2.7 Review of detail specification of scaffolding	
2.8 Review of concept idea of innovation product	21
2.8.1 Digital Weigh Scale concept.	
2.8.2 Elevator load alert system Concept.	22
CHAPTER 3.0	25

Table of Contents

CHAPTER 1.0

INTRODUCTION.

1.1 Background of study

In the current and vast developing era. The demands of residential area are increasing. Especially, in the Urban area where all the vast and convenience facilities can be fully experienced. In order to keep intact with the current occupant demand, High Rise Building or the construction of multiple-storey building such as apartments, condominium and flats is a great consideration to be built especially in urban area which is loaded and packed in order to meets the residential demands.

These days, high-rise residential building in urban area is pretty demanding in order to fulfilling the basic needs of those people that were living in the urban area. Hence, most of the developers are heading towards constructing high-rise building instead of the landed ones. As land are getting limited in the urban area, they have to emphasize the use of the land by proposing the use of strata title in order to fulfil the demands in the urban area residential markets by proposing the construction of Highrise residential building. These strata type is more relevant to be built as it offers more profits to the developers and it is also the most reasonable conditions that can be done in fulfilling the Residential demand especially in the urban areas.