Karachi Institute of Economics and Technology
College of Computing and Information Sciences
FINAL YEAR PROJECT – 2021
PROPOSAL

SEMESTER	FALL 2021	YEAR	2021-2022
TITLE OF PROPOSED PROJECT			
Waste Management System			
Project Category (choose one)	☐ Product based	☐ Research-based	
SUPERVISOR INFORMATION			
Supervisor Name:	(leave blank)	Organization/ Designation	(leave blank)
Contact No:	(leave blank)	email:	(leave blank)

STUDENT(S) INFORMATION			
S#	Student ID	Name	
1	9782	Mohammad Suhail	
Contact No:	03152147532	email:	Mahommadsuhail20@gmail.com
2			
Contact No:		email:	

PROJECT AREA/TOOLS	
Tools Required:	Windows 7 or higher, XAMPP/WAMPP Server or Live Domain. Front-end: HTML5, CSS3, JavaScript, Vue.Js Back-end: Laravel 9 + MYSQL Database
Area/Specialization:	This Project is Completely Web-Based or Web Application. It Responsive For all Devices like: Mobile or Tablet.

SUMMARY OF PROPOSED PROJECT (MAXIMUM 300 WORDS)

The **Internet of Things (IoT)** is a concept in which surrounding objects are connected through **wired** and **wireless** networks without user **intervention.** In the field of IoT, the objects communicate and exchange information to provide advanced **intelligent** services for users.

This project deals with the problem of **waste management** in smart cities, where the garbage collection system is not optimized. This project enables the organizations to meet their needs of **smart garbage management systems.** This system allows the user to know the fill level of each garbage bin in a locality or city at all times, to give a cost-effective and time-saving route to the truck drivers.

PROJECT OBJECTIVE(S)/OUTCOMES

- The proposed system would be able to automate the **solid waste monitoring process** and **management** of the overall collection process using **IOT (Internet of Things).**
- **The Proposed system consists of main subsystems namely Smart Trash System (STS) and Smart Monitoring and Controlling Hut (SMCH)**
- In the proposed system, whenever the waste bin gets filled this is acknowledged by placing the circuit at the **waste** bin, which transmits it to the receiver at the **desired** place in the area or spot.
- In the proposed system, the **received signal** indicates the waste bin status at the **monitoring** and **controlling** system.

FUNCTIONAL FEATURES

For FYP 1:

- **City administration** needs an understanding of the big **picture**, **generating reports**, **control** over **pricing** etc.
- **District administrations** are interested in **controlling** the process of **waste collection**, checking the quality of service (all waste collected, all in time, waste **collected** cleanly, waste **transported** to special places), quick and legal ways for solving disputes and problems. Receiving Payments with just one Click
- **Municipalities** can also deploy and **maintain** smart city **infrastructure** like capacity sensors in waste bins and **wireless** networks for data transferring.
- **Managers** of dumps and recycling factories can publish their **possibilities** or needs in acquiring a certain amount of waste for storing or recycling.

For FYP 2:

- **Staff** that is **responsible** for trash bins in the current yards needs communications with **waste management companies** and **truck drivers**.
- **Road police** can get reports about inaccurate car parking that leads to the **impossibility** of waste collection.
- **Citizens** want to have better service, lower cost and having easily accessible **reports** on what has been done and how much it cost

For Proposal Defense Purpose

PROPOSED ADVISORY COMMITTEE		
S#	**Faculty Name**	**Signature**
1		
2		
3		
4		

FYP Committee

FYP COMMITTEE			
S#	**Member(s) Name**	**Designation**	**Signature**
1	**Usman Khan (FYP Coordinator)**	Lecturer	
2	**Mr. Kashif Bashir / Mr Ayub Latif (Head of the Department)**	Asst. Professor	
3	**Dr. Muhammad Khalid Khan (Director CoCIS)**	Professor	
	Date	00/00/0000	