

# PROCESS TRACKER SYSTEM

# MiTek®



Team — Group 29 — Project 3 MiTek tracking system

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## INTRODUCTION

### DESIGN BRIEF

Create a system to track a job across production process of 5 stations in real time.

Transmit information to database with employee and customer interfaces.

Provide customers details on location and current process.

### DESIGN SPECIFICATION

Design a database that would store and push information from a QR code scanner regarding the following factors:

- Receive data via a unique QR code associated with each station and job.
- Details pertaining the current process and specifics.
- Arrival time, check out time and ETA for completion at each station.

### MARKET RESEARCH

Companies that use these QR & barcode tracking systems:

- Warehouse stock tracking i.e. Amazon, ASOS etc.
- Delivery services i.e. DPD, UPS, APC etc.
- Fast food services i.e. dominos, just eat, uber eats etc.

## APPLICATION

### IMPLEMENTATION

Develop a web-based database in **phpMyAdmin** to receive data.

Unique QR codes associated with the job and station transmit data to the database once scanned.

An admin would check & push the data to customer and employee interfaces.

### COSTINGS

#### Equipment & Development:

- Example Scanner - £30
- 1000 QR code 25x25mm - £9
- Dell T30 server - £450 (Optional)
- Database development in under 3 month time frame - £1200–2500 ~ (approvedindex database comparison quote)

**Total—£2989 Maximum initial cost**

### SUSTAINABILITY

QR codes are perishable will have to keep stocked.

Employ admin to manage database, or invest in additional development to automate system.

Maintain server and scanning equipment.

## CONCEPT

### CUSTOMER INTERFACE

- Example of a mobile notification for a mobile app
- Displays basic order details, current process description and ETA's.



Customer Order Tracking										MiTek
ORDER NO	PROFILE	QTY	COST	STATUS	DETAILS	ARRIVAL	EST. STAGE COMPLETION	TIMES		DELIVERY ETA
1238		5 (2)	£200 (Standard delivery)	Stage 2 – Processing	Raw material being cut	21/01/19 09:30 am	21/01/19 11:30 am			24/01/19
1239		5(2)	£200 (Standard delivery)	Stage 3 – Assembly	Timber and chevron brace mated	21/01/19 9:30 am	22/01/19 11:00 am			23/01/19
1240		1(3)	£500 (Express delivery)	Stage 1 – Selection	Sourcing appropriate material	21/01/19 2:00 pm	21/01/19 3:00pm			25/01/19
1241		3	£600 (Express delivery)	Stage 5 – Transport	Tracking No: 0125426	19/01/19	DISPATCHED			21/01/19

### EMPLOYEE INTERFACE

- Implemented into existing user interface, No retraining required.
- Displays advanced order details and current process.

### ORDER TRACKING

ORDER NO	PROFILE	QTY	O/A HEIGHT WEIGHT	REF	SPAN	PTICH	OVERHANG		TIMBER		Tracking
							LEFT	RIGHT	TOP	BOT	
1		5 (2)	3.649m 212.52 Kg	2XT01	7.487	39.0	0.450		47x197	47x197	Stage 2 – Processing ETA: 14:00 14/02/19
2		5(2)	3.649m 219.80 Kg	2XT02	7.487	39.0	0.450	0.450	47x197	47x197	Stage 3 – Assembly ETA: 09:30 13/02/19
3		1(3)	1.922m 122.81 Kg	3XT05	4.120	39.0			47x97	47x97	Stage 1 – Selection ETA: 12:45 13/02/19
4		3	3.649m 106.26 Kg	T01	7.487	39.0	0.450		47x197	47x197	Stage 5 – Transport Tracking number: 0125426