BLUEPRINT FOR COSTING APP

Research Discovery: I found out that many printing presses still handle their costing and pricing processes manually. And perhaps there are other apps that have been tailored to solve this problem but do not really meet the specific needs of what the company wants of the app.

Vision: My vision is that I want to build a web app that allows the managers of small, medium and large-scale printing companies to handle their costing processes for them. That is taking entries of full details of what it takes to display the total price and unit price of the job on an iPad.

WORK DURATION: 3 Months

What is costing: This is the process of calculating the actual price given to the customer on the invoice after considering all factors such as; paper, plates(stencils), impression. We can however note that this pricing varies according to each company and also with respect to time as prices for certain resources may change (for example paper).

Step 1(Trial and Error)

Check out the feasibility of how possible it is on medium programming languages like Python or C++ taking into consideration that it does all mathematical calculations of inputs efficiently.

It has to prompt the user on the particular fields of entries that is needed for the calculation. For instance (Enter Paper cutting size, enter final size, will it be laminated? and all the like.)

Step 2(Actual Implementation of the Web App)

Once we have the mechanism of the codes running well then start to implement. Using languages like HTML, Java and CSS, we should be able to come up with the solution for that exact costing process. It has to be open-source app where users(managers) login with their credentials and move straight forward

Step 2.1 Implement test server on a test server before making it live so that if something breaks on the test server, it doesn't affect real users or customers.

Why the App? This incoming app gives the professional interface for the non-technical user to work with the program. Also, it gives it a platform very fast to expedite company workflow, maximizes company time and most especially automate all work processes.

-Deploy application and is easily accessed

*Step 2.2*Adding an internal or external database to store persistent data of what calculations and specifications that were done for a particular job. But no databases for minute and sub-calculations.

Step 3(Customization of App to meet company's needs)

-The app must be accurate and curated in a way that that the final price matches with their regular price taking into consideration the standardization of what the client charges. (Note that the app must be flexible to regulate certain price inflations or deflations as per the client. And these changes or modifications can be done by a non-technical user (Managers or Marketers)).

-The company's logo, colours, themes, fonts have to be incorporated into the app. This is more of branding of the app for it to look like it is owned by the company.
-Other specification-purposes needed by the client in the app will be treated accordingly and implemented.

Configuring the app

MEMOS(Technicalities)

-Select machine to be used;

(MO 1 HEAD, MO 2 HEAD

-Will the book be glued or stapled

-Is it recto verso?

-Output has to display Unit price and Total price

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AFTER READING THIS(BEGINNER'S GUIDE)

-You should be able to know what is costing and that it plays a viral role in the field of offset printing.

-You should be able to know what it takes; resources, knowledge, skills and maybe machines to run a full job to completion.

TERMINOLOGIES

a. **Plate/Stencil**: A plate is a metal, plastic, or paper sheet that carries the image to be printed.

The plate does not print on the paper, it rather transfers the image to **a rubber blanket cylinder,** which then presses it onto the paper.

Note: CMYK(Cyan, Magenta, Yellow, Black), the 4 colours for printing where each plate is formed with one of the colours

b. **Impression:** An impression is one instance of an image being transferred onto paper (or another substrate). If you print **1,000 copies** of a flyer → the press made **1,000 impressions**.
c. Recto verso: ⬥ **Recto** → the **front side** of a printed sheet (the right-hand page in an open book).
d. **Verso** → the **back side** of that sheet (the left-hand page when you turn it).
e. **Ream:** Sheets of paper packed together for convenience.

COSTING PROCESS-FOR A BOOK

1. PAPER

Variables

-Enter total quantities to be produced

-Enter Num of Final size on Printing size

-Enter paper to be used (The paper price list must have already been incorporated into the system so that it takes information from the number of papers in a ream and the price of that ream).

Formulae: Cover: $\dfrac{Qty}{Num\ of\ final\ on\ cutting\ size\ *\ Num\ of\ papers\ per\ ream}$ x $Price\ per\ ream$

Inner sheets: $\dfrac{Qty\ *\ Num\ of\ sheets}{Num\ of\ final\ on\ cutting\ size\ *\ Num\ of\ papers\ per\ ream}$ x $Price\ per\ ream$

2. PLATES

Variables

-Is it Colour separation or Black & White

-Enter separation plate (A2 or A3)

Formula: $Number\ of\ colours\ x\ Price$

3. IMPRESSION

Variables

-Enter Binding Price (Price for the labour put in to produce 1 copy)

$\dfrac{Qty}{Number\ of\ final\ on\ cutting}$ x 10F + (Binding Price*Qty)

OTHER JOBS THAT CAN BE COSTED

-Receipt booklets

-Flyer

-Complementary cards

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