**‘A Brush Up’ Internal Management System**

**1. TEAM MEMBERS**

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**2. CUSTOMER STATEMENT OF REQUIREMENTS**

**2.1. PROBLEM STATEMENT**

Carmine D'Alessandro operates "A Brush Up," a small family-run painting business, along with his eight staff members. It was established in 1999, and since then, it has gradually expanded through conventional business strategies. Some of these techniques involve doing computations by hand, maintaining personnel information on paper, and keeping records as hard copies.

Although these methods still are effective, since the company's founding, current technology has developed and introduced new methods that are simply unmatched in terms of effectiveness, dependability, and confidentiality. With the use of contemporary technologies, this initiative seeks to do away with these antiquated corporate practices while boosting productivity and protection generally. In return, the staff will receive additional time to devote to more crucial activities and accelerate the expansion of the company with enhanced information integrity.

**2.2. PROPOSED SOLUTIONS**

In order to assist the client more effectively and ensure the efficient operation of his business. Our system’s key objective is to replace the current operational processes that include maintaining and categorizing data with a cutting-edge database management system which will safeguard confidential information, enable quick and simple accessibility or adjustments, and introduce additional capabilities to interpret data to illustrate business analytics. Since this system is intended to be an internal management system that maintains critical data which is not intended to be made available to the public, it will not be associated with the internet.

The administrator tier will be granted the maximum capabilities, allowing access to information like authenticated users and any data pertaining to the company. Supervisors will be able to create reports, input company data including proposals, invoices, and staff data, in addition to being able to analyze user logins with viewing capabilities. The minimal degree of accessibility will be granted to staff, who will only be given permission to enter company data. The ability to access all of the data will be provided by a consumer-friendly desktop/browser application, which could do away entirely with the requirement for vast physical file storage areas and lessen human error.

**MAJOR FUNCTIONALITIES**

*Priority Scale: 1 - 5 (1 being the highest)*

* (1) User Register
  + Users of the system will be able to register accounts depending on their job title (*Admin*, *Manager*, *Employee*)
* (1) User Login
  + Users of the system will be able to log in to the system as long as they have a registered account
* (1) Store Job Reports
  + Employees and managers will be able to enter job reports that include job related data such as customer name, address, proposed costs, etc.
* (1) Retrieve Job Reports
  + Employees and managers will be able to view past job reports
* (1) Store Job Invoices
  + Employees and managers will be able to enter job invoices
* (1) Retrieve Job Invoices
  + Employees and managers will be able to view past invoices
* (2) Performance Reports
  + Managers will be able to generate performance reports for a given time period (e.g. weekly, monthly, etc.)
* (2) Update Sensitive Employee Information
  + Managers will be able to update sensitive employee data such as banking information and pay rates
* (3) Update Account Information
  + Employees and managers will be able to update account details such as passwords or personal information (e.g. address, phone number, etc.)

**2.3. NOVELTY**

In our study into existing software systems that are comparable to the system we intend to create, we came across *QuickBooks* and *Xero*. With *QuickBooks*, you can easily and conveniently complete your tax responsibilities while keeping track of financial activities including income and expenses, staff costs, and merchandise in real-time.

There are many features on both of the applications (QuickBooks and Xero) that will not be included in our system. Both applications have bank reconciliation, our system will not be able to provide this due to the fact that you have to link bank accounts onto the system. Another feature we will not include in our system is goods and service tax returns, many countries use this tax. However, we are working with a small business in this case that is located in the United States of America. The Sales Tax Rate in the United States stands at zero percent. There is no federal sales tax system within the United States. Since this is a locally owned business, there will also be no multi-currency feature present in this system. The last feature that will not be evident in this system is a mobile app, due to the time that will be taken for development on this system. We will not be able to create both an application and a mobile app, due to the time constraint. However, because there will already be an application, creating a mobile app in the future is possible.

On its website, *QuickBooks* lists the following as its key features:

1. Invoicing - Create professional custom invoices, send payment reminders, and match payments to invoices, automatically
2. Expenses - Get set for tax time with all your expenses organized in one place.
3. Bank Feeds - Save time and reduce errors when you connect your bank to get a full view of your finances.
4. Capture & organize receipts - Use your phone to take photos of receipts. Match them to bills to stay organized and ready for tax season with everything in one place.
5. Insights and reports - See how your business is doing, and how it could look in the next 90 days, with a range of popular reports and the cash flow planner.
6. Security - See how we keep your information safe and compliant at all times.

Another comparable data management program aimed at small to medium sized enterprises is *Xero*. *Xero* promotes the following as its primary features on its website:

1. Pay bills - Track and pay bills on time. And get a clear overview of accounts payable and cash flow.
2. Claim expenses - Manage spending and submit or reimburse expense claims with Xero’s expense management tools.
3. Bank connections - Connect your bank to Xero and set up bank feeds. Transactions flow securely straight into Xero each business day.
4. Track projects - Quote, invoice and get paid for jobs. Plus keep track of costs and profitability with project and job tracker software.
5. Manage Xero contacts - Use Xero for contact management. See details of a customer’s or supplier’s sales, invoices and payments in one place.
6. Capture data - Get copies of documents and key data into Xero automatically. Data capture without manual entry using Hubdoc.
7. Files - Use Xero for online file storage. Manage and share documents, contracts, bills and receipts safely from anywhere.
8. Reporting - Track your finances with accurate accounting reports. And collaborate with your advisor online in real time.
9. Analytics - See future cash flow, check financial health and track metrics. Upgrade your plan to get Analytics Plus.

While these applications offer various features that are useful for many businesses, our client simply does not need all of these attributes to run the business efficiently. The main differences that our proposed system will provide are:

1. No upfront cost - The other software options listed above have basic plans for businesses that start between $20 and $30 per month while our system will be free of charge for the client.
2. No maintenance costs - Not only will our software solution have no initial cost, it will also be free of any hidden maintenance or security fees that other mainstream services often have.
3. Customization - Our system will be custom-designed for the client to fit their specific needs to ensure optimal business performance. Considering the fact that the goal is not to make any type of profits from a general-purpose business software package like the main competitors, our team has the luxury of focusing only on what the client needs, not what the market needs.
4. Customer service - Since our client is related to one of the team members and has direct communication with the team, any questions or issues that they might have can be quickly addressed at almost any time. Other software services often have customer service available 24 hours per day but are not always as responsive or helpful.

**3. GLOSSARY OF TERMS**

* Conventional Business - Traditional and generally mature industries where ground-breaking breakthroughs and the scalability of new initiatives are hardly ever observed.
* Dependability - A system's capacity to provide a particular service.
* Confidentiality - The capacity to safeguard information so that unauthorized persons cannot access it.
* Productivity - The ratio of output volume to input volume.
* Data integrity - The accuracy, consistency, and comprehensiveness of data in its entirety.
* Database Management System - Software that manages the archiving, retrieval, and updating of data in a computer system.
* Accessibility - Making your system useful for people
* Business Analytics - often known as data insight, is the process of turning data into insights to enhance business choices.
* Invoice - A detailed business record listing the goods or services provided to the client, the total amount owed, and the desired mode of payment.
* Desktop Applications - Locally executed software programs on computers.