Table of Contents

[INTRODUCTION 2](#_Toc159845919)

[PROBLEMS IDENTIFIED 2](#_Toc159845920)

[OBJECTIVES 2](#_Toc159845921)

[-BUSINESS RELATED OBJECTIVES 2](#_Toc159845922)

[-COMPUTER RELATED OBJECTIVES 2](#_Toc159845923)

[DESCRIPTION OF EXISTING SOLUTION 3](#_Toc159845924)

[-INPUTS FOR EXISTING SOLUTION 3](#_Toc159845925)

[EVALUATION OF EXISTING SOLUTION 3](#_Toc159845926)

[-ADVANTAGES: 3](#_Toc159845927)

[-DISADVANTAGES: 3](#_Toc159845928)

[-INTUITIVE USER INTERFACE: 3](#_Toc159845929)

[-USER AUTHENTICATION AND AUTHORIZATION: 3](#_Toc159845930)

[DESCRIPTION OF OTHER POSSIBLE SOLUTIONS 4](#_Toc159845931)

[THE PROPOSED SOLUTION/CHOSEN SOLUTION 4](#_Toc159845932)

[-ADVANTAGES: 4](#_Toc159845933)

[-DISADVANTAGES: 4](#_Toc159845934)

[SECOND SOLUTION/POSSIBLE SOLUTION 4](#_Toc159845935)

[-ADVANTAGES: 5](#_Toc159845936)

[-DISADVANTAGES: 5](#_Toc159845937)

[ACTION PLAN IN TERM OF THE SYSTEM LIFE CYCLE 5](#_Toc159845938)

[THE TABLE ON WHEN THE PROCCESS WILL BE COMPLETED: 6](#_Toc159845939)

LEARNERS REGISTRATION SYSTEM

# INTRODUCTION

* Windhoek Technical High School is a technical school located in Academia in the Khomas region, where by around 550 to 560 learners are enrolled with the combination of 45 teachers so during Registration Day it’s becomes very problematic for both parents/guardians and the staff members as multiple people have to come and create a bundle and staff members are running are around to help everybody’s needs.

# PROBLEMS IDENTIFIED

1. Slow customer(parental) service
2. Long queues/ lines
3. When adding adjustments whenever errors are made is very time-consuming
4. Person’s handwriting if not clear/legible can lead to making errors

# OBJECTIVES

## -BUSINESS RELATED OBJECTIVES

1. Protect business information from unauthorized person’s/parties:

{this project aims to protect business information and secrets from unwanted access from opposing companies to avoid information from being stolen}

1. Saves money and time:

{As people don’t have stand in long queue/lines at the school its self as they can do it from the comfort of their own home with their smartphone or computer}

1. Improved customer(parental) services:

{It’s aims to increase the speed in which the Registration system is done by enabling the customer e.g. doing transactions such as paying off school fees}

## -COMPUTER RELATED OBJECTIVES

1. Provides a more secure system;

{to implement a new system with security measures to forbid sensitive student and parental information from being exposed

1. Provides a user-friendly interface:

{To develop an intuitive and user friendly which can reduce time spend into train on how to use it}

1. Effective process of registration:

{To create an automated system to reduce the amount of manual entry and reduces the possibility of mistakes}

# DESCRIPTION OF EXISTING SOLUTION

* Parents/Guardians will come to the school with the learner which is being registered in the school when arriving you would be in a large queue after waiting for a while when someone will hand you a form to fill out after filling it out you hand the paper over to the current register teacher for the rest of the year, if the student has any outstanding fees the parent/ guardian will rather pay on the spot or set arrangement of when it can be payed off completely and if everything is complete the learner shall finally be registered.

## -INPUTS FOR EXISTING SOLUTION

1. Full names of both parents and learner
2. ID number of Parent/Guardian
3. Medical Aid information
4. Hospital of choice
5. Parent/Guardian’s profession

# EVALUATION OF EXISTING SOLUTION

## -ADVANTAGES:

* There is not a lot training required to understand this system
* Improves collaboration as multiple people are required to work to the system
* Provides a sense of trust as people prefer speaking to a human then using a automated system

## -DISADVANTAGES:

* Forms may end up missing/lost forms
* It’s very time-consuming
* Requires more labour for information to process and interpret

## -INTUITIVE USER INTERFACE:

* The registration system feature an intuitive and user friendly interface, so it becomes for the user to guide and navigated through out every instruction/steps of the entire system

## -USER AUTHENTICATION AND AUTHORIZATION:

The system ensures secure access by implementing user authentication protocols for student, parents and staff members

# DESCRIPTION OF OTHER POSSIBLE SOLUTIONS

1. Create a computerized system
2. Create an improved version of the manual system

## THE PROPOSED SOLUTION/CHOSEN SOLUTION

1. CREATE A COMPUTERZIED SYSTEM

* I would like to suggest this is the best solution to the current manual registration system and the process that go behind it as the best way to solve the problems that are related with it.

## -ADVANTAGES:

* The registration process can be done faster:

{as people will be able do it from a device which requires no waiting time}

* Convenience:

{as parents/guardians can do it at the comfort of their own home and on their own time}

* Efficiency shall improve:

{tasks such as data entry, verification, and processing. This reduces the time and effort required for registration, allowing staff to focus on other important duties}

## -DISADVANTAGES:

* Accessibility issues:

{Not all students or parents may have access to the technology required to utilize a computerized registration system}

* Technical issues:

{Computerized systems may encounter technical problems such as software glitches, hardware malfunctions, or network outages}

* User Resistance:

{Some staff, students, or parents may resist transitioning to a computerized registration system due to unfamiliarity with the technology}

## SECOND SOLUTION/POSSIBLE SOLUTION

2.Create an improved version of the manual system:

* improving a manual system allows organizations to leverage existing resources and tailor solutions to their specific needs and preferences

## -ADVANTAGES:

* TRAINING STAFF:

{Training within an improved manual system allows employees to learn through hands-on experience and observation.}

* TAILORED SOLUTION TO PROBLEMS:

{Improving a manual system allows management to tailor solutions to their specific needs and preferences.}

* ADAPTABILITY TO CHANGE:

{Manual systems are often more adaptable to change compared to software systems, allowing training programs to evolve in response to shifting priorities}

## -DISADVANTAGES:

* Increased workload:

{Improving a manual system may require additional effort from employees to implement and maintain the changes.}

* Difficulty in Tracking and Reporting:

{Manual systems may lack the capability to track and report data effectively and to make data-driven decisions.}

* Resistance to change:

{Employees may resist changes to manual systems due to familiarity with existing processes}

# ACTION PLAN IN TERM OF THE SYSTEM LIFE CYCLE

|  |  |  |
| --- | --- | --- |
| NAME OF THE STAGE | THE NUMBER OF WEEKS | COLOUR OF THE STAGE |
| ANALYSIS | 4 |  |
| DESIGN | 3 |  |
| IMPLEMENTATION(DEVELOPMENT) | 10 |  |
| DOCUMENTATION | 3. |  |
| TESTING | 7 |  |
| EVALUATION | 9 |  |
| MAINTENACE | 3 |  |

## 

## THE TABLE ON WHEN THE PROCCESS WILL BE COMPLETED:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| STAGES | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| ANALYSIS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| DESIGN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| IMPLEMENTATION(DEVELOPMENT) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| DOCUMENTATION |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TESTING |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| EVALUATION |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MAINTENANCE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## HARDWARE AND SOFTWARE REQUIREMENTS:

|  |  |
| --- | --- |
| HARDWARE | REASONS WHY THEY ARE NEEDED |
| MONITOR | * comfortably viewing and interacting with development environments and databases. |
| AT LEAST 4GB RAM | * is used to store data and instructions for programs that are currently running on the computer. |
| AT LEAST 500 GB HARD DISK SPACE | * To store database software and project files ect. |
| INPUT DEVICE | * A keyboard and mouse for data input and navigation within the system |

|  |  |
| --- | --- |
| SOFTWARE | REASONS WHY THEY ARE NEEDED |
| **Integrated Development Environment (IDE)** | * An IDE is essential for writing, editing, compiling, and debugging code. |
| **Programming Language** | * a programming language that best suits the requirements and preferences. |
| **Web Server** | * Since I’m creating a developing a web-based registration system, I'll need a web server to host the application. |
| **Text Editor or IDE Plugins** | * Since I’m using a IDE having a text editor for quick edits or viewing files can be useful. |