Princess Sumaya University for Technology

King Hussein School of Computing Sciences

4

|  |
| --- |
| ITG’s internship application Form |

Author Supervisor

-Hala Farraj Dr. Saleh Abu Saud

-Sara Aljurf

-Rozana Alshaer

July 2, 2020

Table of Contents

**1 Introduction3**

**2 Problem Review3**

**3 Objectives**3

**4 Findings 3**

**5 Alternative solutions** 4,**5,6**

5.1 Solution 1……………………………………………………………………………………….4, 5

5.2 Solution 2……………………………………………………………………………………….6

6 **Recommendations…………………………………………………………………………………..7**

# **1 Introduction**

This reports aim is to highlight the alternative solutions and the best solution to enhance this problem for ITG. Before that, we’ve made some interviews with the HR supervisor, Mr. Zaid Rishq, and asked him a few questions that was going in our head about their subsystem. Then, we made a questionnaire for the HR employees to check if it’s a real problem and if we have to solve it. So, we could get some alternative solutions; that we are presenting in this following report.

# **2 Problem Review**

As mentioned previously, the system contains a couple of actions that needs to be enhanced but no bugs were detected. First action was that, the process of receiving and collecting application forms needed much more time and effort than it’s supposed to which made the HR analysis method frustrating, where the process works on sending an application form to the applicant after receiving their CV via email, and the application is expected to be filled out after the interview as well.

The second action is when the CV is sent to the firm’s email, it gets directed to the inbox alongside other emails which may lead to data loss.

**3 Objectives**

1. The process starting from receiving the CVs until the interviews supposed to be shorter and more flexible
2. Less memory space usage by the received data
3. Less time and effort consumption
4. The system response is faster than how it was before
5. Reduce the possibility of data loss
6. Using more advanced software to complete this process

# **4 Findings**

1. Complexity of collecting information from both employee and applicants
2. Based on the questionnaires, 75% of the employees stated that the subsystem needs to be enhanced
3. Based on the applicants’ reviews on the website, 67% faced a problem with how the process is long
4. The robust communication between the HR and the trainee after receiving the training contract
5. The HR is responsible for the actions of the trainee

# **Alternative Solutions**

After the deep discussion between the team mates and the HR department regarding the previously mentioned complications in the subsystem, we came up with the following possible alternative solutions:

* 1. **Solution 1**

Getting rid of the current subsystem and replace it with a new one instead of doing any enhancement on the current subsystem. This solution was suggested by an HR employee during the interviews. Getting a new subsystem is done by the following steps:

1. Finding an IT firm, if we are using the outsourcing method, or hire a qualified IT group specialized in developing subsystems, if we are using In-House method.
2. Train the staff, who works on this subsystem, to get used to it.
3. Display a tutorial on the firm’s website showing the new features.

**Cost:**

We found that the estimated cost of developing a subsystem using the outsourcing method is:

4200 JDs for getting the license and the subsystem

1300 JDs for training the staff

280 JDs for purchasing the needed tools

5780 JDs for the total cost

**Cost:**

We found that the estimated cost of developing a subsystem using the In-House method is:

840 JDs for the (2 Man-days) analyst salaries

2208 JDs for the (2 Man-days) 3-mate programming team

4500 JDs for the servers

280 JDs for purchasing the needed tools

7828 JDs for the total cost

**Time:**

We found that the estimated time of developing a subsystem using the outsourcing method is:

4 months trial

1 month for getting the license

1 month for training the staff

6 months for the total time

**Time:**

We found that the estimated time of developing a subsystem using the In-House method is:

1 month for testing the subsystem

6 month for getting the subsystem ready

2 month for training the IT department for developing

1 month for training the staff

10 months for the total time

**Advantages**:

* Avoid the complexities that the company may face while modifying the subsystem

**Disadvantages**:

* It takes few months to train the users to use the new subsystem
* It costs much more than fixing the exact problem
* It takes more time compared to the time taken for solving the real problem
* This solution doesn’t improve the issue regarding the CVs
  1. **Solution 2**

This solution works on converting the internship’s application from a documented form to a programmed form within the website. In more details, the application form is filled out once on the website instead of receiving it as a documented form via email. The applicant doesn’t need to fill it out once again during the interview. Every filled details is stored in a database called Employee Portal. This solution is done by the firm’s IT staff.

**Cost:**

We found that the estimated cost of developing a subsystem using the outsourcing method is:

760 JDs for the (2 Man-days) analyst salaries

750 JDs for the (2 Man-days) 3-mate programming team

280 JDs for purchasing the needed tools

1970 JDs for the total cost

**Time:**

We found that the estimated time of developing a subsystem using the outsourcing method is:

1 month trial

1 month for analyzing and designing

1 month for developing

3 months for the total time

**Advantages**:

* It takes fewer time compared to other solutions
* It costs less money than other solutions
* Employees are already used to it
* The process is getting shorter
* Data is not lost any more

**Disadvantages**:

* This solution distracts the IT staff from their main work

# **Recommendations**

We, as software engineers, found that:

The first solution is very good in providing a reliable subsystem because an IT system is going to develop our subsystem, or it may be done by ITG’s IT staff. This solution also may relieve the responsible on the firm because it has nothing to do except of training the employees.

The second solution is very good in storing the data in a database and reducing the time and the cost more than how the first solution does. The database thing strengthens this solution much more than the first solution.

In conclusion, the second solution is what we really need to solve this problem so we will go for it.