Follow-up Management System via. using Mobile Application (Follow App.) in Public Sector

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Abstract: Electronic documentation management means imaging documentation and document management technologies. Nowadays people prefer to use mobile application in order to do their activities and transactions. Therefore, in order to create a good electronic documentation management system, it is important to enable mobile application to process and follow up system (it is also called e-Tracking). This study illustrates the mobile application and follow up system in directorate of scholarship and cultural relations in Iraq called the "Follow App." Follow App. provides a monitoring service within different studies in this directorate. This research has developed a follow App. by discussing with the main manager and some staff in this directorate. This study will contribute to encourage the government staff and their customers to use mobile application to ease their work. It can also reduce their effort and time as well as decrease the cost. Moreover, this follow App. system provides more control on the work by keeping an eye on the staff in this directorate. Finally, this system can increase the trust of using technology in Iraqi sectors.

Key words: Electronic documentation management, follow app, directorate of scholarship and cultural relation, main manager and some staff, contribute to encourage, application

INTRODUCTION

Iraqi e-Government has many difficulties in order to build its foundations correctly because of the current issues that the country faces such as security and corruption (Mohammed *et al.*, 2012). Moreover, it is necessary to change the mindset, the plan of action of people in public administration and the way that they communicate with citizens and businessmen. With all of these problems there is a lack of scientific research that tried to solve or provide a solution for Iraqi e-Government projects. Nevertheless, e-Government may build useful bridges with other cultures and countries specially by using the advanced technologies such as social media and mobile applications (Abdulameer *et al.*, 2016).

Electronic Documentation Management (EDM) is referred to imaging documentation and document management technologies (Anonymous, 2007). In the daily life, we need to do many transactions in public organization. Therefore, most of the citizen need to go to these organization in order to submit their documents. In addition to that, the applicant should come again to follow up his/her transaction. In Iraq same other developing countries most of the documents can be lost while transferring from one office to another.

The main usefulness of electronic documentation management is the ability to save digital document, manage and retrieve them within seconds. The system can therefore decrease the time and effort (Anonymous, 2009). Indeed there are many similar systems in the different countries but the operation of the system in Iraq is different due to the system environment and geographical structure (Ibrahim and Ta'a, 2015).

Literature review: A system EDM must have the ability to convert government file into digital form (scan), applying information to the digital files (index fields) and saving images in a database (digital media). Moreover, system in EDM includes search method for files (index or full text search), security features and provide output (view, e-Mail, fax, print). Therefore, these features of EDM can decrease the space of storing the document because it can convert them from study to digital (Mohammed *et al.*, 2014). Adopting the information

technology to make electronic management for the documents is one of the most important challenges that the managers face in the last 10 years (Sprague Jr., 1995).

Iraqi government agencies have huge management problems (Hasan and Ali, 2011). According to Salah, the main manager in directorate of scholarship and cultural relations in Iraq, "students have faced a big issue to come to the directorate of scholarship and cultural relations to apply for their transaction and follow up". Therefore, Iraqi government directorate needs to create official website to solve this issue (Al-Qaisy, 2012). This study suggests to implement website and mobile application to provide these servers to students. The study intends to use mobile application because it is commonly used.

The close study to our research by Mohammed *et al.* (2014), the study used workflow by addressing the document to classify base on the department and scanning using scanner, so that, the study document is converted into PDF document. The electronic documentation management in directorate of scholarship and cultural relation in Iraq is sim-auto system. This system needs a barcode option to put on the student's paper document. The barcode can make the linkage between study documents and digital documents for the student.

The next step is to save the digital document for each student inside the database and that option can keep the documents safe for longer time and it decreases the space of storing the document. The processing step has many parts. The first part that should happen in document process is to give the time that the processing is going to take. Moreover, the second part is the quality for each document. The third part is to send the document to another department or sub-department if it is needed. The usefulness of the processing step is that it can make the directorate know the number of the transactions that have been done or not.

The final step in this workflow is the result of the transaction. Therefore, the monitoring of follow up system starts from the first step (addressing) until the last step (result). The monitoring gives ability to section of e-Monitoring to control and monitor the process of each student's transaction.

The workflow of directorate of scholarship and cultural relations in Iraq has created depends on the process that directorate wants to follow. Thus, each step came from the real processes that student's documents take to be done in this directorate. The workflow has designed based on the discussion between the staff themselves in the first instance, followed by staff and researchers.

The students should come to the office of directorate and submit the transaction to the office-in order to solve this problem we create website using HTML language,

CSS, JavaScript and MySQL for database, the website is built base on student requirement. The workflow of the new system is started by:

- The student should download the application mobile from play store
- The student should make account to get username and password
- Upload the documents and fill the form and choose the type of transaction that can be used for the addressing and submit it-in order to upload, the student needs username and password
- The detail and the documents will be stored in the database
- The student will get confirmation message from the application that the transaction has been submitted successfully with a given submission number
- The addressing step which means, to put address or path for each document, so that, it is transferred to the appropriate department or sub department
- The student can attach their documents by using website or mobile application

After processing the transaction, if all the documents are correct and in order, then he/she will get confirmation message the transaction done, you can come to get it. However, missing or incorrect documents will regulate a message that the student needs to update his/her data. Less effort on employ.

FOLLOW APP.

In order to use the follow App. system, the user should download the App. from the store (apple store/play store) and sign up in the system as Fig. 1. After
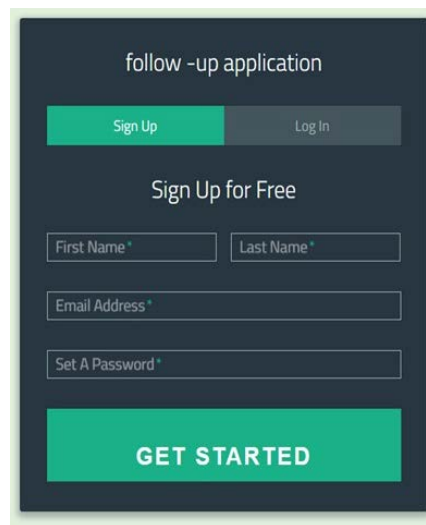

Fig. 1: Download the App. from the sign up in the system

Fig. 2: Directorate of scholarship and cultural relations

Fig. 3: Costumer will receive the message

signing up, the user can login, fill the application, upload the documents in order to submit their transaction and then they should press submit button to submit into the system. If the costumer fill the application with all correct documents, then the system can process his/her transaction into the database of the directorate of scholarship and cultural relation (Fig. 2). Then after submitting the details including documents, the costumer will receive the message as in Fig. 3.

Fig. 4: Citizen can get the feedback from the office

After completing the check and start processing the transaction, the citizen can get the feedback from the office (Fig. 4). When the process is completed and the citizen can get the final result of his transaction, he will get the following message as shown in Fig. 5. However, the user can login and enter his/her account by using the username, password and e-Mail to follow up their transaction (Fig. 6).
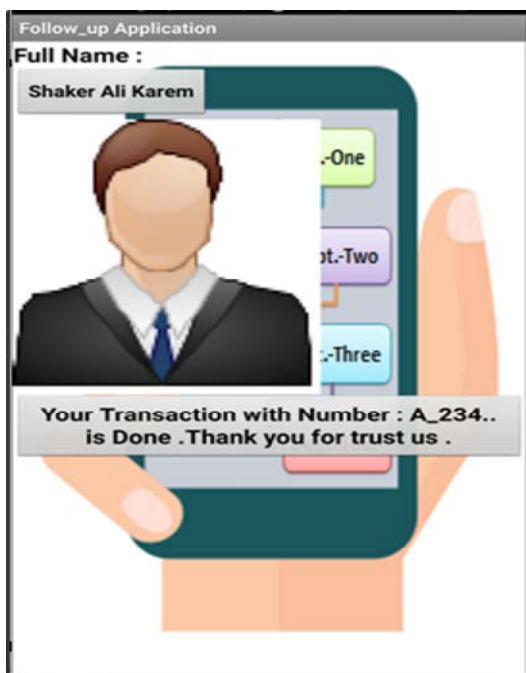
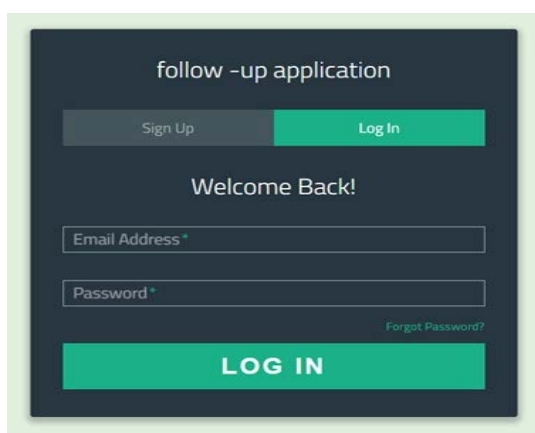Fig. 5: Citizen can get the final result of his transaction

Fig. 6: Password and e-Mail to follow up their transaction

CONCLUSION

This mobile App. is free for all user in both sides government staff and user. It has benefit to the community in the present time by reducing effort and time. Moreover, it can decrease the expenses and also it will prevent the blackmail and harassment during this application. The mobile App. can ease the transactions process and diminish the citizen's order of fatigue and trouble. Iraqi sectors (public and private) are really in need of the mobile App., so as to help them process and monitor transactions. Therefore, government and private companies should give more attention and care about this technology. In order to improve the application, the test case should be done by management staff and customers.

RECOMMENDATION

In the future this research aims to be applied officially in the departments of the ministries in order to serve the Iraqi citizens promptly and effectively.

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