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CREATING TRUSTED LEARNING BY USING QR BASED U LEARNING SYSTEM

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Abstract:

This study was aimed to develop the QR code based U learning materials tool. The tool is used by teachers to provide the class materials to the students and this material will encourage the students for their studies. The materials provided are like context aware materials. The students learn the whole content deeply and easily understandable way by providing the videos images for the concept so that they can understand very well. This tool which gives interest to the teachers to upload the materials and also Interest to the students to learn. The materials provided by the teachers using the tool is available offline also to the students.

Keywords: Context aware learning, student motivation.

1. Introduction

Nowadays in the societies, the nature is being with the smartphones, note and tablets which are used for learning environment beyond the classrooms also. Such learning iscalled as Mobile learning platform. This model is used to over the classroom space. In which the student can learn the content at the exact moment in the exact place. Normally at present in the class, teachers would make theory, filmstrips images andaudio something to make understand the student about the concept. And the traditional outdoor teacher methods are said to be time consuming and also sometimes it is very difficult to understand. This type of teaching will provide the only one-way communication in the real world and it lacks the meaning full interaction between the student and the faculty. And also students won't learn the sufficient information from the faculty without their guidance. For these kind of reasons, the U learning method were introduced with context aware technique in recent years. Past two decades, this context aware techniques were implemented in Radio Frequency Identification(RFID). With the help of this RFID students able to view their content in "actually space" rather

than cyber space. With using this we can detect and record students. The RFID technique was reduced because the teachers don't have sufficient knowledge to do the programming. And lack of coding skills. The problems were uncommon to the educators. Because they don't know how to work with the RFID. And RFID can't be printed easily intraditional computers rather it needs industrial support or needs a expensively architecture printers. These problems where faced in the production time but then also the context aware learning were prepared finely. And the RFID will be capable of storing only particular data patterns alone. And its size won't be expandable. Above mentioned all reasons and to overcome these barriers, we proposed the Quick Response techniques with all possible context which can be easily used by teachers without any expert advice. The aim of this QR is to easily and quickly will be available to user whenever he needs it. As QR code decrypting is widely spreader technique now and in the previous also they use QR code decrypting to provide the materials to students. So it will be used here also and more over this paper has some more enhancements to the base paper. In Our Study the system we developed has three sub sections which we call as modules: QR multimedia production part, material sharing server and context aware learning by thestudents. Through the production system and the server, the teacher can give the unique materials to the students. Like this U learning will make the students to learn and gain the whole subject knowledge. It also supports to enhance their knowledge in education.

2. Related work

The scope of using the QR in the Educational department is been investigated in the law. The educational codes have been released. [12]. The previous decades the researchers were eager in distribution of materials to the students in the mini computers and also using the RFID techniques. These techniques have the lot of drawbacks [5]. Then the QR code has been introduced for some other purpose and then it is also being used in the educational department. As the QR was introduced the mobile learning and material providing was very easy and It became very much useful for the students and also the teachers.

3. Scope and Objective

M learning is mobile learning of various contexts and social interaction using personal devices. Learning using portable technologies. This model helps to overcome the space and time complexity of traditional learning. QR code which can have lakhs and tons of information. It contains all the data types like numeric, alphabetic characters, kanji, kana, hiragana, symbols, binary and control codes. It is very useful motivating tool for students and easy tool for teachers. This tool is

more efficient and achieves better results than the traditional teaching. This create an interest between the student as well as the teacher

4. Materials and Methodology

The Radio Frequency Identification is the prior technique use for the u learning. With the help of this technique we can record the student's details and help them to learn the content. But it is unfamiliar among the teachers. Teachers lack in programming knowledge so it is difficult to execute the RFID technique. And the RFID also needs the special device to be printed it cannot be printed using traditional printers. So this was dropped and teachers started to use the traditional method of teaching. The problems found in this are students were not able to attend the class regularly so they cannot take notes hence they are sharing notes. And the hard copy given by teachers is wasted if it not protected. Old QR just recognizes the URL content and we have to type it manually in the browser in order to download. As QR code is a type which handles several lakhs and billions of information. It is used for context aware learning. This allows the teacher to upload the context aware level materials to the students.

As teachers provide the materials which has video image and also the meaning for the difficult word in the materials. It also points the web page address for further clarification. These are given in hyperlink. The tagging of images videos and audio for the materials is for easy understanding of the concept.

These QR codes makes the user to connect easily and quickly for the information. This technique is lower one so teachers can use it very well. The QR application scanner was designed as to automatically recognize the URL contents in the QR and redirect it to the browser and it trigger the URL to download the U learning material. This U learning material is now available in offline.

4.1 QR Code Generations

The algorithms are used in this study. The algorithms and tools are being used in this project. The QR code generation algorithm is the main and vital algorithm used in the study. The QR code generation algorithm uses the JavaScript,HTML and CSS. The QR code generation helps to create the QR code based on the materials uploaded by the faculty.

4.2 Text to PDF conversion

The conversion of this is used for converting the uploaded text material to the PDF materials. The admin uploads the overall syllabus in text format and it converts the text into PDF content. So that the teacher can't edit it. The teacher can directly download the PDF materials.4.3 Natural Language Processing Technique

The Processing Technique is used for the getting meaning for the difficult words. It acts like the dictionary and gives meaning for the words for which we specify. The technique uses a dictionary tool for it. The tool is NS tool.

4.4 Offline Material Providing Technique

The U learning materials which are uploaded and prepared are being delivered to them in the offline mode. So that the students can learn them in the exact moment and exact place. Once the materials are downloaded then the material is always available to them in the offline mode.

4.5 U Learning Material Package

The Packing of the Materials is zipping all the contents in the Zip file and stored in the Server for the further use. The zip file is then embedded in the QR code for the download process.

5. Conclusion and Future Work

As a result, the QR U learning tool is prepared and given to the teachers and the students. And it is useful for them to learn the subject through mobile. They can gain the extra knowledge. No need of searching web for the concept clearance. This tool was very much helpful for the teachers who were eager and enthusiastic in delivering the context aware learning to the students. And the teachers also recommended for more upgradation in this tool. With essential practice they will become familiar with this tool. The present work was QR code which retrieves the URL and it automatically triggered to download all the materials. And these materials are available in offline also. The Natural Language Processing tool was used to get the meanings for the difficult words. The future work we planned is to supply the QR code which contains lots and clear materials which can be easily understandable to the students who were slow learners. And the QR code is distributed separately to the students who grasp the concept easily

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