Design and Implementation of English Language Tutorial System with Intelligent Feedback System

Meeta Dewangan, K J Satao

Abstract— This paper presents the design and implementation of English language Tutorial system, which supports students at home learning the English language. We concentrate on implementation of different modules of this system such as the learn phase, test phase, dictionary, pronunciation section which is devoted to generate, in a cognitively transparent way, the right tense for the verb appearing in the exercises presented to the student. A model edition of English language Tutorial system has been fully implemented with the help of visual basic 6.0 as front end, ms access and flash files as back end. English language tutorial system essentially classify into three level like primary level, middle level and high level. This paper depicts the components and technology used to design and implement of this system with intelligent feedback system which used to provide the response to user so as to helps to be aware of the knowledle intensity of user after interaction with this system.

Index Terms— — Components, Dictionary, learn phase, model edition, modules, pronounciations, Technology, test phase, Tutorial system, visual basic 6.0

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1 Introduction

LNGLISH tutorial is multimedia based application intended to help nursery primary school students, middle school student, high school student or in general, anyone interested in learning to learn the basic of English. The contents of the application are organized into different modules that comprises of interactive learning program-mers to develop skills for reading and writing alphabets, words, and sentences. The animations, pictures and sounds teach the association of objects and word along their spelling and pronunciation.[1].

English tutor helps the learner understand and prac-tice basic conversation skills with vocabulary, how to greet people, knowing more about them, how to make use of the language in their daily routine, how to invite people and how to request or ask for a favour from them. Making the user aware of the scenarios which the user come across when going around a place, about basic necessities, making him know the objects he may come across, things he may need while planning a journey, skills of describing a place, people the user have across etc, about the way of answering a telephone call, basic etiquettes of talking on phone, extempore questions and their model answers.IJSER staff will edit and complete the final formatting of your paper.

2 COMPONENT OF ENGLISH TUTORIAL SYSTEM

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 Prof. K J Satao is Head Of Department in Information Technology and MCAin Chhattisgarh Swami Vivekanand Technicle University, India. Email: kjsatao@rediffmail.com In this section we would like to describe all the modules of English tutorial system that is used to help the users to learn English language. In this system major five modules have been included such as content, intelligent feedback system, dictionary, pronunciation module and collection of database. All the modules prescribe below in detail manner.

All the component of this software is well managed to help the user to make English influent explore the key architecture of English language tutorial system.

2.1 Learn phase

Success depends on your ability to learn constantly. Some of your learning is picked up along the way and some is seat- of-your-pants learning. Either way, learning takes place in three phases.

The lesson phase: Taking things in During lesson time you, the learner, are presented with new material and concepts. The main purpose of this phase is for you to familiarize yourself with new material and to absorb the text, images and explanations your tutor considers most relevant to the topic at this time.

The learning phase: Thinking things through Learning doesn't happen during lectures or by reading books. It takes place once class is over and your books are closed. Real learning begins when you start tossing what you've read or heard around in your mind, consciously looking for the matches and mismatches between it and what you already know.

The practice phase: Putting things into practice the practice phase is where you carry out the tests and try the uses you came up with in the learning phase. Regular practice is more effective than random bursts. Try to set aside a minimum of three 30-60 minute practice periods a week. Shorter practice periods are unlikely to be helpful. It takes most people 15-20 minutes to leave the busy world behind and slip into a state of mind in which they can fully concentrate.[8]

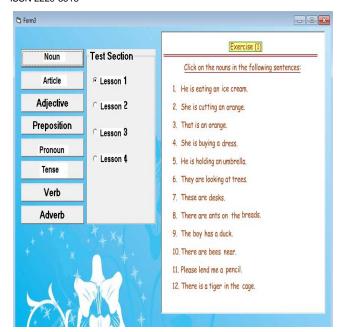


Fig. 1 User Interface for Test phase

2.2 Test phase

Tests in the ETS are performance tests. We do not aim at testing the student's knowledge of English grammar. We would like to test how students produce, understand, and use English in communicative contexts. We are not interested in testing how well the students remember the facts about English language. We are interested in testing how well the students actually use English in communicative contexts.

Achievement tests test the progress the students have made in reference to particular lessons. Students' level of achievement in terms of the structures and words taught through a lesson or a specific number of lessons is the focus of achievements tests.[7] The drills and exercises given in a lesson gauge the progress of students even as these help him to understand, master, and use the content, structures, and words given in the lesson.

Proficiency tests, on the other hand, focus on the overall mastery of the students in English irrespective of the lesson.[7] It may be described as a cumulative test, taking into account all the structures and words that a student may have been exposed to so far: a sort of final exam, a comprehensive exam..

2.3 Dictionary

There are many bilingual Hindi-English/English-Hindi dictionaries, namely those published by McGraw-Hill, Oxford, Olivetti, Prentice-Hall, etc., as well as several online websites where similar dictionaries and glossaries can be found; for instance, Fernandez Calvo's computer glossary;1 also Ramsay's and Lozano-Hemmer's (1998) "Comparative Cyber Lexicon", and Anaya's (Glossaries de terminus informatics Inglés-Español) or glossaries about common mistakes in translation

and language use, such as Angel Olivarez's (2000). In addition, numerous chats and newsgroups have been established in which terminology is being discussed on a regular basis.

In this system we have included one dictionary that based upon the criteria. Here we are collecting large number of words in favour of forming dictionary.

2.4 Intelligent feedback System

Intelligent feedback system module used to test the knowledge of users in favours of contents modules. This section or modules based upon the concept of competi-tive ex-

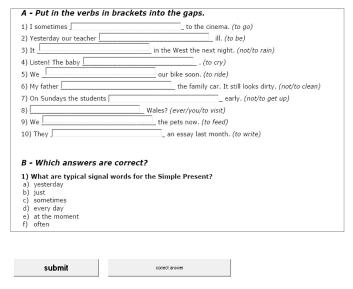


Fig. 2 intelligent Feedback System Module

amination. In competitive examination has many type of technique which used to elaborate the depth of knowledge of English.

In competitive examination the study of English requirement at least three processes: learning, which is acquiring knowledge, understanding this knowledge and memory retention. The best way of achieving these objectives is through careful reading and solving of practice test.

In this system we will try to include vocabulary test, correct English usage test, English proficiency test, logic based English language test. These all test modules should be included in intelligent feedback system module of English language tutorial system to give the advantage to the users who interact with the system to make yourself English influent.

2.5 Pronunciations

Pronunciation refers to the way a word or a language is spoken, or the manner in which someone utters a word. If one is said to have "correct pronunciation", then it refers to both within a particular dialect. A word can be spoken in different ways by various individuals or groups, depending on many factors, such as: the area in which they grew up, the area in

which they now live, if they have a speech or voice disorder, their ethnic group, their social class, or their education.

This module is for learners of English who would like to understand more about the teaching and learning of pronunciation. It will also be useful for those who would like to be-

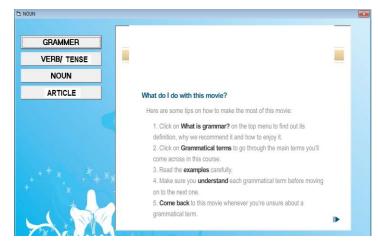


Fig. 3 User Interface for learning phase

come specialist trainers of pronunciation to other teachers, or carry out research into pronunciation and the teaching of pronunciation. You will find here advice on where to find further resources and training.

All English language teachers are pronunciation teachers. Nobody can speak a language without pronouncing, and even

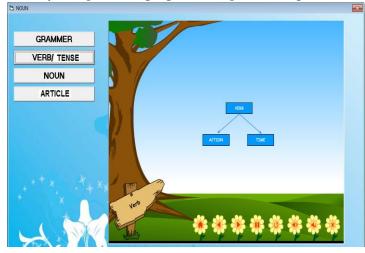


Fig. 4 User Interface for English Tutorial System

if teachers ignore pronunciation in the classroom, they give the message that their learners' pronunciation is satisfactory, or that pronunciation doesn't matter.

Questionnaires and needs analysis procedures frequently reveal that learners regard pronunciation as a high priority often much more so than teachers - and it isn't difficult to appreciate the reasons for this: in spoken interaction, pronunciation is often the first barrier to intelligibility, and uncertainty about pronunciation is often a major reason for learners' lack



Fig. 5 Pronounciation phase of ETS

of confidence in speaking.

Many teachers would like to offer their learners more help and support with pronunciation, but feel that they lack the necessary knowledge and skill, or that their own pronunciation is not sufficiently good. In other words, pronunciation is an area where teachers as well as learners often suffer from



Fig. 6 Primary phase of ETS for Primary School Students

lack of confidence

3 IMPLEMENTATION

A product software implementation method is a systematically structured approach to effectively integrate software based service or component into the workflow of an organizational structure or an individual end-user.[9]

Implementation is the carrying out, execution, or practice of a plan, a method, or any design for doing something. As such, implementation is the action that must follow any preliminary thinking in order for something to actually happen. In an information technology context, implementation encompasses all the processes involved in getting new software or hardware operating properly in its environment, including installation, configuration, running, testing, and making ne-

cessary changes. The word deployment is sometimes used Learn More Implementation to mean the same thing.[9]

4 IMPLEMENTATION PHASE OF ETS DIVIDED INTO SEVEN SECTIONS

4.1Problem recognition

This is the 1st phase before the implementation of English language tutorial system .In this section we recognize the problem and issue that related with English learning process. According to this section we explore a various kinds of problem which has phase by the English learner. There is various kinds of technique which used to teach the English language such as web based English learning technique, traditional approaches, E- class room, according to traditional technique such as attempt the couching classes they need to attempt the class on regular manner therefore learner will have to give the sufficient time to the class.

4.2 Clear objectives

A clear object is a second phase to words the implementation process. We would like to set the goal or objectives in respect to development of English language tutorial system .In this phase we try to develop a system that should be user friendly, easy to use, graphical user interface, easy to understand give the advantage to the user .

4.3 Data collection:

To develop the English language tutorial system using we need to collect the data and information for Antonyms, Synonyms, Verbs, same word used as different part of speech, Spellings, Distinction between similar expressions.

4.4 Setup outline

After collecting the data we go to the next section the named as setup outline in this section we define and design the key architecture of English language tutorial system. By using this section we got the key architecture of English language tutorial system which has basic five modules shows in figure

4.5 Select tools to implement the key architecture

In the primary level of this project we have used to Microsoft visual basic 6.0 as front-end tools and Microsoft access 2009 and adobe Software file used as back-end tools. And we have used the Window7 as operating system.

5 RESULT AND CONCLUSIONS

We have implemented most of the functionalities of the proposed English tutorial system for English. The system is implemented in module wise implementation, designed following the Model View Controller design pattern. The overall approach for the system is such that it addresses most of the pedagogical principles for second foreign language learning. The student is presented with courseware which is distributed across various "Lessons". The system follows a prerequisite

based learning theory wherein the users can attempt a lesson only if he has fair knowledge of the lesson's prerequisites. Various evaluation mechanisms are used to determine the understanding of the student in a particular lesson. The lessons starts with basic structures and gradually moves on to more complicated constructs. The course begins with an introductory lesson on the pronunciation key for English, then moves on to lesson that introduces basic vocabulary from various categories, later to expressions concluding with full-fledged conversations. The navigation mechanism makes sure that the student knows where he is currently in the system, his current level understanding, what he can do next or cannot do based on his current level of understanding. A number of pedagogical ideas have been incorporated keeping in mind the need to keep the learner focused, the need to avoid overconstraining him, the low attention span of an online student, and the need for iterations in areas like language learning.(1)

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