

# ITS for Teaching French

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**Abstract:** *The paper depicts the blueprint of an electronic wise indicating system for demonstrating learning French to understudies to overcome the inconveniences they go up against. The fundamental idea of this structure is a proficient introduction into learning French. The system shows the purpose of learning French and coordinates thusly made issues for the understudies to clarify. The system is logically balanced at run time to the understudy's individual progress. The system gives unequivocal help to adaptable presentation to learners.*

**Keywords:** Intelligent Tutoring System (ITS), learning French, Expert System, Artificial intelligence.

## 1. INTRODUCTION

Learning and mastering one language today is not enough. Individuals who speak several languages are more likely to have a job suitable for them, whether in their own country or abroad. Learning new languages will enrich the human mind and open up new horizons. The French language is the only language spoken by the five continents. It is the second most widely used language after English. Learning the language through Intelligent Tutoring Systems (ITSs) helps the individual to identify different vocabulary, or vocabulary that is difficult to distinguish and know its meaning. Studying the French language with a spoken voice is better for the individual to learn French by listening, not just reading. Learning French words in sentences rather than on their own is better for a person to put the new word into a useful sentence, which leads to the ease of speaking the language later. Spending 15 minutes each day studying the language would give better results than sitting for a very long time for vocabulary and grammar. Those who wish to learn French should build a base of basic words, sentences and rules, through what they read in any book in French or hear it in any text, and then write it in the form of a set of sentences. It is not possible to learn any language without understanding its words and the way to use it, a list of words with their meanings is written, saved and constantly reviewed.

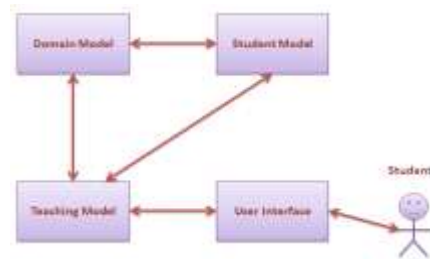
## 2. LITERATURE REVIEW

Numerous analysts have utilized a brilliant instructing frame Intelligent Tutoring System work that has some expertise in training, for example, teaching Java objects Programming language[8], SQL-Tutor, ITS that teach students English dialogues through interaction with students and it takes into account the individual differences of students through levels [3]. ITS to examine errors in algebra [4]. A comparative study between Animated Intelligent Tutoring Systems (AITS) and Video-based Intelligent Tutoring Systems (VITS) [7], Affective Tutoring Systems (ATS) based on embedded devices is a system that relies on embedded devices for detecting the feelings, emotion, psychology student and also adapt to the student's mood such as angry, frustrated and fatigued etc. Based on the mood and feelings of the student, the student will learn [8, 9], teaching AI searching algorithms [10], teaching database to sophomore students in Gaza [11], Predicting learners performance using NT and ITS [12], learning to program in C++ [13], and security algorithms [43-53].

## 3. ITS ARCHITECTURE

An ordinary ITS has four crucial modules: domain model, teaching model, student model and user interfaces. The space display includes the course arrangement in an organized style.

A course may have an assortment of parts, such as division, sub-divisions, and subjects. These parts are put away in the space display together with their conditions. Every one of the materials and assets important to guide an understudy are likewise kept in this module. Along these lines, understudy display is an imperative instrument for the adjustment procedure. The showing module contains all the basic leadership strategy concerning course arrangement and adjustment. Regularly, this module is known as the control motor, since this module controls the whole framework, by tolerating inputs from alternate parts. The teaching module contains all the decision-making procedure concerning course preparation and adaptation. Often, this module is called the control engine, because this module controls the entire system, by accepting inputs from the other parts. Lastly, the user interfaces have two sections - one for the student and the other for the teacher. Teacher's interface is accustomed to arrange and adjust the system and its different parts. So, the teacher's interface behaves as the authoring tool. By his interface, the teacher can add new lessons, adjust the established ones, and revise teaching methods. The student's interface is used to convey all the teaching commands. The sort and the type of these commands would differ with student's ability and performance level. General system architecture is shown in Fig. 1.



**Figure 1:** Overall System Architecture.

### 3.1 ITS Domain Model

The domain model is concerned with the lessons, its arrangement and a range of elements. There are two fundamental components in domain model. The first component, Domain Organization Model, deals with the arrangement and organization of the lessons and its topics. The second one, Repository, deals with the materials being taught themselves.

#### Reasons of learning French:

**lesson 1:** Letters and pronunciation.

**lesson 2:** Numbers.

**lesson 3:** Colors.

**lesson 4:** social studies.

**lesson 5:** the days.

**lesson 6:** Parents and relatives.

**lesson 7:** Expressions and time.

**lesson 8:** the four directions.

**lesson 9:** Pronouns.

**lesson 10:** Some words and phrases.

**lesson 11:** Complimentary expressions.

**lesson 12:** The qualities.

**lesson 13:** Conditions of time.

**lesson 14:** Conditions of place.

**lesson 15:** Words we hear a lot.

**lesson 16:** Notes and alerts.

**lesson 17:** Months.

**lesson 18:** seasons.

### 3.2 ITS Student Model

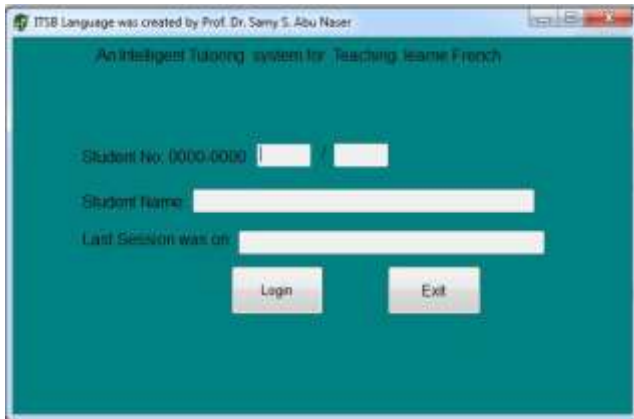
State based approach was implemented in the student model. However, there are quite a few parameters for educational modeling of a student throughout a learning procedure.

### 3.3 ITS Teaching module

Teaching module is considered to be the most important component of an ITS. The primary task of this module is to arrange a sequence of teaching actions to be taken during a teaching process. These actions and their sequence should go with the student's ability, requirement and objectives. The arrangement is done at two stages. At the first stage, ordering of the topics for the student needs to be arranged. This stage begins from the initial state and finishes when all the topics are included in the sequence. At the second stage, after a topic is chosen another arrangement is essential to compute the exact technique of teaching that topic. This engages selecting the proper type of the document and the proper medium.

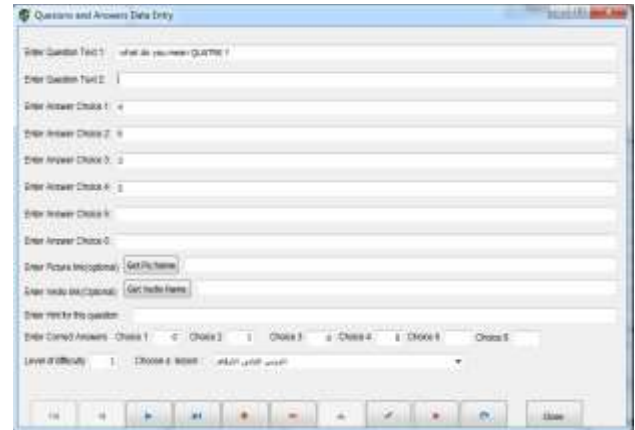
### 3.4 ITS User Interfaces

Interfaces are an essential part of the ITSB system. There are two classes of users, teachers and the students. The ITSB authoring tool has both interfaces. Each class of users see different interface for their interactions with the system.



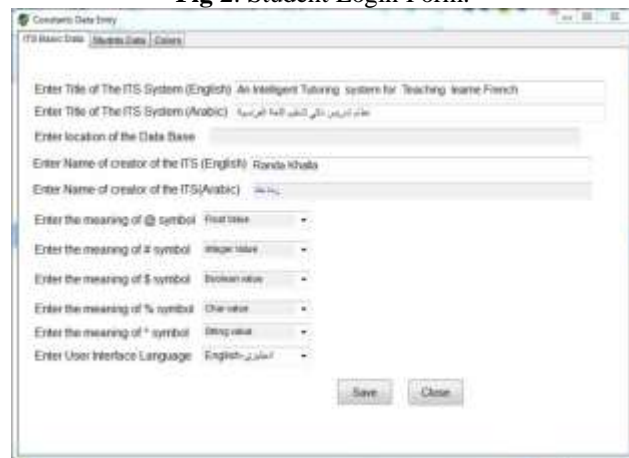
The form is titled "An Intelligent Tutoring system for Teaching Iname French". It has a teal background. Fields include "Student No. 0000-0000" with a dropdown, "Student Name" with a text box, and "Last Session was on" with a date picker. There are "Login" and "Exit" buttons at the bottom.

Fig 2: Student Login Form.



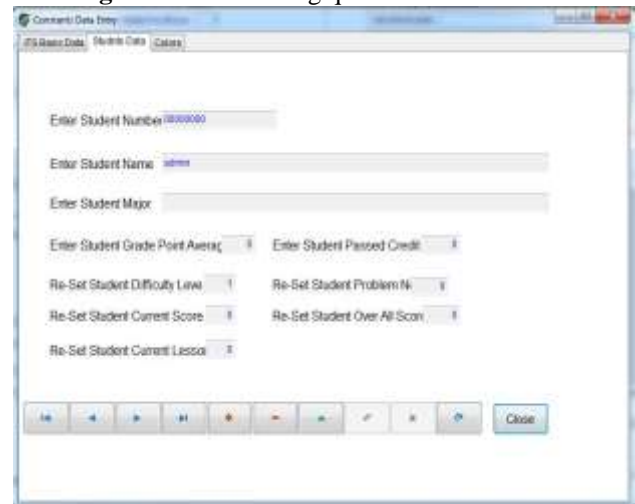
The form is titled "Questions and Answers Data Entry". It contains multiple text boxes for "Enter Question Text 1", "Enter Question Text 2", and "Enter Answer Choice 1" through "Enter Answer Choice 6". There are also buttons for "Get File Name" and "Get File Name". At the bottom, there are radio buttons for "Correct Answer" and "Incorrect Answer", and a "Level of Difficulty" dropdown.

Fig 5: Form for adding questions and answers.



The form is titled "Contents Data Entry" and "ITS Basic Data". It has tabs for "ITS Basic Data", "Students Data", and "Colors". Fields include "Enter Title of The ITS System (English)", "Enter Title of The ITS System (Arabic)", "Enter location of the Data Base", "Enter Name of creator of the ITS (English)", "Enter Name of creator of the ITS (Arabic)", and several dropdowns for "Enter the meaning of @ symbol", "Enter the meaning of # symbol", "Enter the meaning of \$ symbol", "Enter the meaning of % symbol", "Enter the meaning of \* symbol", and "Enter User Interface Language". There are "Save" and "Close" buttons at the bottom.

Fig 3: Form for adding ITS Basic Data.



The form is titled "Contents Data Entry" and "Students Data". It has tabs for "ITS Basic Data", "Students Data", and "Colors". Fields include "Enter Student Number", "Enter Student Name", "Enter Student Major", "Enter Student Grade Point Average", "Enter Student Passed Credit", "Re-Set Student Difficulty Level", "Re-Set Student Problem No.", "Re-Set Student Current Score", "Re-Set Student Over All Score", and "Re-Set Student Current Lesson". There are "Save" and "Close" buttons at the bottom.

Fig 7: Form for student data



The form is titled "Contents Data Entry" and "Colors". It has tabs for "ITS Basic Data", "Students Data", and "Colors". It contains a table with columns: "Forms", "Background Color", "Font Name", "Font Color", and "Font Size". Rows include "Labels", "Buttons", "Page Sheet", "Richedit", "List Box", "Combo Box", and "Edit". There are "Save" and "Close" buttons at the bottom.

Fig 4: Form for adjusting Fonts Name, color and Font Size of all screens of the system.



The form is titled "Lesson" and "Lectures Area". It contains a table with columns: "الحرف", "طريقة", "ملاحظات", "الحرف", "طريقة", "ملاحظات". Rows include "A", "B", "C", "D", "E", "N", "O", "P", "Q", "R". There are "Save" and "Close" buttons at the bottom.

Fig 8: Form for lesson.

#### 4. CONCLUSIONS

ITSs are seen as future's coaching framework and numerous examinations achieved around there, ITSs are very fruitful and moderately having instructors' spot, they go up against supporting obligation for understudies. In conventional showing condition, understudies' disparities aren't considered. In this paper, I was outlined built up an astute coaching framework for understudies picking up Teaching French. The framework was produced for understudies who need to ponder prescription or increment their insight in this field effortlessly and easily. Framework engineering and prerequisites of understudies and instructors were taken in light of the outline of the framework.

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