



Language Learning Tool

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Initial Survey on the Language Learning Tool

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Abstract

Everybody has a language of his or her own. Learning a new language is a challenge for some unless they have the proper guidance and material. This paper describes a methodology to develop an effective training material to learn another language. Flash software is a good and effective tool to develop a Language Learning Tool. Users can learn language very easily by using this tool. One big advantage of this tool is that it is platform independent and localizable. Therefore people from different countries can use this tool to learn languages other than their own.

1. Introduction

Language is a very powerful tool of communication. According to the definition of UniXL¹, Language is a system of communicating with other people using sounds, symbols and words in expressing a meaning, idea or thought. Language can be used in many forms, primarily through oral and written communications as well as using expressions through body language.

Most of the countries have their own language or languages. For example, Sri Lanka has three main languages: Sinhala, Tamil and English. When they need to communicate with the people in other countries, they need to know a language which is common to both countries. The lack of knowledge in another's language on the other hand has been the cause of many a misunderstanding and sometimes cause conflicts. Sri Lanka's ethnic conflict has roots in language in addition to other things. Most of the Sinhala people cannot understand Tamil and vice versa. How do these two communities communicate with each other then? There are two solutions. Either learn each other's language or learn an international language, for example English. But the problem is the lack of resources in learning languages in Sri Lanka. No local language learning project could ignore the strategic opportunity provided by technology to scale the teaching and learning of another language.

The main objective of this project is to develop effective training materials and a methodology to make learning another language less arduous. The framework developed is expected to be flexible enough to extend itself to be used by other project partners to teach their languages. For example, this software needs to be content independent and customizable. Contents can be added and updated easily. This tool is also need to have the following features: user friendliness, platform independence and localizability.

The rest of the paper organized as follows. Section 2 describes the proposed architecture of the tool; Section 3 describes the referred book from which the content is drawn.

¹ www.unixl.com

2. Proposed Architecture

Language Learning Tool (LLT) needs to be very attractive because it helps users to learn languages interestingly. At the outset in selecting a suitable tool for LLT Director MX was tried because it can create both .exe and .swf files directly and it is a powerful multimedia authoring tool which is helpful to design useful software.

For an LLT to be efficient and user friendly and if it needs to have the facility to be used for other languages it must have the support for Unicode.

But Director MX was found to be insufficient for it did not support for Unicode. Our one of the main objective is Language learning tool needs to be supported for Unicode. The next option was to go for a tool like Flash which has the following facilities.

Flash:

- supports for Unicode
- is Platform independent
- can easily deploy materials through web

2.1 Users

Every user of this tool needs to be registered before entering to the lessons section. Registered users can check their performance (Score of evaluation) at the end of each exercise and also after completing the reviews.

Non-registered users do not have that facility of score evaluation but still they can follow the course and also be able to do the exercises. But every non-registered user has to enter through the guest account and it is common to all non-registered users.

If a registered user needs to start from the beginning of a lesson and stopped before the exercises and if he/she wants to do the exercises on the following day, (for example: After completing the dialog and grammar parts and if the user wants to do the exercise on the following day) he/she can start where he/she stopped last time. Only registered users can only do that. User needs to face a review questions after every five chapters. Pre-quizzes and post-quizzes will be added to this tool. That kind of review helps users to get an idea about his/her knowledge level at the beginning and after completing the lessons.

2.2 User Interfaces

When a user double clicks on the executable file (LLT.exe), the first interface shows the user registration page. Completing the registration is not a complex structure. It only asks you to give Full Name, User Name and the Password. Every user (Unfamiliar computer users too) can fill this form very easily. After completing registration, next form; is the login page appears as shown below. There is a separate link called guest which is created for non-registered users



Figure 2.1: Login Page

Registered users and Non-registered users then move to the main page which is shown below (Figure 2.2). This may differ from the other learning tools because chapter 1 is not a lesson, it is an introductory part and lessons will start from chapter 2. It contains the Preface, Author's note, general background, how to use this software, Pronunciation and scripts and what is inside these chapters. If the user does not need to follow the instructions, he/she can skip that section and can directly go to the course lessons. The following interface shows the course structure (Chapter names and chapter numbers).



Figure 2.2: Main Page

At the beginning users can see only twelve chapters and by scrolling right as shown above (at the bottom), users can move to the next chapters.

When a user clicks (No need to double click) one of the chapters, then it will pop up as follows and shows a short summary of that chapter. Summary includes what type of dialog, what type of grammar it has. There are three buttons named Dialog, Grammar and Exercise. By clicking those buttons user can enter to the lesson page. Screen print of the proposed architecture of that page is shown below (Figure 2.3).



Figure 2.3: Second Action Page

2.3 Dialog Structure

The following diagram (Figure 2.4) shows the dialog interface of the language learning tool. This is a sample of the dialog interface. These dialogs are in shockwave flash (SWF) format. Flash tool is used to animate these dialogs. If users want to skip the dialog part and want to do the grammar section, they can do this by clicking the Skip button.

The words will be displayed in both languages and their transliterations are displayed in dialogue balloons, because it is a very important factor to learn a language easily.



Figure 2.4: Dialog Page

2.4 Question Architecture

There are different types of question types which are going to be implemented (different from the questions in the reference book) because some of the question types in the book are difficult to implement using the tool.

Question Types:

- Multiple choice questions (Option Buttons)
- Multiple choice questions (Check Boxes)
- Fill in the blank questions
- Picture matching questions

2.5 Answer Architecture

Answers are going to be shown in the encrypted format. Otherwise users can easily find the answers.

<pre>// Answers Q1.QUS 1 2 2 2, 3 3 பத்து 4 லேனா</pre>		<pre>// Answers Q1.QUS //Encrypted Answers #DF GH,K* FESW#@FG LOINGT</pre>
--	---	---

Figure 2.5: Answer Format

2.6 XML Structure

Main xml structure is shown below.

```
- <Course reg="y">
  <Quiz src="C:\Quiz\Q1.QUS" />
  - <Lesson Id="1" src="C:\Lesson1" thumbnail="first.jpg">
    <Title>Introduction</Title>
    <Description src="\lesson1desc.swf" />
    <Content Id="I1" Type="html" src="intro.html">Introduction</Content>
    <Content Id="I2" Type="video" src="gis.mpg">Introduction</Content>
    <Content Id="I3" Type="swf" src="sss.swf">Introduction</Content>
    <Content Id="I4" Type="text" src="">Introduction</Content>
    <Content Id="I5" Type="jpg" src="">Introduction</Content>
    <Quiz src="C:\Quiz\Q2.QUS" />
  </Lesson>
  <Quiz src="C:\Quiz\Q3.QUS" />
</Course>
```

Figure 2.6: Main Xml Structure

Consider the above xml structure. At the beginning user needs to complete the registration. Then the user needs to face to the pre-quizzes (to get an idea about the user's current position about the language) and after completion of that user can directly move to the lessons section.

Lesson tag has several attributes: Lesson Id, Source (Place), Name of the file. When user clicks on the icon (first.jpg) then it will pop up as shown in the earlier and it has shown in the xml as <Description>.

Then it shows the contents and various types of contents can be shown here. For example file formats such as html, video, swf, text, jpg can be shown.

As for an example, the above xml structure showed the introduction only. Every lesson is going to be implemented as above. End of each lesson, user needs to do an exercise and results will be showed after completing the whole exercise. Then user can go to the next chapter.

Example of Quiz xml is shown below.

```
- <Quiz>
  <Question id="1" Type="Multiple">ஊழல் எதிர்ப்பு சட்டம் ....</Question>
  <Answer>மூண்டு</Answer>
  <Answer>பத்து</Answer>
  <Answer>நாழு</Answer>
  <Answer>எட்டு</Answer>
</Quiz>
```

Figure 2.7: Quiz Xml Structure

3. Referred Book

The main objective of this project is to design a language learning tool. Contents will be taken from Sinhala translation of "An Introduction to Spoken Tamil [1] by James W. Gair, S. Suseendrarajah and W. S. Karunatilaka". This Sinhala translation of this book was by Rev. Kadurugamuwe Nagitha Thero, a lecturer at the University of Kelaniya, Sri Lanka.

Contents are categorized as follows.

- **Introduction**

Introduction has been divided in to three parts:

1. **General Background**

General background section describes the history of the languages.

2. **How to use this Book**

This part describes hints to use this book. Each lesson has three parts: Conversation, Grammar section, set of exercises. This conversation provides examples of Spoken Tamil with which the student may base his practice and new vocabulary is introduced in each lesson. Each sentence comes with its Sinhala translation. The grammar section of each lesson is intended to help the student in his task of constructing and understanding new sentences. The exercises are intended to help the student to construct new sentences on the basis of what he has already met in the conversation and grammar.

3. **Pronunciation and Script**

The only effective way to learn the sounds of another language is to listen to and imitate mother tongue speakers of that language. This section helps to users to understand about the vowels, pronunciation and sounds.

- **Lessons**

- Dialogs
- Grammar
- Exercises or Reviews

There are twenty five lessons. Each lesson has dialog, grammar section and exercises. First five chapters describe the basics in the Tamil language and difficulty levels of the chapters are increasing from the beginning to the end. Exercises can be found at the end of each chapter and reviews can be found after every five chapters. This book covered most of the grammar parts.

According to the author's point of view this book was written not only for giving Tamil knowledge, also to give an idea about the culture. This book is very useful in practical situations and helpful to learn spoken as well as written.

REFERENCES

- [1] James W. Gair, S. Suseendirajah, W. S. Karunatilaka, *An introduction to spoken Tamil*,
Translated by Kadurugamuwe Nagitha Thero, University of Kelaniya, Sri Lanka, 1999.