**Thu Dau Mot University**

**Faculty of Information Technology, Electrical and Electronic Engineering**

**Lecture: Vo Thi Hong Tham**

**DATABASE PROGRAMMING PROJECT REPORT**

**<TITLE OF PROJECT>**

Team: ….- Class :….

<*Student Code*> - <*Full name*>

<*Student Code*> - <*Full name*>

<*Student Code*> - <*Full name*>

April 2017

**COURSE SUMMARY**

Consideration questions:

* What have you learnt from this course?
* What did you like best about this course? In case you don’t have one, that is fine.
* What topics do you want to learn more? In case you don’t have one, that is ok.

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# Team Information

|  |  |  |  |
| --- | --- | --- | --- |
| Student Code | Full name | Email | Role |
|  |  |  | Leader |
| 1424801040205 | Vatthana Vongpaxa | vatthanavongpaxa@gmail.com | Coordinator |
|  |  |  | Implementer |
|  |  |  | Completer |
|  |  |  | Team worker |

# Plan

## Plan overview

|  |  |  |  |
| --- | --- | --- | --- |
| Date & time | Tasks | Time frame  (man hour) | Products |
| 20/2/2017  Starting | Divide group | 1 hours | Name group: MyFriend |
| 27/02/2017  Preparing | Choose topic | 2 hours | App: Dictionary Viet Nam - Laos |
| Presentation in front of the class | 15 minutes |
| 06/03/2017 | Design database | 1 day | Database is complete (db\_TUDIEN.db) |
|  |  |  |
|  |  |  |
| … | … | … | … |

## Plan details

Team meeting agenda

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| … | … | … | … |

## Support Tools

* Google Mail:
* Android Studio: Coding application
* Word:
* Visual studio: Creating Add word form
* Github: Save and update version of application
* SQLite Studio: Create Data Base

# Project report contents

## Part 1 – Project Introduction

The free offline software Viet-Lao Dictionary application explains the meaning of

Viet Name - Lao words!

It’s work offline and won’t further download

Features:

* Quick search.
* User-Friendly interface.
* Support for Laos student studying, working and traveling in Viet Nam.
* Easy bookmark for your Word.

## Part 2 – Database design

### Table TUDIEN

|  |  |  |  |
| --- | --- | --- | --- |
| **Attributes** | **Data type** | **Allow Null** | **Detail** |
| ID(Pk) | INTERGER  (Auto Increment) | Not null | The primary key for a word, each word will carry a different key |
| VNWORD | TEXT(Unique) | Not null | Words are written in Vietnamese |
| LAOWORD | TEXT | Not null | Words are written in Lao language |
| BOOKMARK | BOOLEAN | Default(0) | Mark the words of interest |

### TABLE TUDIEN\_BACKUP

|  |  |  |  |
| --- | --- | --- | --- |
| **Attributes** | **Data type** | **Allow Null** | **Detail** |
| ID | INTERGER | Not null | The primary key for a word, each word will carry a different key |
| VNWORD | TEXT | Not null | Words are written in Vietnamese |
| LAOWORD | TEXT | Not null | Words are written in Lao language |
| BOOKMARK | BOOLEAN | Default(0) | Mark the words of interest |
| TIME | DATETIME  (CURRENT\_TIMESTAMP) | Not null | Time of back up words |

## Part 3 – Different types of SQL SELECT statements and application

### Quick search command

SELECT \*

FROM TUDIEN

WHERE VNWORD LIKE *‘ tu tieng viet % ’*

### Show bookmark word

SELECT \*

FROM TUDIEN

WHERE BOOKMARK = 1

### Translate

SELECT \*

FROM TUDIEN

WHERE VNWORD = *‘ ai ai ’*

## Part 4 – Different types of stored procedures and application

### Add new word

CREATE PROCEDURES sp\_addWord

(@VNWORD NVARCHAR (100), @LAWORD NVARCHAR (100))

AS BEGIN

INSERT INTO TUDIEN (VNWORD, LAWORD)

VALUES (@VNWORD, @LAWORD)

END

EXEC sp\_AddWord N

### Update word

CREATE PROC sp\_UpdateWord

(@ID INT, @VNWORD NVARCHAR (100), @LAWORD NVARCHAR (100))

AS BEGIN

UPDATE TUDIEN SET VNWORD = @VNWORD, LAWORD = @LAWORD

WHERE ID = @ID

END

EXEC sp\_UpdateWord 15, N *‘đi’*, N *‘ໄປ’*

### Update Bookmark

CREATE PROC sp\_UpdateBookmark

(@ID INT)

AS BEGIN

UPDATE TUDIEN SET BOOKMARK = 1

WHERE ID = @ID

END

EXEC sp\_UpdateBookmark 14

## Part 5 – Different types of functions and application

### Translate function

CREATE FUNCTION dbo.translate (@VNWORD NVARCHAR(100))

RETURNS TABLE

AS

RETURN

(SELECT \* FROM TUDIEN WHERE VNWORD=@VNWORD)

END

SELECT \* FROM dbo.translate (‘xin chào ’)

### Show Bookmark function

CREATE FUNCTION dbo.Bookmark (@bm bit)

RETURNS TABLE

AS

RETURN ( select \* from TUDIEN

where BOOKMARK = 1)

SELECT \* FROM dbo. Bookmark (‘true’)

### Search function

CREATE FUNCTION dbo.search (@VNWORD NVARCHAR(100)

RETURNS @CAU3 TABLE

(ID INT, LAWORD NVARCHAR (100), BOOKMARK BIT)

AS BEGIN

INSERT INTO @search

SELECT ID, LAWORD, BOOKMARK FROM TUDIEN WHERE VNWORD LIKE @VNWORD + ‘%’

RETURN

END

## Part 6 – Different types of triggers and application

### Backup Word

CREATE TRIGGER BACKUP

AFTER UPDATE

ON TUDIEN

FOR EACH ROW

BEGIN

INSERT INTO BACKUP (ID, VNWORD, LAWORD, TIME)

VALUES (OLD.ID, OLD.VNWORD, OLD.LAWORD, CURRENT\_TIMESTAMP);

END;

## Part 7 – Application overviews

|  |  |  |
| --- | --- | --- |
| N.O | Function list | Application |
| 1 | Form Management Word with Visual Studio |  |

***<Xóa phần “lưu ý”sau đây khi trình bày báo cáo>***

Báo cáo nên trình bày cẩn thận và tỉ mỉ, không nên chú trọng về độ dài. Càng ít các lỗi định dạng và lỗi chính tả càng tốt. Diễn giải chi tiết cho người đọc thấy được những hiểu biết và giải pháp của các bạn.

Lưu ý: In 02 mặt, không đóng bìa kiếng, lớp cử **một bạn đại diện** mang nộp và nhận danh sách ký tên (các trường hợp *không ký tên* điểm bị tính là **không hợp lệ>.** Ngày nộp: Theo thông báo**.**

Nộp file : theo thông báo